

Bund Lining

Du Pont Plant

Kevlar is a high strength fibre used in many modern production processes to manufacture very high strength and durable products.

One of its key ingredients is 100% sulphuric acid, this is an extremely corrosive material to concrete and requires very stringent health & safety processes during working procedures.

During a recent planned shutdown of the Maydown Plant, it was decided to completely decontaminated and inspect the sulphuric Acid bund. It had been in service for over 30 years but on this occasion it was discovered that the main sump and the drain by the main filter charging areas had suffered some breakdown of the Furane mortar that binds the acid brick together. This had resulted in some seepage of sulphuric into the concrete structure.

The sulphuric tanks in the bund area are critical to the function of the plant; so to allow the plant to be back on line within the 9 day shut down, a fast and effective solution needed to be installed in no later than 6 days.

With downtime and Health & Safety being of paramount importance Larsen proposed to demolish the sump and the drain, remove the defective contaminated concrete, rebuild the structure in a high strength repair mortar and then line the structure using a 100 % sulphuric resistant silicate mortar. This required a detailed risk assessment and round the clock working by two teams of skilled operatives to complete the works in time to allow the material to fully cure prior to being put back into service.

Project Details:

Client: Dupont

Specialist Contractor:
Larsen Contracts Ltd

Application:
100% sulphuric acid resistant lining

Sector : Chemical

