# Innovative Water Technologies

CASE STUDY: RAK STP Automation and SCADA System

The RAK STP is being operated and controlled in sequence either from individual Motor Control Centre (MCC) in Local mode or from SCADA system in Remote mode. Each MCC has a compartment for installation of automation hardware like distributed input/output Module (ET200M), Digital and Analogue I/O Cards, power supply, relays and other accessories. The Schematic Diagram of all MCCs showing connections with each other (MCC) in a series using Modules (ET200M) and Profibus Cables as well as final termination to Main PLC is described below.

The SCADA System has been provided for the monitoring, operations & control of STP units and equipments from remote control room having SCADA Computers (Engineering Station, HMI Station & Historian Server) with software and other hardware. The Main PLCs, hardware and software were supplied by SIEMENS, UAE. The SCADA system has two main software STEP-7 and WinCC. The STEP-7 has been used for programming of PLC and WinCC for Application Development and customization as a Front End. WinCC has inbuilt SQL as backend for data storage, report generation, queries etc.
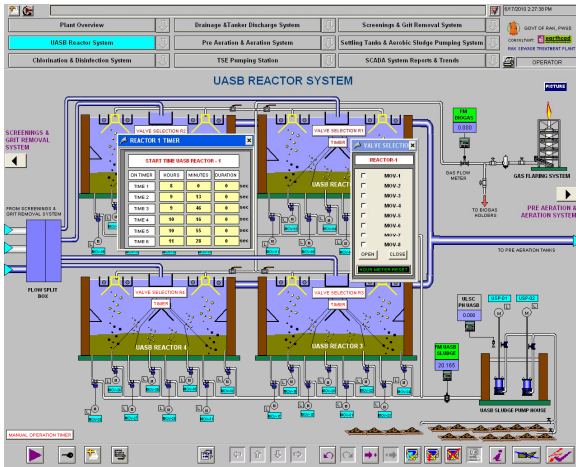
UASB Reactor System of STP
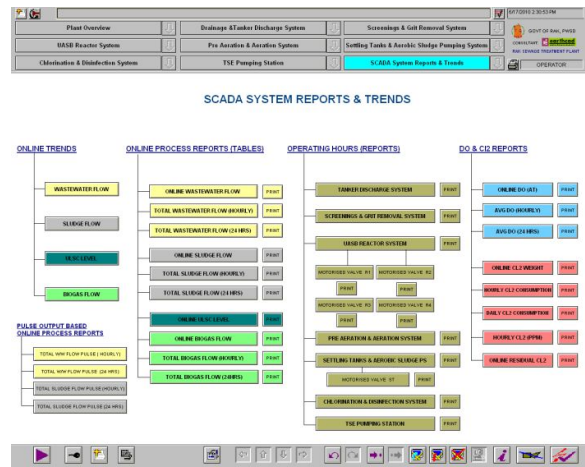
Reports generation facility in SCADA System of RAK STP