

## Landfill Services

**Geo-Logic Associates (GLA) supports landfill operators and hazardous waste managers by providing regulatory, scientific, and engineering solutions at hazardous and municipal solid waste landfills, land disposal units, and waste isolation facilities.**

### HIGHLIGHTS

GLA specializes in:

- Remediation of soil and groundwater permitting
- Cell and cover design
- Field and laboratory testing of soils
- Construction oversight services

GLA performs engineering and hydrogeologic services in support of landfill and solid waste facilities and operations. Ancillary services include feasibility studies, hydrologic investigations, performance modeling, and corrective action.

### Permitting

GLA performs all aspects of permitting associated with solid waste, hazardous waste, mixed waste, and radioactive waste landfills, from the initial siting, through operation, and closure permitting. We have modified existing permits for expansion and efficiency gains and have also performed client support and negotiation services.

### Master Planning

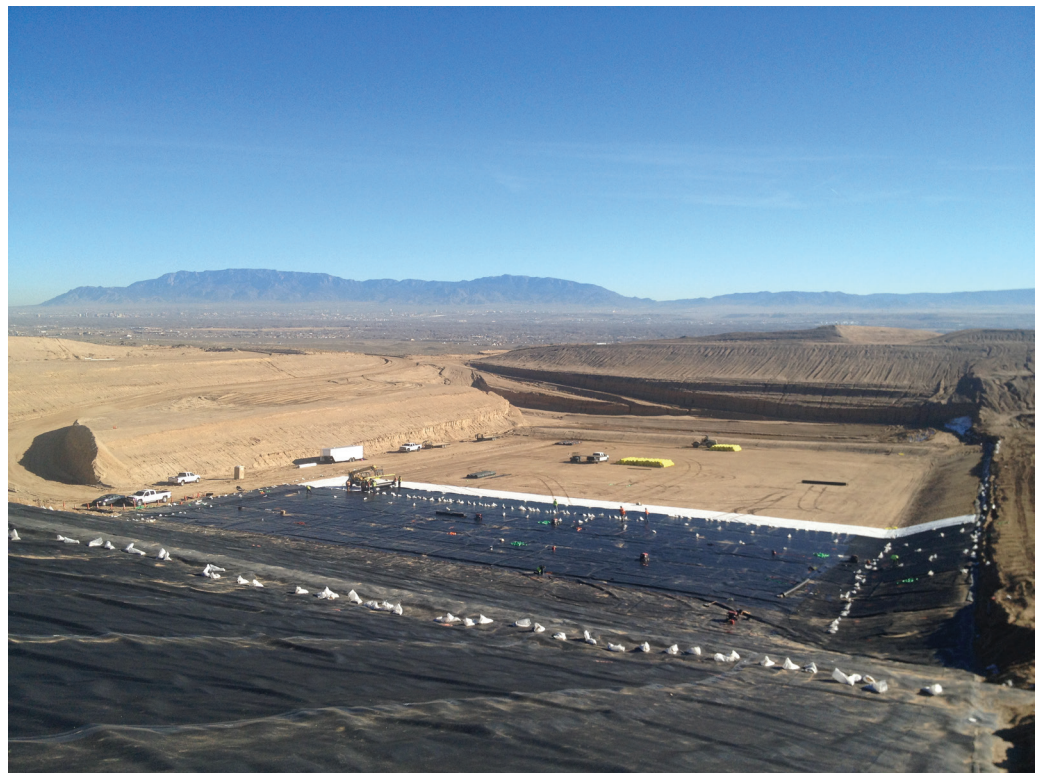
GLA develops master plans that describe build-out, including cell layout and timelines. Key issues in developing a master plan include:

- Sequencing the tie-in between the disposal cells
- Assessing equipment needs
- Financial planning



OMNIA Partners is your trusted ally in the purchasing process, dedicated to optimizing procurement for your organization. Discover a better way to buy with free membership.

[www.omniapartners.com](http://www.omniapartners.com)



Liner installation in a newly permitted cell

### Cell Development and Design

GLA routinely prepares construction drawings and bid documents necessary to select the appropriate contractor for construction. We design stormwater control systems that provide for progressive build-out as cells are developed over the life of the landfill.

### Environmental Monitoring

GLA performs compliance monitoring at landfills for both water quality and landfill gas emissions. We have written groundwater, methane, and leachate monitoring plans and have implemented the plans for our clients with installation of groundwater monitor wells and landfill gas monitoring probes.

### Cover Design and Closure

GLA offers a wealth of experience preparing final cover systems in support of waste site closure. Our closure design work includes cover system studies, borrow source studies, geotechnical analyses for slope stability, settlement and liner systems, hydrogeologic studies, and planting and irrigation systems. GLA has developed revegetation projects using native species, and long-term revegetation monitoring programs.

### Soil Testing and Research Laboratory

GLA's Soil Testing and Research Laboratory performs specialized tests for determining the hydrologic properties of soil and rock. Our independent research efforts have led to development and regulatory approval for a simple and cost-saving alternative to standard landfill and hazardous waste covers—evapotranspiration (ET) covers.

### Borrow Material Investigations

GLA works with our clients to identify on-site and, if necessary, off-site soil borrow material sources for use as daily and subsequent final cover materials. In support, GLA's Soil Testing and Research Laboratory performs evaluations of borrow material properties including saturated and unsaturated hydraulic conductivity and geotechnical testing.

### Quality Assurance and Construction Oversight

GLA has extensive experience in providing construction QA/QC oversight and testing for solid waste facilities, from liner installation through final cover placement, including liner installation inspectors certified under the Geosynthetics Certification Institute Inspectors Certification Program on staff.

### Planning Design and Operations Engineering

GLA has the practical experience gained from working with numerous public and private landfill operators to improve operational efficiency. Factors to consider include:

- Diversion of recyclable materials
- Using alternative daily cover (ADC) to improve waste disposal efficiency
- Evaluating landfill gas-to-energy alternatives to capitalize on current tax credits



HDPE-lined stormwater diversion channel at a regional landfill facility.