

PROJECT INFORMATION



LANDFILLS

Client	<i>Chrome International South Africa</i>
Project	<i>Hazardous Landfill site, Newcastle</i>
Liner Specification	<i>Primary Liner - 2,0mm HDPE Secondary Liner - GCL Slope Re-inforcement - Geomesh Intermediate Drainage - Geonet Tertiary Liner - 1,0mm HDPE</i>
Size	<i>357 200m²</i>
Date Completed	<i>1998</i>
Consultants	<i>Steffen Robertson & Kirsten</i>

Application Details

Chrome International is a joint venture between Bayer SA and Sentrachem. The plant produces sodium dichromate crystals, sodium dichromate solution and chromium trioxide, and the waste stream generated requires secure storage to prevent pollution.

The hazardous (H:h) landfill was the first phase to be developed for Chrome International South Africa and exceeds existing DWAF legislation, meeting proposed future standards.

ENGINEERED LININGS

ct@englining.co.za

021 - 551 2430 telephone

021 - 552 5928 facsimile

www.englining.co.za

jhb@englining.co.za

011 - 452 4004 telephone

011 - 452 4007 facsimile



Chrome International Hazardous (H:h) Landfill Site - Newcastle



A sophisticated double liner system incorporating a leak detection layer was installed to provide the required security.

Photograph shows partial completion of one slope with the white GCL awaiting the final 2,0mm thick HDPE liner.

On the far slope all 5 layers can be seen. Moving left to right is 1,0mm HDPE, Geonet, Geomesh, GCL and finally 2,0mm HDPE.

In the foreground, Geotextile is used for protection of a temporary walkway.



The composite lining installation to Phase 1 took approximately 6 weeks to complete. It was however filled far quicker than anticipated and Phase 2 had to be constructed and lined during the first half of 2000. We installed the same composite lining system in both phases.

LANDFILLS
OTHERS

- Aloes Cell 2 (H:H)
- Bellville South - Cells 5,6&7 (GLB+)
- Bulbul Drive - Phases 1,2A, 2B & 2C (1&2) (H:h)
- Brugspruit Hazardous Waste Lagoon (H:h)
- Holfontein - Cells 1A,3,4,5,6A & 6B (H:H)
- Mariannahill - Cells 1, 2A, 3 & 4A (GLB+)
- Mossgas Hazardous Waste pond No. 3 (H:H)
- Shongweni - Cells 1, 2, 3 & 4 (H:h)
- Umlazi - Northern Site (H:h)
- Vissershok Waste Management Facility Cells 2 & 3
- Vissershok/ CMC - Cell 2, 3, 4 (H:H)
- Coastal Park Landfill (CMC) Phase 2A , 2B, 2C, 2D(GLB+)
- Buffelsdraai Landfill (GLB+)
- Kupferberg Landfill - Windhoek, Namibia
- DCLM Landfill - Kwazulu Natal