



Refinery's rainwater tank cleaning and dewatering

Our client, a major Spanish oil company asked CTP ambiente to clean the refinery's rainwater tank. As the estimated volume of sludge was around 4000 m³ (5235 yd³), the operation involved providing a solution that minimized the volume of sludge to be disposed of, thereby reducing costs.

CTP ambiente recommended a process of dewatering using geotextile membranes with the upstream installation of a **Geofloc**[®] flocculant dosing unit, which offered the following advantages:



- Rapid set up / implementation (short treatment period)
- A significant reduction in the volume of sludge to be disposed
- Safe treatment and storage, with the option of postponing the final disposal of waste

Samples were taken on site, at 7 different locations, in order to handle laboratory tests with various flocculants/concentrations, to achieve the best possible result.

French, Portuguese and Brazilian teams from the CTP environnement Group were deployed for their on-the-ground experience and efficiency: more than 1000 m (3280 ft) of tubes were installed to cover the distance between the rainwater tank and the dedicated storage area for the 6 geotextile membranes required, thereby achieving the goal of diluting and pumping 500 m³/day (2200 gpm).



The operation was a success and CTP ambiente was able to rise to certain challenges: in effect, the sludge was far from uniform and contained a large quantity of waste, with storms broadly filling the tank. Despite unpredictable pumping, due to a combination of these two factors, 42 000 m³ (54 950 yd³) were extracted in 1,5 months. In the end, 2600 m³ (3400 yd³) of sludge was stored in the geotextile membranes, leaving 955 tons of dry matter to be disposed of by a specialist facility.