

Expansion of Alexandria East Wastewater Treatment Plant

Client

Arab Contractors

Scope of Work

- Preparation of detailed designs for the rehabilitation and extension of the WWTP to provide primary treatment for an additional average raw wastewater inflow of 190,000 m³ /day.
- Preparation of detailed designs for the additional secondary treatment to treat an average daily flow of 800,000 m³ /day taking into consideration the fluctuation in flow during the day.

The Alexandria East Wastewater Treatment Plant (WWTP) receives wastewater from different areas in Alexandria City, such as Al-Maamoura, Al-Montaza, Abu Qir and other areas. After treatment, the chlorinated final effluent is discharged into the AlQalaa drain, and the thickened sludge is dewatered before disposal. In order to handle the increase in raw wastewater inflow, an expansion program was developed for Alexandria East WWTP.

The project consisted of two parts: the first part comprised the rehabilitation and increase of the primary treatment capacity to handle an additional average raw wastewater inflow of 190,000 m³ /day.

The second part included the upgrade of the treatment process to the secondary level, which is designed to handle an average raw sewage inflow of 800,000 m³ /day.

Location

Alexandria, Egypt

Types of Activities

Architectural
Communications and security systems
Electrical
HVAC
Mechanical
Structural

The Expansion Program included the following components:

- Preliminary treatment comprising screens, grit and grease removal.
- Primary and secondary treatment works, comprising primary sedimentation, aeration tank and final clarification.
- Disinfection (comprising chlorine storage, handling and dosing facilities).
- Treated water pumping station.
- Equalization tank.
- Sludge dewatering facilities.

