

Recovering oil conduction pipe foundation using geotextile tubes as part of an integral beach erosion control project, for *PEMEX* marine facilities at Tabasco, Mexico.

Solis, A.<sup>1</sup>; Zoe, L., A.<sup>2</sup> & Tang, A.<sup>2</sup>

(1) Axis Ingenieria, (2) Ace Geosynthetics

**ABSTRACT**

Geotextile tubes technology is adopted as part of an integral solution for beach erosion problem at Dos Bocas PEMEX marine facilities. Solution designed consisted in: a) Geotextile tubes filled with sand working as bed for **oil conduction pipes** that were in risk of collapsing due to sand foundation lost within the surf zone; b) Installation of submerged breakwater using geotextile tubes along 1.9 Km of coastline; c) 62,000 m<sup>3</sup> beach nourishment for coastline stabilization. Paper describes elements design criteria and installation process, field survey data as before and after beach profiles comparison and graphical material is presented; analysis corroborates natural beach recovery after breakwater installation. After construction evidences are also given leading to the conclusion that project has worked as expected ensuring long-term oil conduction and storing facilities integrity.