

**Table 6-5**  
**Construction Cost Estimate for Landfill Closure Cap Unit Costs**  
Rolling Knolls Landfill Superfund Site - Feasibility Study  
Chatham, New Jersey

<b>Potential Cap Components</b>		
<b>Component</b>	<b><u>cyd/acre</u></b>	<b><u>\$/acre</u></b>
seed & mulch	-	5,700
6-in topsoil layer	810	44,400
18-in protective layer	2,420	58,100
geonet composite	-	34,000
60-mil HDPE geomembrane	-	43,600
6-in gas venting layer	810	27,500
6-in grading and shaping layer	810	16,200
NJ analytical soil tests	4,850	5,400
<b>Total Cost per Acre:</b>		<b>\$234,900</b>

Notes:

1. Certain soils such as granular gas vent layer are expected to meet rigorous specification and therefore assume these soils would need to be obtained from an off-site source. Assume that soils will require NJDEP clean fill analytical testing at a reduced frequency of one sample per 1,000 cyd with standard turnaround time. The analytical results may need to be reviewed and approved by NJ Licensed Site Remediation Professional; these costs have not been included.
2. Several cap components could be subject to an equivalency evaluation (and possible additional cost reduction), including
  - modify 60-mil to 40-mil thick geomembrane assuming the use of 3/4-in dia. minus material (would need to be confirmed by a puncture test).
  - use of single-sided geonet composite in lieu of double-sided composite (would need to be confirmed by interface friction test).
  - assume the gas venting layer, based on limited methane production, could be substitute for a 6-in thick grading and shaping layer.