

# HSE Guidelines for Oil Pipeline, Sudan

EDESSA was retained by ALCATEL - Sudan to prepare a Health, Safety, and Environmental (HSE) guidelines and procedures for the construction phase of the Supervisory Control and Data Acquisition (SCADA) and Telecommunications system, as part of the deployment of a 1,500Km oil pipeline from the south towards the north of Sudan.

The major objective of the project was to develop the oil reserves in two Blocks located within the Melut Basin which consists of the development of oil production from three currently identified oil fields.

The SCADA & Telecommunication System was designed to enable the monitoring & control of the field facilities and pipeline operations. Once completed, this system will allow the operator to monitor and control a number of critical parameters such as pipeline flow, pressure, temperature, to issue control commands and track inventories as well as a number of other parameters.

EDESSA's duties were conducted in line with the project technical requirements, ALCATEL's Corporate HSE requirements as well as EDESSA's experience in the HSE sector. This covered three main components: Health, Safety, and the Environmental.

- General and specific health concerns were addressed as part of the HSE procedures for this project, including:
  - Infectious diseases / vaccination;
  - Employee medical records;
  - Hygiene & Sanitary facilities (base camp kitchen and sanitation / drinking water supply, etc.);
  - Health Service.
- The Environmental component of the project covered the following aspects:
  - Compliance with local and international environmental laws and regulations;
  - Effects of seasonal climate changes on the physical, chemical, and biological characteristics of the project;
  - The proper management of solid waste, generated as a result of used cable reels, base camp operational activities, construction activities, Cuttings from Horizontal Directional Drilling (HDD), and used motor oil and spare parts;
  - Effects of wastewater, dust, and visual impacts;
  - Site restoration plan.
- The Safety component of the project covered the following aspects:
  - Personnel safety (First aid and CPR training) and emergency response and evacuation;
  - Site security, fire protection and landmine safety issues;
  - Hazardous material and chemical safety issues;
  - Safety auditing, safety recognition programs, and communication with related local authorities.

