



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

DEVAL L. PATRICK  
Governor

RICHARD K. SULLIVAN JR.  
Secretary

KENNETH L. KIMMELL  
Commissioner

October 31, 2013

Mr. John Kelly, Town Administrator  
Orleans Town Hall  
19 School Street  
Orleans, Massachusetts 02653

and

Mr. Jonathan Wienslaw  
Broadway Renewable Strategies, LLC.  
295 Freeport Street  
Dorchester, Massachusetts 02112-3592

RE: Approval with Conditions  
Application for: BWP SW 36 Post-Closure Use - Major  
0.574 Megawatt Solar Photovoltaic Array  
Transmittal #: X255063

AT: Town of Orleans Sanitary Landfill  
56 Lots Hollow Road  
Orleans, Massachusetts  
Facility ID#: 39604, Regulated Object#: 172817

Dear Mr. Kelly and Mr. Wienslaw:

The Massachusetts Department of Environmental Protection, Solid Waste Management Section (the "MassDEP"), has completed its review of the referenced Post-Closure Use permit application (the "Application") for the Town of Orleans Sanitary Landfill (the "Landfill"). The Application was prepared and submitted on behalf of the Town of Orleans (the "Town") and Broadway Renewable Strategies, LLC. of Dorchester, Massachusetts, ("BRS") by Lynnfield Engineering, Inc. ("LEI") of Danvers, Massachusetts (the "Engineer").

MassDEP has determined the Application is administratively and technically complete and hereby **Approves** the Post-Closure Use of the Landfill for a 0.574 megawatt ("mW") solar photovoltaic ("PV") array subject to conditions as specified herein.

## **I. SUBMITTALS:**

MassDEP has reviewed the Application pursuant to 310 CMR 19.000: *Solid Waste Regulations*, 310 CMR 19.143: *Post-Closure Use of Landfills* and MassDEP's *Landfill Technical Guidance Manual, May 1997* (the "Manual"). The Application consists of the following:

- A. A bound document entitled: "Application BWP SW36, Post Closure Use-Major, Town of Orleans Sanitary Landfill, 56 Lots Hollow Road, Orleans, Massachusetts, Transmittal No. X255063", containing an application transmittal form, completed application forms, a narrative describing the proposed post-closure use prepared by LEI, geotechnical calculations performed by AAT Engineering, LLC., and six engineering drawings, received by MassDEP on April 11, 2013.
- B. Supplemental Application information prepared by LEI, dated August 29, 2013, consisting of a bound document entitled: "Supplemental Transmittal No. 1, Application BWP SW36, Post Closure Use-Major, Town of Orleans Sanitary Landfill, 56 Lots Hollow Road, Orleans, Massachusetts, Transmittal No. X255063", containing responses to MassDEP's comments provided to LEI on May 30, 2013, including structural calculations performed by Interactive Resources, and other documents.
- C. Supplemental Application information prepared by LEI, dated October 17, 2013, consisting of a LEI cover letter and responses to MassDEP's comments provided to LEI on October 11, 2013.

The Application and site plans bear the seal and signature of Richard Barthelmes, Massachusetts Registered Professional Engineer No. 33017. The geotechnical calculations bear the seal and signature of Alfred A. Taney, Massachusetts Registered Professional Engineer No. 41218. The structural calculations bear the signature and seal of Paul Westermann, Massachusetts Professional Engineer No. 4817. The electrical drawings bear the signature and seal of Lawrence A. Farrer, Massachusetts Professional Electrical Engineer No. 30388.

## **II. SITE DESCRIPTION:**

The Town of Orleans Landfill is an unlined Landfill located at 56 Lots Hollow Road, on a 21 acre parcel of Town-owned land in Orleans, Massachusetts (the "Site"). The Landfill final cover system occupies approximately 13.6 acres. The Landfill operations began in 1949 for the acceptance of municipal solid waste, ceased accepting waste in 1991, and was capped in 2005. The Landfill is generally bound northerly and easterly by commercial property, westerly by commercial property and Route 6, and southerly by undeveloped woodland areas. The Town maintains a recycling center at the north side of the Landfill.

Existing Final Cover System Design: On September 9, 2004, MassDEP approved closure plans for the Landfill. Design modifications were approved on May 16, 2005, and July 18, 2005. A closure construction certification report was submitted on June 27, 2006, and MassDEP

approved the certification report on April 2, 2007. The final cover was installed with a minimum top slope of 5% and side-slopes no greater than 3:1.

The final cover system in the area of the Landfill proposed for the PV array includes the following layers from bottom to top:

- A prepared subgrade of compacted soil materials, overlain by
- A gas venting layer consisting of a minimum thickness of six inches of soil with a minimum saturated hydraulic conductivity of  $1.2 \times 10^{-3}$  centimeters per second (cm/sec”), overlain by
- A low permeability layer consisting of a 40 mil textured high-density polyethylene (HDPE) geomembrane, flexible membrane liner (“FML”), overlain by
- A drainage layer consisting of soil with a minimum thickness of twelve inches and a minimum saturated hydraulic conductivity of  $1.2 \times 10^{-2}$  cm/sec with a perforated pipe subdrain system constructed within the drainage soil, overlain by
- A vegetative support layer comprised of a minimum thickness of twelve inches of soil, capable of maintaining a healthy vegetative soil growth on the final cover and seeded with a vegetative cover seed mix.

Stormwater runoff controls were constructed to maintain the integrity of the final cover, prevent ponding of water on areas of the final cover, and to control stormwater runoff to prevent off-site impacts. The stormwater control system includes a perimeter swale around the entire Landfill and a 108,000 cubic foot capacity retention basin located in the northeast corner. The retention basin includes a sediment forebay and was designed to fully control the twenty-five year storm event prior to discharge through an emergency spillway.

Drainage pipes were installed across the side slope to collect stormwater accumulated within the sand drainage layer. Side slope pipes connect to header installed down the side slopes leading to stone lined perimeter swales. Pre-cast catchbasins were installed in the paved areas at the transfer station to direct stormwater runoff to the stormwater detention basin.

Final cover system construction incorporated an active landfill gas collection and combustion system to manage landfill gases generated by waste decomposition. Fourteen gas extraction wells were installed. Landfill gas is directed from the extraction wells to header pipes that connected to a skid mounted landfill gas flare.

Twenty-one landfill soil gas monitoring wells were constructed outside the limits of waste around the perimeter of the Landfill on the North, East and South sides. These wells are used in combination with eleven previously existing landfill gas vents located along the west side to monitor for potential subsurface landfill gas migration.

Post Closure Environmental Monitoring & Maintenance: MassDEP approved the post closure environmental monitoring program for the Landfill within the April 2, 2007, closure certification report approval. Post closure environmental monitoring (groundwater, surface water and soil gas monitoring) is currently conducted by the Town.

### **III. POST-CLOSURE USE PROPOSAL SUMMARY:**

The Town is the owner of the Landfill and has entered into an agreement with BRS to develop a 0.574 mW solar photovoltaic (“PV”) array installation on the Landfill. Hereinafter, BRS and the Town shall be referred to as the “Applicants”. BRS and all construction and maintenance personnel associated with the project shall be referred to as the “Applicants’ Contractors”. The Applicants are proposing to construct and maintain a PV array on the capped Landfill consisting of the following components:

- Approximately 560 precast concrete foundations (2’-6” x 2’-6” x 5” concrete blocks) placed directly on the vegetative support layer or on a gravel leveling pad;
- Approximately 1980 PV modules (Suntech STP290-24/VD 290w);
- Perpetual Power Ground Mount racking systems;
- Electrical equipment concrete pads installed outside the limits, to support electrical equipment, including two inverters and one transformer;
- One 500 kW inverter (Advanced Energy);
- One 0.50 MVA medium voltage step-up transformer; and
- Electrical connections between the photovoltaic panel racks and the edge of the Landfill cap using conduits installed above ground on “Dura-Blok DB-10” supports installed on the Landfill surface.

The ground mounted PV array is to be constructed on areas of the Landfill with a maximum slope of less than 10% (approximately 6 degrees). The array will utilize PV modules mounted on Perpetual Power Ground Mount racking attached to the precast concrete ballast blocks. The PV array will use polycrystalline PV modules laid out in panels, 1 modules high and 4 modules wide (panel layout 1 x 4), mounted on racks in micro-blocks sub arrays of 12, 16 or 20 modules each. The rack ballasts for each sub array will consists of four precast concrete blocks, each with one post to support the racking system. The modules and the associated racking will be approximately 22 inches in the front and 42 inches in the rear (north side). The racking system will hold the panels at a fixed tilt of 30 degrees from horizontal.

The racks will be placed to avoid interference with the active landfill gas collection extraction wells and all storm water control features. The existing elevation and grade of the Landfill will not be altered. The proposed design will impact limited portions of the vegetative layer of the final cover system. The impacts result from rack ballasts installations and below grade cable installations.

Contours of the landfill and the integrity of the landfill final cover soils should not be compromised by construction or operation of the solar array (**refer to conditions #10 and #11**). All photovoltaic rack assemblies and above-ground wiring will be kept at least 10 feet from any landfill gas wells (**refer to condition #2**).

Array grounding details are provided on drawing PV-4, submitted on October 18, 2013. Individual support racks will be bonded together using a #8 bare copper conductor. Each raceway will contain an equipment grounding conductor connected to all non current carrying equipment. Three-quarter inch by 10 foot copper clad grounding rods will be installed vertically at the concrete transformer support pads located outside the limits of the final cover system and

at the base of the pole at the point of common coupling. No electrical/grounding equipment will penetrate the HDPE flexible membrane layer or compromise the integrity of the final cover system (**refer to condition #12**).

Two-inch diameter conduits will be installed on the Dura-Bloks on the vegetative support layer to convey power from the PV array to the edge of Landfill cap. Conduit will then run underground from the edge of Landfill cap to the pad mounted electrical equipment located outside the Landfill final cover limits. Underground utility conduits from the electrical equipment pad run parallel to the Landfill edge of waste to a new power pole.

All subsurface utility conduit proposed for the project must be designed for a subsurface environment with the potential for elevated concentrations of methane (i.e. methane concentration in soil should be assumed to be above the Lower Explosive Limit (“LEL”). The Applicants are required to submit a final design plan prior to installation of subsurface conduits (**refer to condition #14**).

Three new utility poles will be installed to support an AC disconnect, cutouts and a primary meter. Power from the electrical equipment will run from the pad mounted electrical equipment to the first pole via a 4-inch PCV underground conduit. Overhead wires will be used to transfer power from new pole to new pole. Power will then be directed via overhead wires to an existing utility company owned utility pole.

The Application included a “Typical Concrete Pad” detail indicating that all electrical conduits will penetrate all concrete pads outside the limits of the electrical equipment, incorporate a gas tight fitting, and pass through the side of the electrical enclosure to ensure that there is no pathway for the migration of landfill gas into the enclosure.

The Application included a Construction Control Affidavit for Electrical Work signed and sealed by the electrical engineer, Lawrence A. Farrer, certifying that the electrical installation will be designed and installed in compliance with the applicable provisions of the Massachusetts Electrical Code. Upon completion of the project, a Final Report will be submitted to the Applicants by the electrical engineer. A copy of the report must be submitted to MassDEP (**refer to condition #5**).

Geotechnical Analysis: The Application included a geotechnical evaluation for the installation of the PV array and supporting structures on the final cover system.

The Application included an analysis of the foundations for the PV array that will bear directly on the final cover system and has considered the dead load, snow load and wind load. The results of the geotechnical evaluation are as follows:

- The PV array, racking system and ballast system is adequate to resist lifting and overturning forces;
- The modules, ballasts, and footings do not exceed loading criteria for the Landfill; and
- The solar array will not cause adverse landfill settlement.

The anticipated maximum loading scenario (ballasts, racking system, and modules) on the Landfill surface will result in a bearing pressure of 3.8 pounds per square inch (psi). LEI stated that the calculated bearing pressure of the array on the Landfill should have no impact on settlement and that the array systems are able to accommodate minimum settlement. As a condition of this Permit Approval, the Applicants are required to inspect the Landfill prior to construction and repair existing settlement. The Applicants are further required to continue to monitor the Landfill for future settlement and make necessary repairs to prevent the ponding of stormwater (**refer to condition #3**). The equipment pads will not be located on the Landfill, accordingly no bearing pressure was analyzed.

A sliding stability evaluation was performed for the ballasts located on landfill areas with a 5.7 degree slope and the proposed ballast design was deemed to be acceptable.

Storm Water: LEI evaluated the suitability of the existing storm water management system for the proposed post-closure use and concluded that the increased impervious area for the post-closure use amounts to approximately 0.6% of the affected catchment area. LEI stated that the project is not anticipated to have any impact on the capacity of the stormwater management system at the site.

Post Closure and Post-Closure Use Operations and Maintenance: The Town currently implements the Landfill's post closure monitoring and maintenance plan. The Town is to continue to perform all post closure environmental monitoring (groundwater, surface water and soil-gas monitoring). There are no proposed changes to the post closure operation and maintenance plan for the area to be maintained by the Town and not used for the PV array.

Maintenance of the lease area will be the responsibility of BRS. The lease area is shown on the design plan C-2 as approximately 3.41 acres, offset approximately 20 feet from the perimeter of the PV array outer limit.

A Health and Safety Plan ("Plan") was prepared for the project by LEI, to assist in the protection of personnel during the PV array installation, operation, and maintenance. LEI states that the Plan is intended to comply with the requirements of the Occupational Safety and Health Administration ("OSHA") regulations 29 CFR sub-section 1910.120(b)(1) and 29 CFR 1926.651. MassDEP is requiring a Health and Safety Plan and personnel training for employees who access the areas of the Landfill (**refer to conditions #7 and #8**).

Site Security: Access to the Landfill by the general public is controlled via an existing chain link fence that has been installed around the perimeter of the Landfill. (**refer to condition #16**).

Decommissioning Plan: BRS has a Lease and Energy Services Agreement with Cape and Vineyard Electrical Cooperative, Inc. ("CVEC"), which is the entity purchasing power for the project. The agreement allows for operation of the solar array for up to 20 years. BRS can renew the lease or decommission and remove all components of the PV array from the Landfill including solar panels, mounting substrates, system foundations, wiring and connections, power inverters, servicing metering equipment, and the utility connection. The Landfill will be left in

similar condition to pre-installation in compliance with applicable regulations and permits in effect. (**refer to condition #17**).

#### **IV. PERMIT DECISION:**

MassDEP, having determined the information in the Application is satisfactory and in accordance with its authority granted pursuant to M.G.L. c.111, s. 150A, and 310 CMR 19.000, hereby **APPROVES** the Post-Closure Use of the Orleans Landfill for the proposed Solar Photovoltaic Array subject to the conditions identified herein.

#### **V. GENERAL PERMIT CONDITIONS:**

- 1) **Permit Limitations:** The issuance of this approval is limited to the proposed solar photovoltaic array at the Orleans Landfill as detailed in the Application and does not relieve the Applicants from the responsibility to comply with all other regulatory or permitting requirements. Post-Closure Use construction shall proceed in complete compliance with the approved plans, MassDEP's regulations and requirements, the Manual or as required by this Approval. There shall be no deviation from this Approval without prior consent from MassDEP. MassDEP shall be consulted prior to any deviation from the approved design. MassDEP may require a permit modification application for significant design modifications.
- 2) **Regulatory Compliance:** The Applicants, Engineers and Applicants' Contractors shall fully comply with all applicable local, state and federal laws, regulations and policies, by-laws, ordinances and agreements. This includes but is not limited to, 310 CMR 19.142: *Post-Closure Requirements*, 310 CMR 19.143: *Post-Closure Use of Landfills*, and 310 CMR 19.043: *Standard Conditions*. Applicable federal regulations include, but are not limited to, 29 CFR Part 1910, OSHA standards governing employee health and safety in the workplace and all applicable local, state and federal electrical codes and permits, including National Electrical Code (NEC).
- 3) **Inspection and Repair of Settlement Areas:** Prior to construction of the PV array, any suspect settlement areas on the Landfill project area shall be surveyed to determine the lowest spot. The surrounding area should be then surveyed to find the "relief point" defined as the lowest surrounding area where ponded water would flow out. The elevation difference is defined as the "pond value". Minor settlement shall be defined as less than a 12-inch pond value. Any Landfill project area that has undergone minor settlement shall be corrected by the placement of addition vegetative support soil to promote runoff and the area shall be reseeded. Any area repaired should be surveyed and the location marked on a plan with the pond value. Any future settlement should be recorded cumulatively. If/when the total settlement reaches 12-inches, the area will be considered to have suffered major settlement and appropriate repairs to eliminate ponding shall be performed.

Major settlement is defined as a pond value of 12-inches or more. When this occurs, the final cover system must be repaired to prevent water from ponding above the low permeability layer. The Applicants may either:

- 1) Strip off the final cover soils above the low permeability layer, inspect and repair the low permeability layer if/as necessary, place low permeability soil as necessary to promote runoff, replace final cover soils; or
- 2) Expose the low permeability soil or geomembrane in a trench around the perimeter of the settled area. Fill the area with soil to form slopes promoting runoff. Cap the area with a new low permeability membrane, GCL, or low permeability soil layer that ties into the existing low permeability layer at the identified perimeter. Place new drainage sand and vegetative support material over the new cap area.

Any proposal to repair minor settlement may be done as routine maintenance, provided that the Applicants report the settlement to MassDEP and state the intent to perform repairs and provide MassDEP with final survey results and a summary write-up.

Any proposal to do a major settlement repair must be submitted within a Corrective Action Design (BWP SW 25) application, since disruption of the final cover system will take place and repair details must be submitted and approved.

- 4) Notification of Construction: The Applicants shall notify MassDEP in writing (e-mail is acceptable) when the post-closure use construction commences and is completed.
- 5) Certification Report: Within ninety (90) days of completing the installation of PV array, MassDEP shall be provided with a certification report. All construction work shall be completed under the supervision of a Massachusetts Registered Professional Engineer who shall have sufficient staff on-site to provide quality assurance/quality control (QA/QC) oversight for all construction work at the Landfill. The report shall include, at a minimum, written certification from the supervising engineer that the project was performed in accordance with MassDEP regulations, requirements and the approved Post-closure Use permit application. The report shall include as-built drawings depicting all pertinent site features. The Certification Report shall include a copy of the Final Report prepared by the electrical engineer.
- 6) Preconstruction Work: Prior to commencement of construction activities, all Landfill gas vents, Landfill soil-gas monitoring wells, groundwater monitoring wells and other existing above ground structures and appurtenances on the Landfill cap shall be flagged for visibility, and protective barriers shall be placed around such structures, as needed, to prevent damage by vehicles accessing the area.
- 7) Health and Safety: The Applicants, Engineers and Applicant's Contractors are responsible to ensure all necessary precautions are taken to protect the health and safety of workers and the general public during both the construction phase and during the operation and maintenance phase of the post-closure use.

A site specific Health and Safety Plan was submitted in the Application. The Applicants shall review the plan to ensure it adequately addresses the following:

Construction phase:

- protocols for monitoring of landfill gas as needed;
- protocols for modifying work practices if landfill gas is detected at levels deemed unsuitable; and
- training for all workers including town workers conducting construction activities at the Landfill regarding hazards associated with the landfill gas and the PV array, including electrical hazards.

Operations phase:

- protocols for monitoring of landfill gas as needed;
- protocols for modifying work practices if landfill gas is detected at levels deemed unsuitable;
- training for all workers including town workers conducting maintenance activities at the Landfill regarding hazards associated with the landfill gas and the PV array, including electrical hazards; and
- the plan shall specifically address work related to maintenance of vegetation beneath the array and in the stormwater swales located in the array area.

8) Personnel Training: The Applicants and the Applicants' Contractors shall instruct all construction and maintenance personnel regarding the potential hazards associated with landfill gas and shall instruct or give on-the-job training to all personnel involved in any activity authorized by this permit. Such instruction or on-the-job training shall teach personnel how to comply with the conditions of the permit and carry out the authorized activity in a manner that is not hazardous to public health, safety, welfare or the environment. PV array construction and operation and maintenance shall not include any excavations or penetrations the Landfill final cover system.

9) Landfill Gas Notification Requirements:

a. As specified in solid waste management regulations at 310 CMR 19.132 (4) (g),

*"When, at any time, the concentration of explosive gases exceeds 10% of the lower explosive limit (LEL) in any building, structure, or underground utility conduits, excluding gas control, gas recovery and leachate collection system components, the owner/operator shall:*

- 1. Take immediate action to protect human health and safety;*
- 2. Notify the Department within two hours of the findings; and*
- 3. Undertake the actions specified under 310 CMR 19.150, Landfill Assessment and 310 CMR 19.151: Corrective Action, as required by the Department."*

b. If at any time monitoring detects the presence of any combustible gases at or in excess of 10% of the lower explosive limit at any location within a building or within any utility conduits on site or off-site, the Town shall notify MassDEP's Bureau of Waste Site Cleanup-

Emergency Response Section via MEMA (888-304-1133) within two (2) hours of the exceedance as per 310 CMR 40.0321(1) (a) of the regulations.

- 10) Vehicles Operating on the Landfill Final Cover System: Vehicles operating on the Landfill final cover system shall only operate on the designated permanent and temporary access roads, except for low-pressure construction equipment (with ground pressures of **7 psi** or less) in accordance with the remaining conditions of this permit. Low-pressure construction equipment operating off the access road shall limit turning on the vegetative support layer as much as possible. If MassDEP determines the use of construction equipment is creating the potential for damage to the FML, the usage of such equipment shall immediately cease upon notification by MassDEP. All operators of the vehicles entering the final cover system area shall be clearly instructed by the on-site engineer and/or the contractor of the requirements of this permit prior to arrival, to avoid damage to the Landfill final cover system components. A list of low ground pressure equipment used and the pressure rating of each vehicle shall be indicated in the certification report required in Condition #5.
- 11) Permanent and Temporary Roads and Low Ground Pressure Equipment: Low ground pressure equipment shall not access the final cover system from permanent and temporary roads or the landfill perimeter where the transition will result in excessive pressure and wear on the Landfill vegetative service. The on-site engineer may construct ramps as necessary.
- 12) Integrity of the Final Cover System: No disturbances of the Landfill were depicted or described within the Application and approved plans. No excavations shall penetrate the vegetative support layer, sand drainage layer, the low permeability soil layer, or the flexible membrane layer without written approval by MassDEP. The Engineer and Applicant's Contractors shall ensure that vehicles operating on the Landfill surface do not compromise the integrity of the Landfill final cover system.
- 13) Construction Precautions: All excavations and construction shall be supervised by a Massachusetts Registered Professional Engineer who shall have sufficient staff on-site to provide oversight for all construction work. All necessary precautions shall be taken to protect the Landfill storm water control system, environmental monitoring network, gas vents, and other on site structures. All operators of vehicles entering the area should be clearly instructed by the on-site engineer and/or the Applicant's Contractor of the permit requirements to avoid damage to the Landfill components. The on-site engineer shall observe the extent of each excavation performed on the Landfill capping system. If any damage occurs to any Landfill components, the Applicant's Engineer shall notify MassDEP within 24 hours and provide a written plan with a schedule for repairs.
- 14) Proposed Conduits/Inverter/Transformer Pad and Interconnection Equipment: All underground conduits shall be designed and installed as gas-tight, given the potential for landfill gas in the soils. **Prior to installation of subsurface conduits**, the Applicants shall submit final design plans for the conduit installation for MassDEP and written approval. If the Applicants or Applicant's Contractors propose to change the electrical equipment a copy of the final design for the inverter/transformer pad and any other electrical pads and protective switchgear (interconnection equipment) proposed on-site shall be submitted to

MassDEP for review and approval. The Applicant, Engineers and Applicant's Contractors are responsible to ensure that utilities/structures will not accumulate landfill gas during construction and operation. There shall be no penetrations (utility, conduits or other) at the base of any concrete pads or foundations which lead to equipment mounted directly on the pad.

- 15) Post-closure Use Operation and Maintenance Plan: During the first year after completion of construction of the PV array, inspections of the Landfill final cover system shall be performed on a monthly basis. Monthly inspection reports shall be submitted to MassDEP within **fourteen (14) days** of completion. Following the first year of operation of the PV array, and if no problems have been documented, inspections of the Landfill shall be performed on a quarterly basis and shall be submitted to MassDEP within **fourteen (14) days** of completion. Pursuant to 310 CMR 19.142(6) inspections shall be conducted by a third-party consulting Massachusetts Registered Professional Engineer, or other qualified solid waste professional. The Applicants, Engineers and Applicants' Contractors shall monitor the effectiveness of the storm water management system which should include; swales, structures and any and all conveyance systems. MassDEP shall be consulted prior to any deviation from the approved storm water design. MassDEP may require a permit modification application for significant design modifications. Any erosion, settlement, security problems or other issues observed at the Landfill shall be reported to MassDEP and repaired immediately.
- 16) Site Security: Pursuant to 310 CMR 19.130(23) the Applicants are required to provide sufficient fences or other barriers to prevent unauthorized access to the Landfill. The Applicants and Applicant's Contractors must continually monitor and evaluate the potential for unauthorized access and institute all appropriate measures to prevent unauthorized access during construction and operation of the PV Array.
- 17) Decommissioning Plan: If the proposed project is abandoned, during or after completion of construction, the Applicants shall submit a decommissioning plan. The decommissioning and site restoration plan should include dismantling and removal of all panels and supporting equipment, transformers, overhead cables, foundations and buildings and restoration of the roads to restore the Site to substantially the same physical condition that existed prior to Post-Closure Use construction. Disturbed earth shall be graded and seeded.
- 18) Entries and Inspections: In accordance with *310 CMR 19.043: Standard Conditions*, MassDEP and its agents and employees shall have the right to inspect the Landfill and any equipment, structure or land located thereon, take samples, recover materials or discharges, have access to and photocopy records, to perform tests and to otherwise monitor compliance with this permit and all environmental laws and regulations.
- 19) Reservation of Rights: MassDEP reserves the right to require additional assessment or action, as deemed necessary to protect and maintain an environment free from objectionable nuisance conditions, dangers or threats to public health, safety and the environment. MassDEP reserves all rights to suspend, modify or rescind this permit if it determines the PV array compromises the integrity of the final cover system and/or results in a threat to public health, safety or the environment.

This approval pertains only to the Solid Waste Management aspects of the proposal does not negate the responsibility of the owners or operators to comply with any other local, state or federal laws, statutes and regulations or enforcement actions, including orders issued by another agency now or in the future. Nor does this approval limit the liability of the owners or otherwise legally responsible parties from any other applicable laws, statutes or regulations now or in the future.

### **Review of Decision**

Pursuant to 310 CMR 19.037(4)(b), if the Applicants are aggrieved by MassDEP's decision to issue this Permit, they may, within twenty-one days of the date of issuance, file a written request that the decision be deemed provisional and a written statement of the basis on which the Applicants believe they are aggrieved, together with any supporting materials. Upon timely filing of such a request, the decision shall be deemed a provisional decision with an effective date twenty-one days after MassDEP's receipt of the request. Such a request shall reopen the administrative record, and MassDEP may rescind, supplement, modify, or reaffirm its decision. If MassDEP reaffirms its decision, the decision shall become final on the effective date. Failure by the Applicants to exercise the right provided in 310 CMR 19.037(4)(b) shall constitute waiver of the Applicants' right to appeal.

### **RIGHT OF APPEAL**

**Right to Appeal** – This approval has been issued pursuant to M.G.L. Chapter 111, Section 150A, and 310 CMR 19.037: Review Procedures for Permit Modifications, Permit Renewals and other Approvals, of the “Solid Waste Management Regulations”. Pursuant to 310 CMR 19.037(5), any person aggrieved by the issuance of this determination may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. c. 111, § 150A and M.G.L. c. 30A not later than thirty (30) days following receipt of the final permit. The standing of a person to file an appeal and the procedures for filing such an appeal shall be governed by the provisions of M.G.L. c. 30A. Unless the person requesting an appeal requests and is granted a stay of the terms and conditions of the permit by a court of competent jurisdiction, the permit decision shall remain effective or become effective at the conclusion of the thirty (30) day period.

**Notice of Appeal** - Any aggrieved person intending to appeal a grant of a permit to the Superior Court shall first provide notice of intention to commence such action. Said notice of intention shall include the MassDEP transmittal number X255063 and shall identify with particularity the issues and reason why it is believed the permit decision was not proper. Such notice shall be provided to the Office of General Counsel of the MassDEP and the Regional Director for the regional office which processed the permit application at least five days prior to the filing of an appeal.

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Department of Environmental Protection  
One Winter Street  
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Philip Weinberg, Regional Director  
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20 Riverside Drive  
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No allegation shall be made in any judicial appeal of a permit decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in 310 CMR 19.000, provided that a matter may be raised upon a showing that it is material and that it was not reasonably possible with due diligence to have been raised during such procedures or that matter sought to be raised is of critical importance to the environmental impact of the permitted activity.

Please direct any questions regarding this matter to me at (508) 946-2847 or Dan Connick (508) 946-2884 or write to the letterhead address.

Very truly yours,

Mark Dakers, Chief  
Solid Waste Management Section

D/DC/rr

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