Guidance for Use of Protective Cover in Cell Liner

Design and Construction in Oklahoma

General

The protective cover is provided to prevent penetration of the liner and clogging of the drainage layer.

Materials

The protective cover material will have less than 5% fines (passing no. 200 sieve) and hydraulic conductivity of at least $1 \times 10^{-3}$ cm/sec. Protective cover shall contain nothing that could penetrate the geomembrane liner. Alternative materials such as foundry sand will be evaluated on a case-by-case basis.

Thickness

Protective cover should have a minimum thickness of 12 inches. To prevent the penetration of the liner, a minimum thickness of 24 inches is required if geonet is used for the drainage layer.

Testing

Grain size distribution (ASTM D 422) to the No. 200 sieve must be performed every 1600 cubic yards of protective cover. Hydraulic conductivity (ASTM D 2434) must also be performed every 1600 cubic yards of protective cover.

Placement

Place protective cover in a single lift with no compaction.

References

References (Continued)