## Wastewater & Sewage Treatment Plant at Medical Union Pharmaceuticals Factory

## Client

Medical Union Pharmaceuticals

## Scope of Work

Environmental impact assessment Basic design Design development Detailed design Tender documents Construction supervision

The project aimed at conducting an environmental impact assessment of the effluents resulting from the manufacturing of antibiotics and other pharmaceuticals. It also aimed at providing suitable technical solutions for the treatment of industrial wastewater and sewage. In this context, a treatment plant was designed for the treatment of liquid waste and the safe disposal of sludge. Work also covered the modification of the production process in antibiotic ointment tanks to reduce the loss of antibiotics and reduce the pollutants inhibiting bacterial activity.

For further environmental protection, the following measures were taken:

• Reducing discharge from antibiotic ointment tanks to decrease the load on the treatment plant and to

**Location** Abu Sultan, Ismailia, Egypt

**Types of Activities** Civil Electromechanical

maintain the bacterial activity necessary for biological treatment within the plant.

- Mixing sewage with industrial wastewater to augment the fertilizers (nitrogen and phosphorus) required for bacterial reproduction.
- Utilizing the treated effluent (instead of drinking water) for the irrigation of green areas; in this context, a bulk of about 450 m<sup>3</sup> of drinking water was saved on a daily basis.
- Eliminating foul odors and minimizing soil and groundwater contamination.







