



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

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November 10, 2015

Michael Gauthier
Town of Woburn
10 Common Street
Woburn, MA 01801

Re: WOBURN – Solid Waste
Woburn Landfill
202 Merrimac Street
FMF# 39928
Post-Closure Use – Solar Power Generating Facility
Approval and Authorization to Construct
Transmittal Number: X266890

Dear Mr. Gauthier:

The Massachusetts Department of Environmental Protection, Northeast Regional Office, Bureau of Air and Waste, Solid Waste Management Section (MassDEP) has reviewed the application by the City of Woburn (the “City”) for the post closure use of the Woburn Landfill located at 202 Merrimac Street, Woburn, Massachusetts (the “Landfill”). The application (BWPSW36, Post Closure Use – Major, Transmittal Number X266890) was prepared on behalf of the City by Weston & Sampson Engineers, Inc., Peabody, Massachusetts.

The application proposes the installation of a 3.4 megawatt (MW) solar photovoltaic power generating facility (“PV Facility”) on the Landfill. Included with the application are design plans for the solar array and an engineer’s report describing and supporting the design of the facility.

The City has entered into a lease and energy purchase arrangement with American Capital Energy, Inc. and Renewable Energy Development Partners, LLC. (the “Developers”) for the installation and operation of the PV Facility.

The proposed PV Facility will consist of approximately 11,000 solar modules mounted on racks which will be supported by concrete foundation ballasts. Nine (9) inverters will convert the DC power from the modules to AC power for connection to the Eversource electric power grid.

The solar modules will be supported by galvanized steel trays (ballast trays) placed directly on the existing ground surface. Pour in place concrete foundation ballasts will be constructed to stabilize the panels from sliding and wind uplift.

The Developer will be responsible for the mowing and maintenance of the vegetative cover of the landfill within the fenced area of the facility following installation of the PV Facility. Environmental monitoring of the site will continue to be performed by the City pursuant to the landfill's existing environmental monitoring plan.

MassDEP has determined that the application is administratively and technically complete and that, subject to the terms and conditions of this decision and permit, the proposed post-closure use complies with the applicable requirements of 310 CMR 19.000, the Massachusetts Solid Waste Regulations (the "Solid Waste Regulations"). The application demonstrates pursuant to 310 CMR 19.143(3) that the installation and operation of the solar PV facility as proposed and approved by this decision:

- Will not result in a disturbance of the Landfill cap that could cause an adverse impact to public health, safety or the environment;
- Will not impair the integrity or functioning of the final cover, the components of the containment system, the landfill gas control system, and the environmental monitoring systems; and
- Provides for the maintenance of the Landfill cap's storm water drainage facilities, basins, swales, and other erosion/sedimentation controls.

Therefore, in accordance with M.G.L. Chapter 111, § 150A and 310 CMR 19.143, MassDEP approves the application and issues this Post-Closure Use Permit subject to the City's compliance with 310 CMR 19.000 and the following conditions, imposed by MassDEP pursuant to 310 CMR 19.043(1) *Items Subject to Conditions* and 310 CMR 19.142(7) *Additional Measures*. This decision is a Post-Closure Use Permit pursuant to 310 CMR 19.143 *Post-Closure Use of Landfills*.

Permit Conditions

1. The City and Developer shall comply with this permit and the requirements of 310 CMR 19.000, including, but not limited to, the requirements established at 310 CMR 19.043(5) *Standard Conditions*.
2. The City and Developer shall assure persons conducting activities¹ at the PV Facility and Landfill are familiar with the applicable provisions of this permit and the approved plans, and that all work performed at the Landfill complies with 310 CMR 19.000 and the applicable requirements of this permit.
3. Pursuant to 310 CMR 19.043(5)(a) *Duty to Comply*, this decision does not relieve the City and Developer, or others, from their obligations to comply with all other applicable federal and state laws and regulations including, but not limited to acquiring applicable permits and approvals, including local permits.

¹ Activities include, but are not limited to, the construction, installation, operation, and maintenance of the PV Facility and the Landfill.

4. Not less than seven (7) days prior to commencing construction pursuant to the application and this permit, the City shall notify MassDEP in writing of the scheduled date of the commencement of construction at the site. In addition, the notification shall include:
 - a. The projected schedule for completion of the major construction milestones and the PV Facility;
 - b. The name and contact information of an on-site contact for the construction;
 - c. A health and safety plan for MassDEP's files that includes, but is not limited to:
 - i. protocols for monitoring for landfill gas (methane, hydrogen sulfide, etc.) as needed;
 - ii. protocols for modifying work practices if landfill gas is detected at levels of concern (action levels);
 - iii. instruction and training of all personnel working on the site regarding the potential health and safety hazards at the Landfill including, but not limited to those associated with landfill gas;
 - iv. instruction and training of all personnel in compliance with the conditions of this permit and how to perform authorized activities in a manner that is not hazardous to public health, safety, and the environment: and
 - d. The National Pollutant Discharge Elimination System (NPDES) Notice of Intent and Stormwater Pollution Prevention Plan (SWPPP).
5. The City and Developer shall not commence construction of the PV Facility until it has provided the plans and notification to MassDEP and the Town of Woburn Board of Health pursuant to Condition 4 above.
6. All construction work shall be completed and conducted under the supervision of an independent Massachusetts Registered Professional Engineer ("Engineer of Record") who shall have sufficient qualified staff on-site to provide field supervision and quality assurance/quality control for all construction activities.
7. The City and Developer, and the Engineer of Record, are responsible to ensure that all necessary precautions are taken to protect the health and safety of workers and the general public during the construction and operation of the PV Facility and during its decommissioning.
8. All disturbance of the Landfill shall be limited to the proposed excavations and installations as depicted and described in the application and the approved plans and this permit. The Developer and any other contractors performing work at the Landfill shall without delay notify the Engineer of Record or his/her on-site representative upon encountering or damaging the flexible membrane layer (FML) of the landfill cap.
9. If the FML of the cap is damaged, the City shall notify MassDEP without delay and in no case later than the close of business of the next business day after it becomes aware of any incident or such damage. This notification requirement is in addition to any other notification requirements required by statute or regulation including, but not limited to, 310 CMR 19.000 and 310 CMR 40.0000.

10. The City and Developer shall maintain copies of this decision and permit, the application, the health and safety plan, and documentation that site personnel have been trained pursuant to the health and safety plan at the site during construction of the PV Facility.
11. Pursuant to 310 CMR 19.043 Standard Conditions MassDEP and its agents and employees shall have the right to inspect the Landfill, any equipment, structure or land located thereon, to take samples, to perform tests, and have access to and photocopy records, and to otherwise monitor compliance with this permit and all environmental laws and regulations administered by MassDEP.
12. Notice of the landfill located on this site, including this approval, shall be recorded in the applicable Registry of Deeds and/or the Registry Section of the Land, as appropriate, pursuant to the requirements of M.G.L. Chapter 111, § 150A and 310 CMR 19.141.
13. Prior to commencing operation of the PV Facility, and in no event on or before ninety (90) days after the date of completion of the construction of the PV Facility, the City and Developer shall submit for review and approval by MassDEP a construction certification report, as an application category BWP SW45 Alternative Review Process, that includes, but is not limited to:
 - a. As-built plans for the final as constructed PV Facility amended to incorporate all modifications and alterations, if any, made during construction;
 - b. A narrative, prepared by the Engineer of Record that discusses in part, any modifications made to the design of the PV Facility; and
 - c. Certifications by the City and the Engineer of Record pursuant to 310 CMR 19.011.
 - d. Copy of Notice of Landfill Operation as recorded in the Registry of Deeds and/or Registry Section.
14. On or before thirty (30) days after the date the PV Facility ceases operation, the City and Developer shall submit to MassDEP an application pursuant to 310 CMR 4.00 and 310 CMR 19.000 for the decommissioning of the PV Facility and the restoration of the landfill cap and appurtenances thereto. The application shall include, but not be limited to, a narrative, plans and schedule for the decommissioning of the PV Facility and the restoration of the Landfill's cap and appurtenances.²
15. MassDEP reserves the right to amend, modify, suspend or revoke this permit pursuant to 310 CMR 19.040 Department's Modification, Suspension, or Revocation of a Permit. This does not limit or restrict MassDEP from implementing any other applicable authority at the Landfill including, but not limited to authority pursuant to 310 CMR 40.0000.
16. This permit is effective on the date signed by MassDEP below, except as provided by the Notice of Appeal Rights below and 310 CMR 19.033(4) (b). This permit shall expire on December 31, 2036, provided that MassDEP may amend the term of the permit in accordance with a modification pursuant to 310 CMR 19.033 or 310 CMR 19.034. The City and Developer shall submit to MassDEP on or before June 30, 2036 either an application to renew the permit or notice of its intent to close the PV Facility. Wherein the City and the Developer elects to close the facility, the City and the Developer shall submit an application for the decommissioning of the

² Appurtenances include, but are not limited to storm water controls, landfill gas control structures, landfill gas and groundwater monitoring wells.

PV Facility and the restoration of the landfill cap and appurtenances thereto pursuant to paragraph 14, above.

17. The City and Developer shall not deviate from this permit and the approved design plans. The City shall notify MassDEP prior to any modification(s) of the design and of any significant changes in the project schedule. MassDEP may, at its sole discretion, require the City to submit an application to MassDEP for review and approval for any modification/alteration to the design. In the event that MassDEP determines that a permit application is required for a modification, the City shall submit such application to the MassDEP in accordance with the schedule specified by MassDEP.
18. No transfer of this permit shall be permitted except in the requirements of 310 CMR 19.044. If at any time, the permittee for this project does not include a municipal entity, the permittee shall provide to MassDEP a financial assurance mechanism, in accordance with 310 CMR 19.051, for the costs of decommissioning and site restoration activities.
19. The City shall continue to perform post-closure activities at the Landfill pursuant to 310 CMR 19.142 *Landfill Post-closure Requirements* including, but not limited to, maintenance of the Landfill's cap to prevent growth of vegetation with root systems that could be detrimental to the cap, and to prevent erosion of the cap.

NOTICE OF RIGHT TO APPEAL

The City of Woburn (the "City") is hereby notified that it may within twenty-one (21) days of the date of issuance file a request that this decision and permit be deemed a provisional decision under 310 CMR 19.033(4)(b), by submitting a written statement of the basis on which the City 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 (21) days after the MassDEP's receipt of the request. Such a request shall reopen the administrative record, and the MassDEP may rescind, supplement, modify, or reaffirm its decision. Failure by the City to exercise the right provided in this section shall constitute a waiver of the City's right to appeal.

Appeal. Any person aggrieved by the issuance of this decision may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. c. 111, s. 150A, and M.G.L. c. 30A, not later than thirty (30) days following the date of issuance of the final decision. The standing of a person to file an appeal and the procedures for filing such 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 decision by a court of competent jurisdiction, the decision shall remain effective.

Notice of Action. Any aggrieved person intending to appeal this decision to the Superior Court shall first provide notice to the MassDEP of their intention to commence such action. Said notice of intention shall include the MassDEP's file number and shall identify with particularity the issues and reasons why it is believed the 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 application at least five (5) days prior to the filing of an appeal. The appropriate addresses to which to send such notices are:

General Counsel

Massachusetts Department of Environmental Protection
One Winter Street – 3rd Floor
Boston, MA 02108

Eric Worrall, Regional Director
Massachusetts Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

No allegation shall be made in any judicial appeal of this decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in those regulations, 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.

Should you have any questions relative to this approval, please contact Richard Spieler at phone number 978-694-3317.

Sincerely,

Sincerely,

This final document copy is being provided to you electronically by the Massachusetts Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Richard J. Spieler
Environmental Engineer
Solid Waste Management Section

Susan Ruch
Acting Solid Waste Section Chief
and Deputy Regional Director

SR/RJS/rjs

Enclosure: Fact Sheet

Cc:
Jack Fralick, Health Agent
Woburn Board of Health
jfralick@cityofwoburn.com

360 Merimack Street
Suite 202
Lawrence, MA 01843

Duane Himes
Weston & Sampson Engineers, Inc.
himesd@wseinc.com
Zac Osgood
American Capital Energy

Hank Ouimet
Renewable Energy Development Partners
P.O. Box 2655
Mashpee, MA 02649