Data Sheet Project # 24	Project title		Water purification plants for Bahr Al-Bakar and Al-Kab and Sedk					
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start/end)	Name of Consortium members if any
EnviroConsult	Egypt	2151429	100%	12	Agricultural services project for eastern Delta	World Bank	Jan 2006/ Dec 2008	N/A

## **Detailed description of project**

# Type of services provided

## **Modifications to the existing units:**

# Revamping the first water treatment plant (Air craft factory) by the following:

- Replacing the PVC sheet by a new type of lamella counter flow type.
- Supply new pump complete with motor for raw water and city feeding pumps.
- Replace the gate valves on the delivery branches of the pumps and all filters with another
- butterfly type.
- Supply one submersible pumps for sludge sump complete with guide rails, lifting chain, float switches and related
  accessories.
- Supply and install magnetic flow meter complete with indicator/ totalizer to be installed at the delivery header of
  raw water pumps and treated water pumps, also new differential pressure switches for each filter complete with
  alarm to indicating the backwashing of the filters.
- Maintenance facilities for all steel tanks from handrails, walkways and covers for the tanks which cover with lamella, also the maintenance of the tanks from repair the old parts, sand blasting and painting all the tanks.
- Readjusting the pipe work so the velocity at gravity not exceed 0.6 0.8 m/s and pressure pipes 2 2.5 m/s.
- Supply workshop equipment and laboratory instruments as mention in technical specifications.

# Revamping the second water treatment plant ( Netherland company ) by the following:

- Supply and install new water pumps complete with motor for raw water, filter feed pumps and treated water pumps.
- Supply and install the required pipes with valves and fittings necessary for new arrangement with suitable dimensions ( the valves on the suction and delivery branches shall be butterfly type).
- Supply and install the lamella on the primary and secondary Clarifiers complete with support and backwash system.
- Supply and install new flash mixing tank complete with flash mixer.
- supply and install new flocculators complete with low speed agitators for the folcculators.
- Supply and install magnetic flow meter complete with indicator/ totalizer to be installed at the delivery header of
  raw water pumps and treated water pumps, also new differential pressure switches for each filter complete with
  alarm to indicating the backwashing of the filters.
- Supply and install addition new pressure filter complete with all accessories.
- Maintenance facilities for all steel tanks from handrails, walkways and covers for the tanks which cover with lamella, also the maintenance of the tanks from repair the old parts, sand blasting and painting all the tanks.
- Readjusting the pipe work so the velocity at gravity not exceed 0.6 0.8 m/s and pressure pipes 2 2.5 m/s.

- Consultancy services studies, design, and tender documents preparation and construction supervision
- Design and preparation of Tender documents of all works necessary for Revamping and Extension of El-Cab Water Treatment Plant.
- Studies design and tender documents preparation of water purification plants, internal water networks, civil works for service buildings as well as mechanical and electrical works for the plant

### New Compact WTP.

- Design, supply, install, commissioning, start up, and hand-over of the following components on the bases of turn-key concept (All inclusive)
- Civil Works for chlorination, chemical and diesel generator building.
- One Underground tanks 200 m3 two compartments complete with treated pump room.
- New intake structure complete with intake pipeline.
- Two raw water pumps
- One flash mixing tank complete with flash mixer.
- Two flocculator steel tanks complete with paddle agitator.
- Two Settling tank (totally covered by lamella system)
- One intermediate storage tank.
- Chemical (Alum) and Chlorination dosing equipment
- Three pressure filters complete with filter feed pumps, air blowers and backwash pumps.
- Two treated water pumps
- All Pipework and valves
- Diesel generator complete with all required accessories. All Electrical and instruments works

#### Sedk WTP

- new compact water treatment unit with capacity 2000 m3/day
- Upgrading the existing intake to increase it's capacity and reached with it to 4400 m3/day raw water for El-Eslah.
- Replacing the PVC sheet by a new type of lamella counter flow type.
- Supply new pump complete with motor for filter feeding.
- Replace the gate valves on the delivery branches of the pumps and all filters with another butterfly type.
- Supply two submersible pumps for sludge sump complete with guide rails, lifting chain, float switches and related
  accessories.
- Supply magnetic flow meter complete with indicator/ totalizer to be installed at the delivery header of raw water pumps and treated water pumps, also new differential pressure switches for each filter complete with alarm to indicating the backwashing of the filters.

Maintenance facilities for all steel tanks from handrails, walkways and covers for the tanks which cover with lamella, also the maintenance of the tanks from repair the old parts, sand blasting and painting all the tanks.