



SIPLAST TERANAP TP bituminous geomembranes for the tailings disposal facility at El Halassa phosphate mine wash plant in Morocco

The OCP (Office Chérifien des Phosphates) is one of the leading worldwide exporters of rock phosphate, phosphoric acid, and phosphate fertilizers. The use of phosphate and its derivatives represented 25% of exports from Morocco in 2010 (3.5% of GDP). As part of the development of its business, which plans to triple the production of fertilizers by 2020, a washing plant was built on the El Halassa site in the region of Khouribga (the world's largest deposits of phosphate) with a processing capacity of 7.2 million tonnes of ore per year.

The washing treatment is the first processing of the phosphate in the mine before transport occurs. It contributes to increasing the mine's production capacity through the use of new enrichment techniques developed by OCP. For the sake of environment the El Halassa wash plant incorporates a sludge and a wastewater pond. The waterproofing contracting firm Valtech installed 100,000 m² of TERANAP 331 TP (thickness 3.5 mm) during summer 2013.

The bituminous geomembrane was chosen for its levels of mechanical performance, allowing direct application on the substrate (after compaction), without the use of a geotextile protection layer, and for its dimensional stability, UV resistance when exposed, and its ability to withstand temperature variations (no wrinkles on the geomembrane).

The Canadian company SNC Lavalin (Toronto office) recommended the use of TERANAP 331 TP based on the quality of the product. A Siplast specialist came on site to support the smooth installation of this first major mining project with a bituminous geomembrane in Morocco.

Other prestigious references:



Cerro Negro Gold mine in Argentina



Morwell Main Drain Rehabilitation in Australia



Project information:

Name of the project: El Halassa Wash Plant, Morocco

Owner: OCP

Project management and Consulting Engineers: SNC Lavalin

Earthworks contractor: Makyol

Waterproofing contracting firm: Valtech

Siplast Products:

- [Teranap TP 331](#)