



PROJECT PROFILE

MILLERSVILLE LANDFILL

OWNER	Anne Arundel County, Maryland— Bureau of Waste Management Services
SIZE	15 Acres
LOCATION	Severn, Maryland
DESIGN	733,000 SF—SKAPS—60 mil HDPE White Textured Geomembrane (Secondary) 733,000 SF—SKAPS—Geocomposite (Secondary) 2,440 SF—AGRU—GCL—Sump and Mid-layer 733,000 SF—SKAPS—60 mil HDPE White Textured Geomembrane (Primary) 733,000 SF—SKAPS—Geocomposite (Primary) 580,000 SF—RAVEN—20 mil Temporary Rain Cover



CONSTRAINTS

Safety Regulations

State Regulations

Labor Task Interdependence

Runoff Water Implications

BACKGROUND

The Millersville Landfill and Resource Recovery Facility, the only landfill in Anne Arundel County spanning 525+ acres, has made tremendous progress towards greater efficiency and longevity of their facility. Since implementing the county-wide recycling campaign in 2008, the landfill boasts an increase in the county's recycling rate from 31% to 45% in this timespan. This has been accomplished through public collection and waste diversion, in addition to relocating and reusing material that shouldn't be occupying valuable landfill space. These measures have gone a long way towards maximizing the landfill's lifetime.

SOLUTION

We worked with Allan Meyers, Inc., to expand Cell 9, installing a liner system for a new sub-cell. We installed GCL below the sump and as a mid-layer between two layers of geocomposite and white textured 60 mil HDPE geomembrane. The reflective white color provided additional resistance to the UV light and high temperature fluctuations that geosynthetic lining is often exposed to during construction. These layers maximized landfill volume and reduced the possibility of wrinkles that could result in leaks down the road.

Finally, a temporary rain cover was placed over the main areas of the cell to collect and redirect clean rainwater towards a drainage area, rather than having it contribute to leachate volume. This expansion was completed in February of 2021 and because of this work, Cell 9 is expected to remain active through 2048.

For more information visit the Hallaton Environmental Linings website at www.hallaton.com.





1206 SPARKS RD.
SPARKS, MD 21152
410-583-7700

