



## DUX Geosynthetic Clay Liner (“GCL”)

Geosynthetic Clay Liners ( known as “GCL”) are widely used in civil construction as alternative to compacted natural clays. GCL’s comprise bentonite, granular or powdered, sandwiched between two geotextile layers. Granular bentonite GCL’s are by far the most popular worldwide. A 5mm GCL can replace a metre thick CCL layer.



The key advantage of a Granulated Bentonite GCL is that it creates less dust during installation than powdered bentonite and the bentonite is less likely to shift through the needlepunch reinforcement process resulting in a more consistent hydraulic performance. It is interesting to note that in Australia powdered bentonite is almost always specified, but this has nothing to do with functional requirements and a lot to do with good marketing. Standard industry specifications, such as USA GRI-GCL3 and GRI-GCL5 make no stipulation about the type of bentonite to be used. If

you are paying more than \$5/sqm for a GCL you should ask your designer why they are specifying powdered GCL’s only and restricting your market choices. Contact me on 0419 478 238 for more info on specifying GCL’s by properties relevant to function.

10,000sqm of **DUX SPL40** Geosynthetic Clay Liner (GCL) has recently been installed by Waters Excavations at the Wentworth sewage ponds near Dareton, NSW. The leaking ponds required re-lining and SPL40 was installed together with a 300mm soil cover layer for surcharge. GCL’s are simple to install, simply roll out, overlap and paste joints and cover.



**DUX SPL40** GCL is a multi-component system made from a high-tensile PP woven base, internal sealing material consisting of granulated sodium bentonite and a robust PP non-woven as the top layer. A special precision-needling technique, based on state-of-the-art engineering, is used to join together the three components to produce a homogeneous, structurally continuous liner sheet.