



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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**April 12, 2013**

I. William Place, Director  
Town of Sudbury  
Department of Public Works  
275 Old Lancaster Road  
Sudbury, MA 01776

RE: SUDBURY – Solid Waste/COR  
20 Boston Post Road  
Sudbury Sand Hill Landfill  
FMF# 36831  
Post-Closure Use, Solar Facility  
Approval (revised)  
Transmittal Number: X254464

Dear Mr. Place:

The Massachusetts Department of Environmental Protection, Northeast Regional Office, Bureau of Waste Prevention, Solid Waste Section ("MassDEP ") has reviewed the Town of Sudbury's (the "Town") application for the post-closure use of the closed Sudbury Sand Hill Landfill (the "Landfill") located at 20 Boston Post Road, Sudbury, Massachusetts. The application, category BWPSW36, "Post-Closure Use – Major", Transmittal Number X254464, was prepared and submitted to MassDEP on behalf of the Town by AMEC Environment & Infrastructure, Inc., Westford, Massachusetts ("AMEC"). The application includes preliminary design plans for the installation of a 1.512 megawatt (MW) solar photovoltaic power generating facility ("PV Facility") on the Landfill. The Town has entered a contract with Solar Sudbury One LLC of Framingham, Massachusetts for the installation and operation of the PV Facility.

The proposed PV Facility will consist of approximately 6,048 solar modules attached to aluminum frames. The frames will be supported on concrete pads resting on shallow gravel leveling pads placed on the ground surface. Three inverters will convert the DC power from the modules to AC power for connection to the regional electric power grid at Boston Post Road.

**This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TDD# 1-866-539-7622 or 1-617-574-6868**

MassDEP Website: [www.mass.gov/dep](http://www.mass.gov/dep)

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Modules will be placed on slopes with gradients of up to nine percent (9%). The application includes a stability analysis by AMEC. The Factor of Safety was determined to exceed the minimum acceptable ( $FS > 1.5$ ). The module supporting system will not significantly alter the flow of storm water or snow melt to the existing storm water control basins at the Landfill.

MassDEP has determined that the application is administratively and technically complete and that the proposed post-closure use complies with the applicable requirements of 310 CMR 19.000, the Massachusetts Solid Waste Regulations (the "Solid Waste Regulations"), subject to the terms and conditions of this decision and permit. The application demonstrates pursuant to 310 CMR 19.143(3) that the installation of the solar PV arrays 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 Town'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 Town and Solar Sudbury One LLC 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 Town and Solar Sudbury One LLC shall assure persons conducting activities<sup>1</sup> 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 Town and Solar Sudbury One LLC, 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.
4. Not less than fifteen (15) days prior to commencing construction pursuant to the application and this permit, the Town shall submit to MassDEP (1) complete, detailed, construction ready plans for the facility, and (2) an O&M plan for the continuing care and maintenance of the landfill and the PV facility.

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

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5. Not less than seven (7) days prior to commencing construction pursuant to the application and this permit, the Town 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; and
    - 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.
6. The Town and Solar Sudbury One LLC shall not commence construction of the PV Facility until it has provided the plans and notification to MassDEP and the Town of Sudbury Board of Health pursuant to Condition 4 and 5 above.
7. 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.
8. The Town, Solar Sudbury One LLC, and the appertaining 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.
9. 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. Excavations, excepting placement of the two (2) proposed utility poles, shall be limited to the upper six (6) inches of the soil cover (that is, the topsoil and vegetative support layer). No excavations, excepting placement of the two (2) proposed utility poles, shall penetrate the impermeable clay layer. The Solar Sudbury One LLC 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 clay layer. Cuttings from below the clay layer generated during installation of the utility poles (including topsoil and/or clay mixed with such cuttings) shall be disposed of off-site, at an appropriate solid waste disposal facility, as a solid waste material.
10. If the impermeable clay layer of the cap is damaged the Town 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 the incident. This notification requirement is in addition to any other notification

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requirements required by statute or regulation including, but not limited to, 310 CMR 19.000 and 310 CMR 40.0000.

11. The Town and Solar Sudbury One LLC 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.
12. 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.
13. 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.
14. 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 Town 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;
  - c. A final O&M plan that consolidates inspection and maintenance activities at the Landfill into a consolidated comprehensive plan including any necessary revisions; and
  - d. Certifications by the Town and the Engineer of Record pursuant to 310 CMR 19.011.
15. On or before 30 days after the date the PV Facility ceases operation, the Town 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<sup>2</sup>
16. 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.
17. This permit is effective on the date signed by MassDEP below, except as provided by the Notice of Appeal Rights below and 310 CMR 19.037(4)(b).

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

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18. This permit shall expire on December 31, 2033, provided that MassDEP may amend the term of permit in accordance with a modification pursuant to 310 CMR 19.039 or 310 CMR 19.040. The Town shall submit to MassDEP on or before August 30, 2032 either an application to renew the permit or notice of its intent to close the PV Facility. Wherein the Town elects to close the facility, the Town shall submit an application for the decommissioning of the PV Facility and the restoration of the landfill cap and appurtenances thereto pursuant to 15, above.
19. The Town and Solar Sudbury One LLC shall not deviate from this permit and the approved design plans. The Town 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 Town 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 Town shall submit such application to the MassDEP in accordance with the schedule specified by MassDEP.
20. The Town 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 trees, brush and other vegetation with root systems that could be detrimental to the cap, and to prevent erosion of the cap.

### **RIGHT OF APPEAL**

The Town of Sudbury (the "Town") is hereby notified that it may within twenty-one (21) days file a request that this decision be deemed a provisional decision under 310 CMR 19.037(4)(b), by submitting a written statement of the basis on which the Town 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 Department's receipt of the request. Such a request shall reopen the administrative record, and the Department may rescind, supplement, modify, or reaffirm its decision. Failure by the Town to exercise the right provided in this section shall constitute a waiver of Town's right to appeal.

**Appeal** - Any person aggrieved by the issuance of this decision, except as provided for under 310 CMR 19.037(4)(b), 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 receipt 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 Appeal** – Any aggrieved person intending to appeal the decision to the superior court shall provide notice to the Department of intention to commence such action. Said notice of intention shall identify with particularity the issues and reason(s) why it believed the approval decision was not proper. Such notice shall be provided to the Office of General Counsel of the Department and the Regional Director for the regional office that made the decision. The appropriate addresses to send such notices are:

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Office of General Counsel  
Department of Environmental Protection  
One Winter Street  
Boston, Massachusetts 02108

Regional Director  
Department of Environmental Protection  
Regional Office  
205A 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 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 public health or environmental impact of the permitted activity.

Should you have any questions relative to this application, please contact David Adams at phone number 978-694-3295.

Sincerely,

Sincerely,

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

David C. Adams  
Environmental Engineer  
Solid Waste Management

John A. Carrigan  
Section Chief  
Solid Waste Management

JAC/DCA/dca

Cc:

Sudbury Board of Health  
275 Old Lancaster Road  
Sudbury, MA 01776

Robert J. Bukowski, P.E.  
AMEC Environment & Infrastructure, Inc.  
2 Robbins Road  
Westford, Massachusetts 01886