

Project Management

International

Lowering of 36" Crude oil landfall through surf zone – shore protection works

Client: Trafigura Construction Ltd.
Location: Tema, Ghana
Period: August to September 2005

Crude Oil Line to Tema Oil Refinery

In August 2005 Trafigura approached PMI for the lowering of the 36" crude oil line that was under construction near the village of Kpone close to Tema, Ghana. The crude oil line connects a newly installed Single Point Mooring (SPM) facility with the Tema Oil Refinery.

The pipeline levels as initially installed proved too high through the surf zone section.

The scope of works comprised of preparation for trenching works, trenching and lowering of the 36" crude line through the surf zone.

The Works

Within days of award, PMI came up with a project-tailored solution, mobilised to site and started the construction of a 400 meter long rock access dyke, parallel to the pipeline.

Once installed, trenching works started making use of hydraulic excavators fitted with specially designed buckets to suit the local soil conditions. This allowed for digging directly beneath the pipeline, without endangering its integrity.



Within a month of the award, PMI successfully lowered the pipeline by more than two meters, guaranteeing the required natural cover through the surf zone.

Shore Protection Works

The Ghana Coastline has been subject to erosion for an extended period. Some fishing communities are affected by the ever reclining seashore.

TCL awarded a variation to PMI for the protection of the shoreline in the vicinity of the landfalls.

A total length of 300 meters of shore protection was installed immediately following the lowering of the crude oil pipeline.

The total scope of works was completed within two months of contract award and to the Client's complete satisfaction.

