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

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May 13, 2015

Michael Yunits
Norton Town Manager
70 East Main Street
Norton, MA 02766

and

Emma Kosciak
Norton Landfill Solar, LLC
88 Black Falcon Avenue, Suite 342
Boston, MA 02110

RE: Approval with Conditions
Application for: BWP SW 36 Post-Closure Use - Major
Solar Photovoltaic Array
Transmittal #: X262998

AT: Norton Landfill
Hill Street
Norton, Massachusetts
Facility ID#: 39587, Regulated Object#: 172803

Dear Mr. Yunits and Ms. Kosciak;

The Massachusetts Department of Environmental Protection, Solid Waste Management Section (the "MassDEP"), has completed its Administrative Review and Technical Review of the referenced Post-Closure Use permit application (the "Application") for the Norton landfill (the "Landfill"). The Application was prepared and submitted on behalf of Norton Landfill Solar, LLC, (the "Applicant") by Tighe & Bond, Inc., of Westfield, 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 1.9 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 permit transmittal form assigned No. X262998, an application form for Post-Closure Use - Major (BWP SW 36), a narrative describing the proposed use, engineering calculations, engineering drawings, received by MassDEP on March 26, 2015.

B. Supplemental Application information, prepared by the Engineer in response to comments e-mailed to the Engineer on April 14, 2015, received by MassDEP on April 28, 2015.

The Application is signed on behalf of the Applicant by Emma Kosciak. The Application is signed and the geotechnical calculations are stamped by Brian S. Huntley, Massachusetts Professional Civil Engineer No. 46273. The Design Drawings bear the signature and seal of Brian S. Huntley and Francis J. Hoey III, Massachusetts Professional Civil Engineer No. 40111. The structural design calculations performed by GameChange bear the signature and seal of Mingqiao Zhu, Massachusetts Professional Civil Engineer No. 45131. One electrical design drawing bears the signature and seal of Dallas Olson, Massachusetts Professional Electrical Engineer No. 47683.

II. POST-CLOSURE USE PROPOSAL SUMMARY:

The Town of Norton (the "Town") is the owner of the Landfill. The Application includes a letter from the Norton Town Manager stating that the Norton Board of Selectmen have entered into a lease and power purchase agreement with Citizens Enterprises Corporation. The Applicant is a wholly owned subsidiary of Citizens Enterprises Corporation.

Hereinafter, the Applicant and all construction and maintenance personnel associated with the construction and operation of the PV array and the maintenance of Landfill areas to be maintained by the Applicant shall be referred to as the "Applicant's Contractors".

The Applicant has proposed to develop a 1.9 MW (DC) solar photovoltaic installation on the Landfill consisting of the following components:

- Approximately 6,239 PV modules installed on GameChange Pour-in-Place™ Ground Mounting Racks and Cast-in-Place forms;
- Two SMA-800 inverters, or equivalent, mounted on a concrete pad;
- One 1,600 KVA transformer, mounted on a concrete pad;
- Low voltage wiring supported on the panel mounting rack system;
- Low voltage and medium voltage wiring in an above grade cable tray or rigged conduit for wiring above the Landfill final cover system; and
- Medium voltage wiring installed in a below-grade trench for wiring outside the limits of the Landfill final cover system.

The ground mounted PV array is to be constructed on areas of the Landfill with a maximum slope of 12% (approximately 7 degrees). The proposed solar array will encompass approximately 8.5 acres of the Landfill. The solar array will utilize PV modules (39 inches wide by 78 inches high) mounted on galvanized steel framed racks with aluminum mounting rails attached to the cast-in-place concrete ballast blocks. The PV array will use PV modules laid out in panels, 1 modules high and 4 modules long (panel layout 1 x 4), with concrete ballasts at each end. Each panel support rack will utilize a fully ballasted mounting system with no penetrations of the low permeability layer of the final cover system. The modules and the associated racking will be approximately 6 feet 5.5 inches in height in the rear (north side) and 2 feet in the front (south side). The rows of solar panels will be oriented east-west with approximately 7 feet between each row (north-south measurement).

The racking system will hold the panels at a fixed tilt of 25 degrees from horizontal. The proposed design will not impact the vegetative layer of the final cover system and the existing elevation and grade of the Landfill will not be altered. The racks will be placed to avoid interference with access roads and the passive landfill gas venting wells. A 10 foot setback from the 9 existing landfill gas vents will be maintained to minimize the potential for adverse impacts due to landfill gas emissions.

The concrete ballasts will utilize "Game Change" recycled high molecular weight polyethylene ("HMWPE) plastic tubs placed either directly on the Landfill final cover system vegetative support soils or on a leveling pad. The plastic tubs will be filled in place with concrete using low-ground pressure equipment for concrete delivery to the tubs, or using concrete pumping trucks located off the Landfill cap. Concrete pumper trucks will not operate on any portion of the Landfill cap (refer to Condition #17).

Crushed stone or crushed uncoated asphalt pavement, brick and concrete ("ABC") will be used as necessary to create a level surface for installation of the rack components for slopes up to a 12 percent grade. The crushed stone pads will be located above the vegetative layer of the existing final cover system and will be no more than 9 inches thick.

The low voltage cable conduits will be mounted on the rack assemblies of each array. As the conduits run between arrays and traverse the Landfill to the inverters/transformer skids, they will be installed above grade, mounted to the back of the array ballasts. As the medium voltage conduits run from the electrical pad above the Landfill final cover system, they will be supported by pedestals in a cable ladder tray or in rigid conduit. Once the medium voltage conduits are no longer above the Landfill final cover system, they will be installed in a below-grade trench with 32 inches of cover soil and an electrical warning tape. As a condition of this permit, the trench must be designed and constructed to include measures to prevent the migration of landfill gas along the trench and subsurface utilities located adjacent to the Landfill must be designed for an explosive environment. Medium voltage cable conduits will be designed in accordance with local electrical inspector requirements and the National Electrical Code (NEC) code (refer to Conditions #13 and 15).

Switchgear, two inverters and one transformer are proposed and will be located on a cast-in-place reinforced concrete pad located above the Landfill final cover system. The concrete pad will be 35 feet long and 20 feet wide, 1.5 feet thick at the perimeter and 1 foot thick in the center. The equipment pad will be surrounded by a chain link fence with posts cast into the concrete pad and no penetration of the Landfill final over. As indicated on an Application drawing entitled "Example Equipment Pad Layout", the equipment pad will be mounted on an approximately three foot thick subgrade placed above the Landfill final cover system. Conduits will run horizontally through the subgrade materials and turn vertically to pass through the concrete slab. As a condition of this permit, the subgrade material shall be crushed stone, or other material approved by MassDEP that will vent any landfill gas that migrates through the final cover system. The conduit passing through the slab must be cast in place.

Bearing Capacity, Settlement, and Stability: The Application included a geotechnical evaluation for the installation of the array and supporting structures.

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 loading. The results of the geotechnical evaluation are as follows;

- The modules, ballasts, and footings do not exceed loading criteria for the Landfill.
- The PV array will not cause adverse landfill settlement.

Based on the anticipated maximum loading of the ballasts, racking system, and modules on the Landfill surface, the Engineer calculated a bearing pressure of 2.7 pounds per square inch ("psi"). Including wind and snow loading, GameChange calculated a maximum soil stress of 4.75 psi. The anticipated maximum loading scenario of the concrete equipment pad and equipment on the Landfill surface will result in a bearing pressure of 2.8 psi. The Engineer stated these loads are less than the 7 psi loads experienced during the final cover construction and are expected to have a negligible effect on the final cover system.

Settlement analysis was also performed by the Engineer for the ballasts bearing on the final cover system. These calculations indicate settlement of less than one-half inch, an estimated strain on the HDPE membrane of less than 0.01 percent. The Engineer states that this strain is significantly below the industry standard of 5 percent .

Uplift, tipping and sliding stability evaluations were performed for the concrete ballasts by GameChange. Using a minimum acceptable factor of safety of 1.5, GameChange determined the minimum concrete ballast weights for uplift control, overturning control, and friction control (sliding) were 1399, 2829, and 2941 pounds respectively. GameChage determined that the friction control was the governing factor and specified a GameChange tub 6 feet long by 1.53 feet wide by 1.75 feet tall.

Access Road: There are no existing access roads across on the Landfill. One new access road will be constructed for use during future maintenance of the PV array. The access road will be constructed to be 12 feet wide and consist of a Group 3 woven geotextile fabric overlain by 6 inches of crushed stone.

As a condition of this permit, during construction of the PV array, low ground pressure vehicles (<7psi) will be permitted to travel over the Landfill final cover surface and throughout all stages of construction, the Landfill cap must continually be monitored for any signs of damage or stress. A final inspection of the Landfill surface must also be performed at the conclusion of the PV array construction project and any areas of concern must be repaired.

Storm Water: Under existing conditions stormwater saturates the Landfill cap and excess runoff sheet flows across the Landfill surface before discharging into adjacent wetlands. There are no swales or downchutes on the Landfill. A new access road has been designed with a crushed stone base allowing stormwater to flow through the stone. The ballast blocks will be either placed directly on the vegetative cover or elevated on crushed stone or crushed ABC. The Engineer stated that stormwater will continue to flow as under the existing conditions with a increase in time of concentration and a reduction in peak discharge rates.

Wetlands: Wetland areas abut the Landfill. The Applicant has applied to the Norton Conservation Commission for approval of the project and an Order of Conditions is pending.

Post Closure and Post-Closure Use Operations and Maintenance: Currently the Landfill is maintained by the Town. 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.

The post-closure use operation and maintenance of Landfill area used for the PV array, defined as all areas within 10 feet of any array component, will be performed by the Applicant.

MassDEP is requiring that during the first year of operation of the PV array inspections of the Landfill final cover system be performed on a monthly basis and thereafter quarterly, at a minimum (refer to condition #19).

Site Security: Site security for the electrical equipment pad will include a continuous chain link fence mounted on the concrete pad. Since no continuous security fence has been proposed around the PV array, the PV array must be designed to meet all security provisions in all applicable local, state and federal electrical codes and permits, including National Electrical Code (NEC), 2011 Edition, Article 690-"Solar Photovoltaic (PV) Systems. (refer to conditions #2 and #15).

Decommissioning Plan: The Town and the Applicant have entered into a long term lease agreement that includes a financial assurance arrangement and requires that the Applicant decommission and remove the PV system from the Landfill upon expiration of the lease agreement. The Applicant stated that the PV system components will be removed. Disturbed surfaces will be restored with loam and seeded with the Landfill left in similar condition to pre-installation as well as applicable regulations and requirements. MassDEP has determined that no separate financial assurance mechanism with MassDEP is required. A written decommissioning plan is required to be submitted prior to decommissioning. (refer to Condition #20)

MEPA Review: An Environmental Notification Form for the project was noticed in the October 20, 2014 Environmental Monitor. On November 19, 2014, a Certificate was issued by the

Secretary of Energy and Environmental Affairs, which stated that the project does not require the preparation of an Environmental Impact Report.

Health and Safety: The Application did not include a Health and Safety Plan for the construction phase or the operation and maintenance phase of the proposed PV array. Health and Safety Plans are required to be submitted for MassDEP's records as a condition of this Approval. (refer to Condition #8).

III. SITE DESCRIPTION & INVESTIGATIONS:

The Landfill site is comprised of multiple parcels which total approximately 38 acres. Approximately 13 acres were used for waste disposal and were capped with a landfill final cover system. The PV array will occupy approximately 8.5 acres of the Landfill site.

The Landfill was operated by the Town until operations ceased in July 1987. The Landfill site is bounded by Hill Street to the east and undeveloped land and wetlands to the south and west, and undeveloped land to the north.

Existing Final Cover System: On July 12, 1989, MassDEP approved closure plans for the Landfill. The final cover system was constructed in 1990, with a minimum top slope of 5% and maximum side-slopes of approximately 4 horizontal to 1 vertical (4:1).

The cap was constructed of the following components from bottom to top:

- a twelve-inch (12") thick base layer of soil, overlain by
- a 40-mil High Density Polyethylene (HDPE) smooth, flexible membrane liner material, overlain by
- a 24-inch thick granular soil drainage layer, overlain by
- a six inch thick topsoil layer.

Baker Environmental, Inc. provided construction oversight and prepared and submitted a Final Project Report detailing construction activities and certifying that construction was completed in accordance with the approved plans, as amended during construction.

Landfill Gas Extraction System: The Landfill has a passive landfill gas venting system consisting of 9 passive gas vents consisting of 6 inch pipe extending 7 feet above grade and terminating at a TEE. Two gas vents are individual vents not interconnected with other vents. Seven vents are interconnected with a 4 inch corrugated pipe installed approximately 18 inches below the final cover system geomembrane in a stone filled trench. Considering the 30 inches of Landfill final cover soils and the 18 inch pipe depth, the horizontal collection pipes are 4 feet below grade and should not be impacted by the low ground pressure equipment use for the PV array installation.

Post-Closure Environmental Monitoring: The Town is currently performing environmental monitoring in accordance with the MassDEP approval letter entitled "Post Closure Monitoring Plan", dated August 26, 2008 (the "Plan"). The Plan required that the Town perform groundwater monitoring and install a soil-gas monitoring network in order to address any

potential soil-gas migration issues. Subsurface sampling has revealed subsurface methane levels in excess of 25% of the Lower Explosive Level between the Landfill and the closest potential receptors (adjacent apartment buildings at 21 & 39 Hill Street and the associate subsurface utilities). The Town and MassDEP are currently evaluating appropriate future monitoring of this area and MassDEP will issue a separate correspondence in this regard. MassDEP has received a permit application for modifying the environmental monitoring plan (transmittal #255905), which will be the subject of a separate permit decision. The Applicants should familiarize themselves with all environmental conditions at the Landfill, including the area of subsurface gas migration. It is recommended that the migration area be identified in the Health and Safety Plans required pursuant to Condition #8.

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 Norton Landfill for a 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 Norton Landfill as detailed in the Application and does not relieve the Applicant 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, 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 Town, Applicant, Engineer and Applicant's 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), 2011 Edition, Article 690-"Solar Photovoltaic (PV) Systems".

3. Notification of Construction: The Applicant shall notify the MassDEP solid waste section chief in writing (e-mail is acceptable) when the post-closure use construction commences and is completed.

4. Certification Report: Within ninety (90) days of completing the installation of solar photovoltaic 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 be signed and stamped by a Massachusetts Registered Professional Engineer and 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.

5. Preconstruction Work: Prior to commencement of construction activities, the entire Landfill shall be mowed and all passive Landfill gas vents, Landfill soil-gas monitoring wells, groundwater monitoring wells and other existing above ground structures on the Landfill cap and appurtenances shall be flagged for visibility, and protective barriers shall be placed around such structures as needed to prevent damage by vehicles accessing the area.

6. 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 off the cap. 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 additional 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" as defined below 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 Town or Applicant 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, geosynthetic clay liner (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 their intent to perform repairs and provides MassDEP with final survey results and a summary write up.

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

7. Ongoing Landfill Maintenance: During installation and operation of the PV array, the Applicant shall not impede the routine inspection and maintenance of the Landfill by the Town.

   Be advised that the Town is currently implementing a corrective action for one sideslope area of the Landfill. The Applicants shall coordinate all PV array installation work with the Town personnel overseeing the corrective action and shall not interfere with the completion of the corrective action.

8. Health and Safety: The Town, Applicant, Engineer 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 Solar Array Construction Period Health and Safety Plan shall be developed and submitted to MassDEP (for its files) prior to the beginning of any construction work. The Solar Array Construction Period Health and Safety Plan shall include as a minimum;
   - 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.

   A site specific Post Closure Operations and Maintenance Health and Safety Plan for the post-closure use period shall be developed and submitted to MassDEP (for its files) prior to commencement of operation of the PV array. The Post Closure Operations and Maintenance Health and Safety Plan shall include as a minimum;
   - 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 maintenance activities at the Landfill regarding hazards associated with the landfill gas and the PV array, including electrical hazards.

9. Personnel Training: The Town, Applicant, Engineer and Applicant's Contractors shall instruct all personnel regarding the potential hazards associated with landfill gas and shall give on-the-job training involving in any activity authorized by this permit. Such instruction and on-the-job training shall teach personnel how to comply with the conditions of the permit to carry out the authorized activity in a manner that is not hazardous to public health, safety, welfare or the environment.

10. Landfill Gas Notification Requirements:

    a. As specified in solid waste management regulations at 310 CMR 19.132 (5) (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 conduit, 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's regional Office that covers the municipality in which the facility is located within two hours of the findings; and*
    3. *undertake the actions specified under 310 CMR 19.150, Landfill Assessment Requirements and 310 CMR 19.151: Corrective Action Requirements, 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 Applicant shall notify MassDEP's Bureau of Waste Site Cleanup-Emergency Response Section (508) 946-2850 within two (2) hours of the exceedance as per 310 CMR 40.0321(1) (a) of the regulations.

11. Integrity of the Final Cover System: No excavation of the Landfill final cover system has been proposed. No excavation of the Landfill final cover system shall be performed without a prior proposal and written MassDEP approval. All PV array installation work shall be as depicted and described within the Application and approved plans. Manufacturer's recommendations for standard construction practices **shall not be followed** if the practice may lead to damage to the final cover system. (For example: see GameChange installation manual steps 6 and 12 – "*posts may be pounded into the ground when downward adjustment is required*").

12. Array Setbacks: The Applicant shall maintain a minimum 10 foot radius buffer between the closest edge of the PV array modules and all Landfill gas vents and a 10 foot radius buffer between the pad mounted electrical equipment and all Landfill gas vents.

13. Proposed Electrical Equipment: A copy of the proposed final design for the electrical equipment and protective switchgear (interconnection equipment) proposed on-site shall be submitted to MassDEP for review and approval prior to installation. The Applicant, Engineer and Applicant's Contractors are responsible to ensure that utilities/structures will not accumulate landfill gas during construction and operation. Appropriate electrical plans shall be stamped by a Massachusetts registered Electrical Engineer.

    All utility trenches shall be designed so they do not act as a conduit for landfill soil-gas migration and shall be designed for an explosive environment.

14. Enclosures and Combustible Gas Alarms: There shall be no penetrations (utility, conduits or other) at the base of the electrical equipment support concrete slab unless the slab subgrade is constructed above the landfill final cover system and is adequately ventilated to prevent landfill

gas migration into the electrical equipment. Any enclosures shall have a landfill gas monitor that is fully operational at all times. The monitor shall be calibrated to a methane standard; have an audible and a lighted beacon. At a minimum, the alarm shall be set to sound when the concentration of explosive gases exceeds 10% of the Lower Explosive Limit (LEL).

15. Electrical Design Plans: The Applicant shall submit final electrical design plans, stamped by a Registered Massachusetts Electrical Engineer prior to commencing construction activities. The electrical design, including the complete grounding design, shall meet applicable NEC and local electrical code requirements. If any grounding rods are installed as part of the grounding system, the rods shall only be driven into the ground outside the limits of the Landfill final cover system. The location of any such grounding rods shall be clearly depicted on a site plan.

16. Construction Precautions: All construction shall be supervised by a Massachusetts Registered Professional Engineer. All necessary precautions shall be taken to protect the Landfill final cover system, environmental monitoring network and the Landfill gas extraction wells. 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. Prior to the commencement of construction activities, all Landfill gas vents located in close proximity to the proposed array shall be flagged for visibility to minimize the potential for damage by vehicles during construction. If any damage occurs to the any Landfill components, the Applicant shall notify MassDEP within 24 hours and provide a written plan with a schedule for repairs.

17. Vehicles Operating on the Landfill Final Cover System:
    Vehicles operating on the Landfill final cover system shall be low-pressure construction equipment, with fully loaded ground pressures of **7 psi** or less.

    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 any equipment is creating the potential for damage to the final cover system, 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 equipment used on the Landfill, the Landfill area accessed by the vehicle, and the pressure rating of each vehicle shall be indicated in the final certification report.

    If use of the equipment on the Landfill is determined to be detrimental to the cap vegetative support layer surface, a geotextile and a 6-inch layer of crushed stone may be temporarily placed on the vegetative support layer surface in problem areas for equipment use, provided that settled areas of the Landfill are repaired pursuant to Condition 6 and the temporary geotextile/crushed stone implementation adequately addresses the issue.

18. Vehicles Operating on the Landfill Assess Road above the Final Cover System:
Prior to operation of any vehicle with a ground pressure greater than 7 psi on the Landfill access road above the Landfill final cover system during PV array construction and or during PV array maintenance or Landfill maintenance, the Applicant or the Town shall submit a list of the equipment proposed to be driven on the access road, the fully loaded ground pressure of the equipment, and an evaluation by a Massachusetts Registered Professional Engineer demonstrating that the access road and final cover soils above the final cover geomembrane are adequate to protect the final cover system geomembrane from adverse impacts from the proposed vehicles.

19. Post-closure Use Operation and Maintenance Plan: During the first year of operation 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 14 days of completion. Following the first year of operation of the PV array, inspections of the Landfill shall be performed on a quarterly basis and shall be submitted to MassDEP within 14 days of completion. Inspections shall be conducted by a third-party consulting Massachusetts Registered Professional Engineer, or other qualified solid waste professional. The Applicant, Engineer and Applicant's Contractors shall monitor the effectiveness of the storm water management system. MassDEP shall be consulted prior to any deviation from the approved storm water control design (sheet flow only at the Norton Landfill). MassDEP may require a permit modification application for significant design modifications. Any erosion problems, settlement problems, security or other issues observed at the Landfill shall be reported to MassDEP's solid waste section chief within 24 hours. The notification must include a written plan with a schedule for repairs.

20. Decommissioning Plan: If the proposed project is abandoned, during or after completion of construction, the Applicant shall submit a detailed written decommissioning plan. The decommissioning and site restoration plan should include, at a minimum; dismantling and removal of all panels and supporting equipment, transformers, overhead cables, slabs, 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. The plan should describe the methods and equipment proposed to be use during decommissioning and to ensure the integrity of the Landfill final cover system is maintained.

21. 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.

22. 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 solar 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 19.033(4)(b), if the Applicant is aggrieved by MassDEP's decision to issue this decision, it 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 Applicant believes it is 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 decision on the effective date. Failure by the Applicant to exercise the right provided in 310 CMR 19.033(4)(b) shall constitute waiver of the Applicant's right to appeal.

Right to Appeal

This approval has been issued pursuant to M.G.L. Chapter 111, Section 150A, and 310 CMR 19.033: Permit Procedure for an Application for a Permit Modification or Other Approval, of the "Solid Waste Management Regulations". Pursuant to 310 CMR 19.033(5), any person aggrieved by the final permit decision, except as provided for under 310 CMR 19.033(4)(b), may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. Chapter 111, Section 150A and M.G.L. Chapter 30A no later than thirty days of issuance of the final permit decision to the applicant. 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 be effective in accordance with the terms of 310 CMR 19.033(3).

Notice of Appeal: Any aggrieved person intending to appeal a final permit decision to the Superior Court shall first provide notice of intention to commence such action. Said notices of intention shall include MassDEP Transmittal No. X262998 and shall identify with particularity the issues and reason why it is believed the final permit decision was not proper. Such notice shall be provided to the Office of General Counsel of MassDEP and the Regional Director for the regional office which processed the permit application, if applicable at least five days prior to filing of an appeal. The appropriate addresses to send such notices are:

Office of General Counsel
Department of Environmental Protection

Philip Weinberg, Regional Director
Department of Environmental Protection

One Winter Street
Boston, MA 02108

20 Riverside Drive
Lakeville, MA 02347

No allegation shall be made in any judicial appeal of a final 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 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.

If you have any questions or comments regarding this approval letter, please contact me at (508) 946-2847 or Dan Connick at (508) 946-2884 or at the letterhead address. In any correspondence regarding this approval, please reference permit Transmittal Number # X262998.

Very truly yours,

Mark Dakers, Chief
Solid Waste Management Section

D/DC

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