

Solar Panel Installation on Closed & Capped Landfills

What You Need to Know

The Solid Waste Program (SWP) approval for solar panels on landfills that had refuse disposal permits is in the form of a letter. The SWP supports the post-closure reuse of landfill properties and will generally approve a plan if all issues are satisfactorily addressed.

Required Documentation

The SWP will require plans and an installation and operation manual or similar document that describes how the system would be built and operated, and what impact it might have on existing pollution controls such as the landfill cap, vegetative stabilization, sediment and erosion controls, groundwater and soil gas monitoring wells, and landfill gas controls. The plan should address the following:

- Executive summary
- Construction report
- Prevention of damage to the landfill cap (e.g., will footers, pilings, entrenched wires, or weight of construction equipment damage the geomembrane and/or drainage layer, etc.).
- Layout of the facility shown on a plan
- Layout of the panels on the landfill
- Panel spacing, slope and height
- Management of burrowing animals under the panels
- Soil erosion maintenance plan; Groundcover vegetation must be maintained in good condition at all times
- Method of solar panel placement (on top of soil, concrete ballasts, etc.)
- Sediment erosion plan approved by local soil conservation district, if required
- Stormwater management plan; management of concentrated runoff between panels: how will this be handled?
- Security: who will be responsible party?
- How will the landfill be put back together once solar panel decommissioning is done?
- Who will be responsible for the landfill once the solar facility is removed after 20-years?

Additional Requirements

A Notice of Intent for construction activities may have to be filed with MDE's Water and Science Administration. The Water and Science Administration can be contacted by email at mde.constructionswnoi@maryland.gov or by phone at (410) 537-3019.