



Zamzama Gas Field Karachi, Pakistan

Waterproofing of Main Plant Buildings
Sikalastic 560



Zamzama Gas Field, Karachi , Pakistan Waterproofing solution with Sikalastic 560

Project:

The Zamzama field is a major resource located in Karachi, covering an area of around 120 square kilometres, and ranking forth in terms of Pakistan's discovered gas reserves. Under full development the field adds approximately 15% to Pakistan's daily gas production. The total estimated proven plus probable recoverable reserves for the core area of Zamzama field to be developed are 1.7 Tcf of gas (gross), of which BHP Billiton's equity share is around 650 Bcf. Situated in the highly productive Pab reservoir, at a depth of around 3,500 metres, Zamzama gas is sweet and dry, with a low condensate to gas ratio of 6.5 barrels/MMcf. This project of Zamzama involved waterproofing of processing plant and control room buildings with total coverage area of 140,000 Sft.

Project Requirements:

After heavy rains and with passage of time, the main building of processing plants and control room was in need of high-tec waterproofing system. The work nature at plant could not be shut down for long as the shut down of Zamzama plant would result in 35% shortage of gas supply to Sindh and Balochistan. The client, BHP Billiton was in need of a solution which was reliable and long lasting and ensured waterproofing of the structure for at least 15 years without any maintenance work.

Sika Solution:

BHP Billiton contacted Sika for the solution and upon studying the details of client requirement, Sika Sales Team proposed the following solution.

Sikalastic 560, a cold-applied, one-component waterborne liquid applied waterproofing membrane, highly elastic and UV-resistant based on Sika Co-Elastic Technology (CET) with compliance to acc. ETAG-005.

The advantages achieved from product application at roof structure include:

- UV resistant and resistant to yellowing and weathering
- High elasticity
- Non-toxicity,
- One component ready to use
- Excellent adhesion on porous and non-porous substrates
- Water vapor permeable
- Solar reflection according to Energy Star (0.820)
- External fire protection performance

Four buildings covering area of 75,000 Sft have been treated with the waterproofing solution till now as the plant could only be shut down partially to avoid any delays in gas supply. The Sika solution has been appreciated by client and is approved for the rest of waterproofing coverage planned in the coming years.

Project Name:	Zamzama gas Field Dadu.
Project Owner:	BHP Billiton.
Consultant:	BHP Billiton Itself
Contractor:	National Engineering