



MOF Siltation study, Bonny River, Nigeria

The existing Nigerian Liquid Natural Gas Plant at Bonny Island is to be extended. As part of the extension a new Material Off-loading Facility is to be constructed.

This study assessed the risk of siltation/erosion near the NLNG plant site, specifically the area in front of the NLNG slot and the slot itself, the area around the two loading platforms (one existing and one to be constructed) and the existing material off-loading facility (MOF).

The hydraulic and morphological study focused on the determination and interpretation of the local wave and current climate, an estimation of the morphological consequences of the projected development, the determination of hydraulic conditions near the loading jetty protruding into Bonny River and the stability of the river section in which the jetty is constructed.

Numerical modelling using the FINEL 2D package was applied to make quantitative assessments of the hydraulic conditions and the sea bed development.

Client
M.W. Kellogg Ltd.

Location
Bonny River, Nigeria

Date
2001 (study)

Services
Determination local wave and current climate, 2 dimensional hydraulic modelling (FINEL 2D), estimation of sedimentation and erosion rates