

**Agency of Natural Resources  
Department of Environmental Conservation  
Waste Management and Prevention Division  
Solid Waste Management Program**

**Policy on  
Constructing Solar Photovoltaics on Closed Solid Waste Landfills  
February 2013  
Amended July 2014**

**Introduction:**

Within Vermont there are more than 70 closed, administered solid waste landfills. These facilities are generally maintained by a private or public owner/operator under authority of a post-closure certification, or other authorization, issued by the Secretary of the Agency of Natural Resources (Agency), through the Solid Waste Management Program (Program). Recent widespread interest by Federal and State government, utilities, and investors in developing renewable energy sources has resulted in consideration of siting commercial solar photovoltaic (PV) projects on closed landfills across the country, including Vermont. The Program recognizes that given current market conditions PV systems on closed landfills could be a mutually beneficial situation for the investors, local utilities and landfill owners, as landfill end uses are generally limited, and revenue generated as a result of the PV project/system could be used to fund continued post-closure care.

**Applicability:**

This policy is applicable to all potential PV developments on closed solid waste landfills in Vermont, maintained under authority of a post-closure certification, administrative order, assurance of discontinuance, or in custodial care as recognized by the ANR. All recognized closed landfills have identified end uses, and a change to the identified end use requires prior written approval in the form of an amendment to the post-closure certification order, assurance, or custodial care documentation

**General Performance Standard:**

The construction, operation, or maintenance of any development upon a closed solid waste landfill shall not compromise the integrity of the landfill capping system, any landfill gas collection and removal system, leachate collection and removal system, surface water control system, environmental monitoring system, and access controls, or otherwise increase the environmental or public health and safety risk from the facility.

**Other Considerations:**

Development of a solar array on a closed landfill will likely increase the level of effort, and resources, needed to maintain the closed facility. Any increase in maintenance and associated costs that are anticipated to result from the proposed development must be accounted for and reflected in the post-closure plan and cost estimates for post-closure of the landfill, and in any financial responsibility or financial capability documents required to be included in the request to amend facility certification, order, assurance, or custodial care documentation.

If future site conditions are deemed to pose a threat to public health or safety, or the environment, the Secretary is authorized to require corrective actions to mitigate the threat. A corrective action

may take many forms, depending on the nature and severity of the threat posed. A corrective action may not actually result in disruption of the operations of the solar development, but such disruption is a possibility that applicants should to be aware of.

**Submittal Requirements:**

The form of the submittal will be dependent upon the particular legal authority by which the particular landfill is being maintained post-closure, but should include pertinent revisions to the facility's Post-Closure Care Plan. Regardless of the form, the submittal should, at a minimum, contain sufficient information to allow the Agency to find conformance with the General Performance Standard above. This includes information regarding:

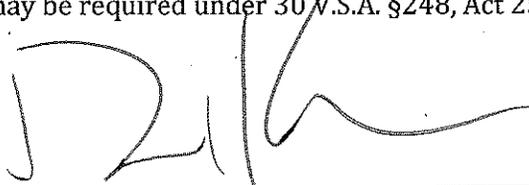
- Site plan for the solar array, to include road construction and vehicular traffic patterns (designed to minimized capping system disturbance)
- Anchoring system details - ground mounted, on a slab, shallow footing, augured, etc.
- Panel mounting systems
- Potential differential settlement considerations
- Gas venting considerations
- Cap maintenance considerations
- Surface water runoff, and increased erosion potential
- Wind, frost, and snow loading
- Site security
- Protection of other facility appurtenances.
- Construction specific procedures and considerations
- Update to the financial document if applicable

For additional technical resources, see USEPA's publication *Best Practices for Siting Solar Photovoltaics on Municipal Solid Waste Landfills*.

**Approval:**

Approval for the PV system, if granted, will be conditioned in an amended post-closure certification, order, assurance, or as an approved change in end use if the facility is in custodial care.

The approval would not provide authorization of any activity in lieu of a certificate of public good as may be required under 30 V.S.A. §248, Act 250, or other state or local laws which may also govern.



\_\_\_\_\_  
David K. Mears, Commissioner  
Department of Environmental Conservation



\_\_\_\_\_  
Date