

Water Business Group

Desalination

Client

Sharjah Electricity and Water Authority

Location

Kalba, United Arab Emirates

Project Value

US\$13.3 million

Project Completion

2010

CH2M HILL Role

EPC Contractor



CH2M HILL is serving as the single source of responsibility for engineer-procure-construct (EPC) services for turnkey delivery of a 3MIGD Seawater Reverse Osmosis (SWRO) desalination and potable water treatment plant. CH2M HILL's scope of work includes:

- Engineering Design
- Procurement
- Mechanical and Electrical Erection
- Guarantee of water output
- Guarantee of electricity consumed per m³ of produced desalinated water

The Kalba site is located on the Gulf of Oman, which is situated in the Indian Ocean. The seawater RO system will use high efficiency pressure exchangers for energy recovery, resulting in very low energy

consumption for an SWRO facility.

The RO plant capacity is 3 million imperial gallons per day (MIGD).

Ultrafiltration pretreatment is used at the Kalba site, which was commissioned in 2010.

The Kalba plant incorporates the highest efficiency energy-recovery devices available on the market. These innovative technologies result in the production of desalinated seawater at lower capital and operating costs than conventional systems