



TEMPORARY SEWAGE TREATMENT PLANT AT THE DUBAI MARITIME CITY

- **END USER:**
Dubai Maritime City
- **CLIENT:**
Nakheel
- **INDUSTRY:**
Waste Water Treatment
- **DATE OF
CONTRACT AWARD:**
2008
- **CONTRACT
COMPLETION:**
2010



INTRODUCTION:

2,000m³/day Containerised MBR Wastewater Treatment Plant project on Dubai Maritime City, Dubai, was awarded to ACWA Emirates by Nakheel.

DESCRIPTION:

The STP comprises of four MBR Treatment Streams each capable of treating 25% of the average flow. This provides the flexibility during operation to bring additional treatment capacity as flow increases, and redundancy for maintenance purposes. The treated effluent is discharged to Irrigation.

SCOPE OF SUPPLY:

The pre-treatment process comprises of 3mm fine screens upstream of the MEMTREAT® bioreactors. The variations in the flow to the STP is balanced out in the balancing tank and then fed to biological streams consisting of Anoxic and MBR Tanks. The treated effluent is of an extremely high quality, suitable for direct discharge without further treatment for uses such as irrigation, district cooling, batching plants and industrial process waters. The waste sludge is thickened using a Drum Thickener while the Odours from various areas are vented through an Activated Carbon filter to contain odour problems.

Effluent Quality:

BOD < 10mg/L
COD < 50 mg/L
TKN < 2 mg/L
SS < 10 mg/L
NH₃ < 1 mg/L
TN < 20mg/L



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