Landfill Capping

All-In-One Capping Pozidrain SK, Landfill Labarde, Bordeaux, France





Project Description

The Communaute Urbaine de Bordeaux (CUB) is responsible for the management and environmental safety of the Labarde Landfill on the northern outskirts of the city in southwest France.

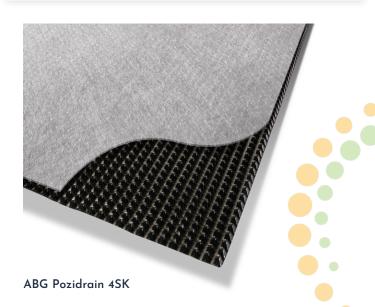
The Challenge

The site is adjacent to the River Garonne, and concern was raised of a risk of leachate being flushed into the river. The 600,000m2 site needed to be capped urgently following public pressure, with a leachate treatment lagoon and surface rainwater runoff lagoons constructed to ensure the safety of the local area.

The primary challenge of this largely flat site was to collect the rainwater with the goal of shedding it to perimeter receptor drains. The surface water run-off could then be taken to the separate lagoons around the perimeter for monitoring and eventual safe discharge.

The CUB had limited funds to achieve a fully lined permanent capping including multiple layers of mineral, geomembrane liner and drainage layers. The site needed an economic solution which could be used to effectively cap the site and efficiently direct the rainfall to the collector drains. With the time pressure as well as lack of funds, the CUB needed an easy to install all-in-one solution which would meet environmental legislation.

Client	Communaute Urbaine de Bordeaux (CUB)
Contractor	Guintoli
Products	Pozidrain 4SK
Quantity	600,000m²
Benefits	 Near impermeable all-in-one capping Fast installation Specially adapted geocomposite with geomembrane overlaps



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The Solution

A specially made **ABG Pozidrain 4SK** was supplied which comprised an impermeable cuspated core with high drainage capacity thermally bonded to a filter geotextile forming an impermeable drainage geocomposite. The geocomposite had the additional feature of an extended flat selvedge of impermeable core to provide a near impermeable joint between panels when loaded with cover soil. The filter geotextile had an overlap which was hot air welded along the edge to prevent the ingress of soil. This had the further advantage of preventing any movement of the geocomposite during the backfilling. Installation was completed rapidly in one efficient operation.

The ABG Service

ABG, in co-operation with distributor Huesker France, assisted the client with design information and adapted the Pozidrain selvedge to give optimum overlap. With this large project it was important to schedule deliveries to maintain efficient installation and meet the tight completion deadline required.



Simple heat weld joints on geotextile



Backfill operation followed immediately behind the geotextile filter jointing



Overlap prevents soil ingress and holds panel in place