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

June 19, 2017

Paul Chuckran
Albina, Ltd
25 Colonial Drive
Bridgewater, MA 02324

and

Emily Mann
Bridgewater Landfill Solar, LLC.
88 Black Falcon Avenue
Boston, MA 02210

RE: Approval with Conditions
Application for: BWP SW 36 Post Closure Use
Transmittal Number: X259704

AT: Chuckran Corporation Landfill
1221 Bedford Street
Bridgewater, MA 02324
Facility ID No. 39116 R.O. No. 172370

Dear Mr. Chuckran and Ms. Mann:

The Massachusetts Department of Environmental Protection, Solid Waste Management Section ("MassDEP"), has completed its review of the referenced Post-Closure Use permit application ("Application") for the Chuckran Corporation Landfill ("Landfill").

MassDEP has determined that the Application is administratively and technically complete and hereby approves the Post-Closure Use of the Landfill for a 1.8 Megawatt (MW) solar photovoltaic (PV) array subject to the conditions specified herein.

The Application was prepared and submitted on behalf of Bridgewater Landfill Solar LLC, the PV array developer ("Developer"), and Albina, Ltd., the landfill owner ("Owner"), (jointly

hereinafter referred to as the "Applicants") by Tighe & Bond, Inc. ("Engineer") of Westfield, Massachusetts.

Hereinafter, the Owner, Developer and all construction and maintenance personnel associated with the Landfill shall be referred to as the "Applicant's Contractors".

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* (Manual). The Application consists of the following:

A. A permit application transmittal form assigned No. X259704, a completed application form for Post-Closure Use - Major (BWP SW 36), a narrative describing the proposed post closure use, engineering calculations, and five (24" x 36") engineering drawings received by MassDEP on July 21, 2015.

B. Supplemental Application information prepared by the Engineer, consisting of responses to MassDEP's October 14, 2015, comments, received via e-mail by MassDEP on January 21, 2016.

C. Supplemental Application information prepared by the Engineer, consisting of responses to MassDEP's February 2, 2016, comments, received via e-mail by MassDEP on February 24, 2016, and September 27, 2016.

D. Supplemental Application information prepared by the Engineer, consisting of responses to MassDEP's September 27, 2016, comments, received via e-mail by MassDEP on October 3, 2016 and October 10, 2016.

E. On June 14, 2017, MassDEP received payment of past due annual compliance fees and recommenced with its review of the Application.

The Application drawings and geotechnical calculations are signed and stamped by Brian S. Huntley, Massachusetts Registered Professional Civil Engineer No. 46273. A "One Line Diagram" electrical drawing was signed and stamped by Dallas L. Olson, Massachusetts Registered Professional Electrical Engineer No.47883.

II. SITE DESCRIPTION

The Chuckran Corporation Landfill is an inactive unlined landfill located at 1221 Bedford Street on a site assigned parcel of land encompassing approximately 12 acres landfill site, in Bridgewater, MA (the "Site"). The Landfill was active from 1976 until 1992 when it stopped receiving waste.

The Landfill is bounded by undeveloped/forested land and a golf driving range to the north, Bedford Street to the east, a buffer of undeveloped land and Bedford (Industrial) Park to the

south, and undeveloped/forested land to the west. Primary site access is provided from Bedford Street via Colonial Drive which bisects the Landfill from the driving range parcel.

Existing Cover System: Based on the information available, intermediate cover was placed on the Landfill in 1993. A Comprehensive Site Assignment and a Closure Certificate permit application for the Landfill have been submitted to MassDEP and are currently under review.

Information submitted by the Engineer included a Clay Certification report prepared by Engineering & Management Services, Inc., certifying that:

- At the end of operations, the Landfill had side slopes between 1.5 and 2:1;
- A clay layer was placed over the Landfill top plateau to provide a minimum 5% slope and placed to build the side slopes out to provide a maximum slope of 3:1;
- A minimum four-foot layer of clay was used on the lower (south) end of the Landfill and clay layer thickness increased in a northerly direction;
- The clay provided a minimum of four feet of cover at the far southerly end and upwards of 10 feet of cover over the side slopes;
- Three Shelby tube samples were collected and analyzed. The permeability results ranged between 1.0×10^{-8} and 1.9×10^{-8} cm/sec; and
- The clay is overlain by 0-1 feet of sandy till on the plateau areas.

Post-Closure Environmental Monitoring: The Landfill does not currently have an air quality/soil gas environmental monitoring program. Semi-annual groundwater sampling is conducted. The proposed solar array project will not impact or modify the existing groundwater monitoring program.

The proposed project will not impact the Owner's ability to conduct routine inspections for settlement of the final cover system. The PV array design will also not impede the Owner's ability to clean the drainage swales of sediment. The operation and maintenance plan developed for the PV array proposes annual site visits to inspect the solar array. As a condition of this permit, MassDEP will be requiring monthly inspections for the first year of PV array operation and quarterly inspections thereafter, unless otherwise approved by MassDEP in writing. The results of all inspection are required to be submitted to MassDEP, the Owner and the Developer. (refer to Condition #17)

The Engineer has submitted three permit applications: a Landfill Closure Certification, a Post-Closure Use Permit Application and a CSA Application to demonstrate the alternative final cover system design meets the requirements of 310 CMR 19.113 Alternative Final Cover System Design. Pursuant to 310 CMR 19.113, MassDEP may approve an alternative final cover system design if the proponent demonstrates to MassDEP "that an alternative design would adequately protect public health, safety and the environment".

On June 19, 2017, MassDEP approved a scope of work to collect additional information to complete the CSA. The Applicants may not proceed with construction of the PV array until Applicants submit the additional information to complete the CSA as required in MassDEP's "Proposed Scope of Work Approval" issued on June 19, 2017 and MassDEP approves the CSA. (refer to Condition #2)

Information obtained from the Comprehensive Site Assignment("CSA") Application and MassDEP records indicate the Landfill owner has not completed the Landfill Closure Certification process pursuant to 310 CMR 19.000. The Engineer is submitting this CSA to demonstrate the adequacy of the existing unpermitted clay cap closure system in protecting public health, safety, and the environment.

III. POST-CLOSURE USE PROPOSAL SUMMARY:

The Developer, through an agreement with the Owner, proposes to develop a 1.8 MW solar photovoltaic installation on the Landfill consisting of the following components:

- A12 foot wide, permanent access road on the Landfill;
- Approximately 1,020 (26.5 feet by 7.2 feet) Game Change Pour-In-Place™ Ground Mounting Racks, or equivalent, running approximately east-west and spaced approximately 6.9 feet apart;
- Ballast blocks (1.75 feet by 6.75 feet by 13 inches) oriented north-south;
- Approximately, 4,080 Yingli YL300 P-35b Solar Modules, or equivalent, placed at a 25 degree tilt angle.
- Two Inverters rated for 1000 VDC, compliant with UL1741, models TBD;
- One 1,500 kVA transformer, or equivalent;
- Photovoltaic panel support racks interconnected and connected to the inverter/transformer using above-ground cables; and
- No vegetative layer was placed during the closure process but over the time some organic growth has occurred on the surface of the Landfill.

The PV array will be installed on areas of the Landfill with a slope of less than 10%. The project will not require any significant clearing, grading, or compaction activities. Crushed stone or crushed, clean ABC when required to level the ballast foundations for the racks. The Applicants are required to, at all times, protect the integrity of the Landfill final cover system, landfill gas system, and environmental monitoring components. (refer to Conditions #14 and #15).

The PV array will utilize PV modules mounted on framed racks attached to cast-in-place, concrete ballast blocks. The racking system will hold the panels at a fixed tilt of 25 degrees from horizontal facing south. The typical spacing between each row will be approximately 6.9 feet (north-south measurement).

Each string of PV panels will have an integrated combiner and disconnect switch that the panel wire feeds into. From the combiner box, energy will be transmitted to one of two inverters located on equipment pads constructed on the Landfill final cover. Final electrical details will be provided by the Applicant prior to construction. It is currently anticipated that cable trays will be used to support conduit above the Landfill surface from the arrays to the electrical equipment pad. (refer to Condition #3)

The equipment pad at the Landfill will be located adjacent to the proposed access road in the northwest corner of the site and will have inverters, switchgear and transformers that will

interconnect the power to National Grid's local distribution circuit on Bedford Street. As a condition of this permit, the equipment pad must be designed to prevent landfill gas from entering the electrical equipment. (refer to Condition 3)

All electrical work will be designed for the most recent version of the Massachusetts Electrical Code (MEC) which includes and incorporates the requirements of the National Electric Code (NEC). Prior to construction, an electrical permit will be obtained from the local building department official, and the project will incorporate any additional electrical requirements stipulated by the building department official (refer to Condition #4).

No existing landfill gas collection and management system exists. Passive landfill gas vents will be installed on the Landfill pursuant to the results of ongoing site assessment and shown on the final PV array site plan. The arrays and other electrical equipment will be set back a minimum of 10 feet from the passive gas vents. (refer to Condition #2)

A new 12 foot wide access road will extend from the existing gravel road and curve around the northwest corner of the proposed array. The access road will be constructed with 18 inches of processed gravel borrow placed on a woven geotextile fabric placed on the existing Landfill surface, overlain by 6 inches of dense graded crushed stone or crushed, clean asphalt, brick and concrete ("ABC"). Only low ground pressure ("LGP") equipment with less than 7 pounds per square inch ground pressure will be allowed on the Landfill cap and outside of the access road. Construction staging and stockpiling of materials will be limited to areas not on the Landfill cap. (refer to Conditions #12 and #13)

Geotechnical Evaluation: The Application included a geotechnical evaluation for the installation of the PV array and supporting structures on the final cover systems prepared by the Engineer based on array loading information provided by Gamechange Racking LLC. and submitted within the Application.

The results of the geotechnical evaluation are as follows:

- The modules, panel support racks, and ballasts do not exceed the loading criteria for the Landfill. The estimated maximum applied ground pressure will be 2.8 psi compared to a 7.0 psi ground pressure stated to be allowable by the Engineer;
- The proposed electrical equipment pad, with equipment, will not exceed the loading criteria for the Landfill. The estimated maximum applied ground pressure will be 4.2 psi compared to a 7.0 psi ground pressure stated to be allowable by the Engineer;
- The PV array will not cause adverse Landfill settlement. Predicted settlement was calculated as 0.03 inches at the ballast blocks;
- The PV array is stable based on uplift, sliding and overturning and seismic considerations.

Storm Water: The Landfill does not currently utilize formal stormwater management features to control surface runoff from the site. As described in the Comprehensive Site Assignment application and shown of the Post Closure Use Application "Proposed Site Plan", as part of the Post Closure Use project, stormwater collection swales will be constructed along portions of the

southern and eastern landfill side slopes. Each swale will be lined with modified rockfill convey water to the southeast corner of the site, cross the perimeter access road and end at a level spreader located adjacent to a land area designated as an Isolated Land Subject to Flooding ("ISLF"). The level spreader will utilize two 6-inch diameter culverts to convey water to the ISLF.

Minimal changes to the existing storm water control system are proposed, limited to the area of the proposed new access road. The Applicants evaluated the existing and proposed stormwater management system using HydroCad Software Solutions LLC's HydroCAd 9.0. The Applicants determined that the proposed use of the Landfill for the PV array will have minimal impacts to stormwater runoff quantities.

Health and Safety: The Applicants, Engineer and Applicants' 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. As a condition of this permit all personnel shall be trained regarding the potential hazards associated with landfill gas and shall give on-the-job training involving in any activity authorized by this permit. (refer to Condition #11).

As a condition of this permit, a Construction Phase Health and Safety Plan and an Operations and Maintenance Phase Health and Safety Plan must be prepared and submitted to MassDEP for its records. (refer to Condition #5).

Post Closure and Post-Closure Use Operations and Maintenance: Per agreement with the Owner, the Developer has assumed responsibility for vegetation management on the entire Landfill for the life of the PV project as the fenced in area encompasses the entire footprint of the Landfill. This agreement does not relieve the Owner from its responsibility to comply with all post closure monitoring and maintenance requirements for the Landfill.

Site Security: A chain link fence with a locked gate will be installed around the solar array to provide site security. The fence will be a post driven fence that will be located outside the limits of the landfill final cover system. (refer to Condition #18).

Decommissioning Plan: The Applicants stated that under the terms of an agreement between the Owner and Developer the developer will be required to remove the PV system after expiration or termination of the agreement. (refer to Condition #19).

Financial Assurance Mechanism: Pursuant to the provisions of 310 CMR 19.051, the Applicants shall establish a Financial Assurance Mechanism ("FAM"), based on the AC rated capacity of the PV array, in order that sufficient funds are available to properly decommission the solar PV array system, and all of its appurtenant structures and features, and to properly restore the Landfill to its original condition. (refer to Condition #20)

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 Chuckran Corporation Landfill for a Solar Photovoltaic Array subject to the conditions identified herein.

1. Permit Limitations: The issuance of this approval is limited to the proposed Solar Photovoltaic Array at the Chuckran Corporation Landfill as detailed in the Application and does not relieve the Applicants' Contractors 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. This approval does not relieve the Owner of the Landfill, from its responsibility to comply with all post closure monitoring and maintenance requirements for the entire Landfill. 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. Comprehensive Site Assessment Per Application: The Applicants shall not commence PV array construction until MassDEP approves the Comprehensive Site Assessment Application (BWP SW 23, Transmittal No. X260760)

3. Pre-Construction submittals: Prior to construction, the Applicants shall submit the following to MassDEP for its review and approval at least 60 days prior to commencing construction activities, unless otherwise approved by MassDEP:

    a) A Final PV panel layout plan depicting all PV panels, all conduits, all electrical equipment and pads, all utility poles and overhead wires, and all other electrical equipment. The layout plan shall show the final Landfill contours, the proposed landfill gas vents, the 10 minimum setback for all electrical equipment from the landfill gas vents, the new access road, the 100 foot wetland buffer zone, and any other information pertinent to the design and layout of the PV array.
    b) Final electrical drawing(s), prepared, signed and stamped by a Massachusetts Registered Professional Engineer, depicting the general layout and details of all electrical equipment, all conduit supports, all underground conduit details, all equipment pads. The equipment pad, and all underground conduits (if any), must be designed to be explosion proof and prevent landfill gas from entering the electrical equipment.
    c) A narrative describing the final electrical design, including manufacturer's catalog cuts of major electrical components: panel, inverters, and transformers.
    d) A copy of the Bridgewater Conservation Commission Order of Conditions.
    e) A statement from the Engineer that the engineering assumptions made in the Application, (or as revised in an accompanying Engineer's submittal) are consistent with the final PV array layout including the equipment weight, reaction forces, and maximum Landfill slope in areas of installation of the PV array, and

f) A copy of the site specific health and safety plan for the post-closure use CONSTRUCTION phase as described in Condition #5 (for MassDEP files, not approval).

4. Regulatory Compliance: The 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".

5. Health and Safety: The Applicants, Engineer and Applicants' 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 copy of the site specific health and safety plan for the post-closure use CONSTRUCTION phase, shall be submitted to MassDEP (for its files) 60 days prior to commencement of the PV array construction. The health and safety plan shall include as a minimum:

   - protocols for monitoring of landfill gas (i.e. methane, hydrogen sulfide, etc.) as needed; and
   - protocols for modifying work practices if landfill gas is detected at levels deemed unsuitable.

   A copy of the site specific health and safety plan for the post-closure use OPERATIONS AND MAINTENANCE phase, shall be submitted to MassDEP (for its files) prior to the beginning of any construction work. The 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 PV array including electrical hazards.

6. Landfill Gas Notification Requirements:
   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 conduits, excluding gas control, gas recovery and leachate collection system components, the owner or 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, as required by the Department."*

7. 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.

8. 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 prior to installation of the PV array. Any area repaired shall be surveyed and the location marked on a plan with the pond value. Any future settlement shall be repaired and 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 on the low permeability layer 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 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 Applicant reports 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.

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

10. Pre-construction Work: Prior to commencement of construction activities all landfill gas passive vents, 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.

11. Personnel Training: The 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.

12. 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 as much as possible. If MassDEP determines the use of excavation equipment is creating the potential for damage to the final cover soils, 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. (refer to Condition #15)

13. Road Access and Low Ground Pressure Equipment: Low ground pressure equipment shall not access the final cover system from roads where the transition will result in excessive pressure and wear on the Landfill vegetative surface. The on-site engineer may construct ramps as necessary.

14. Integrity of the Final Cover System: All disturbances of the Landfill shall be limited to the proposed excavations and installations as depicted and described within the Application and approved plans. No excavations shall penetrate the final cover system soils without written approval by MassDEP. The Engineer and Applicants' Contractors shall ensure that vehicles operating on the Landfill surface do not compromise the integrity of the Landfill final cover system. No grade stakes shall be used in the area of the Landfill final cover system. The Applicants shall verify the limits of the Landfill final cover system prior to installation of any

security fence, utility poles, etc. that are designed to be installed outside the limits of the final cover subsystem.

15. Construction Precautions: All necessary precautions shall be taken to protect the Landfill storm water control system, environmental monitoring network and the Landfill gas vents and horizontal pipes. All operators of vehicles entering the area should be clearly instructed by the on-site engineer and/or the Applicants' Contractors 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 cover system. If any damage occurs to the any Landfill components, the Engineer shall notify MassDEP within 24 hours and provide a written plan with a schedule for repairs.

16. 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. At a minimum, the report shall include as built drawings depicting all pertinent site features, equipment used, etc.

17. Post-closure Use Operation and Maintenance Plan: During the first year after completion of construction of the PV Facility, the Permittee shall ensure that inspections of the Landfill final cover system are conducted on a quarterly basis. Pursuant to 310 CMR 19.142(6), inspections shall be conducted by a Third-Party Inspector registered with MassDEP, pursuant to 310 CMR 19.018. Quarterly inspection reports shall be submitted to MassDEP the developer and the Owner within fourteen (14) days of completion. Following the first year of operation of the PV Facility, and if no problems have been documented (and noted by MassDEP to warrant continued quarterly inspections) , inspections of the Landfill shall be performed on an annual basis and shall be submitted to MassDEP within **fourteen (14)** days of completion.

    The Applicants, Engineer 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. When noted, all settlement shall be repaired. (refer to Condition #8)

    There are no proposed changes to the post closure operation and maintenance plan for the area to be maintained by the Owner and not used for the PV array. Landfill inspections shall be conducted pursuant to 310 CMR 19.018(6)(b) every two years that evaluate the entire Landfill, the environmental monitoring system and summarize the inspection and monitoring

information pursuant to 310 CMR 19.018(6) and (8) and submitted pursuant to 310 CMR 19.018(8)(c).

18. Site Security: Pursuant to 310 CMR 19.130(23) the Owner is required to provide sufficient fences or other barriers to prevent unauthorized access to the Landfill. The Owner must continually monitor and evaluate the potential for unauthorized access and institute all appropriate measures to prevent unauthorized access during the closure and post-closure period.

19. Decommissioning Plan: If the proposed project is abandoned, during or after completion of construction, the Applicant shall submit a 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, foundations and buildings and restoration of the roads and the final cover system components, including the vegetative support layer, to substantially the same physical condition that existed prior to post-closure use construction.

20. Financial Assurance Mechanism: Pursuant to the provisions of 310 CMR 19.051, the Applicants shall establish a Financial Assurance Mechanism ("FAM") in order that sufficient funds are available to properly decommission the solar PV array system, and all of its appurtenant structures and features, and to properly restore the Landfill to its original condition The FAM shall be based on the MassDEP approved cost estimate and shall be "in-place" at least thirty (30) days prior to the start of construction. MassDEP has determined that the appropriate amount of the required FAM is $90,000 per megawatt AC for landfills that do not have an existing FAM that covers landfill maintenance. Accordingly, the required FAM amount for the 1.8 megawatt array proposed at the Landfill is approximately $162,000. Prior to establishment of the FAM, the Applicants must provide MassDEP with the final PV array capacity in terms of megawatts AC and DC to determine the exact FAM amount.

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. Transfer: No transfer of this permit shall be permitted except in accordance with the requirements of 310 CMR 19.044. The form established by MassDEP for permit transfers is the BWP SW 49 application form. Any time the Applicants for this project do not include a municipal entity, the Applicants shall provide to MassDEP a financial assurance mechanism, in accordance with 310 CMR 19.051, for the costs of decommissioning and site restoration activities.

23. 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.

V. 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.

VII. 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. X259704 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
One Winter Street
Boston, MA 02108

Regional Director
Department of Environmental Protection
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.

Please direct any questions regarding this matter to me at (508) 946-2847 or to Hersh Thakor (508) 946-2715, or write to the letterhead address.

Very truly yours,

Mark Dakers, Chief
Solid Waste Management Section
Bureau of Air and Waste

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