

CASE STUDY

Water Containment | Dam Lining | Quoin Rock Farm, Stellenbosch

Apr 2014

Client Quoin Rock Farms

Contractor Power Construction

Consultant Melis & Du Plessis

Product

EnviroFix® X800 | 36 000 m²
bidim® | 34 000m²



An equivalent of **472 222** recycled 2l PET bottles was used in this project

Problem

The new owners of this wine farm required that two of the leaking farm dams be sealed. With these clay-constructed farm dams situated on the slopes of the Simonsberg Mountain, their steep embankments posed a problem if the conventional layer-works approach was adopted.

Solution

EnviroFix® GCL was laid onto a well compacted, smooth surface and covered with the recommended minimum cover thickness of 300mm on the floor of the dams, and a 150mm clay cover layer on the slopes of the dams. The additional confinement required on the slopes was made up with a layer of 200-250mm size riprap, placed on top of the GCL/clay lined embankments for protection against erosion and wave action.

Since this angular riprap has sharp edges, **bidim® A8** geotextile was placed beneath it as a protection layer, allowing sufficient retention of soil underneath the riprap.

Benefits

Familiar with the time-saving, easy installation of **EnviroFix®** GCL, it was a simple choice for the consultants to make.



EnviroFix® GCL was easily laid on the steep slope



bidim® A8 forms a protection layer with the riprap