



**THE PLANT**

Raw water comes from wells drilled deep in the ground.

This water contains a high PPM of salts and the plant is precisely designed to separate the salts.

The produced water is exported to the oilfields for rock fracking and the brine disposed of in the evaporation ponds.



**TANK FOUNDATION**

Considering the circular shape of the tank foundations, blockwork was built as sacrificial formwork.

This permitted, however, easier application of external concrete protection.



**PRE-CAST ELEMENTS**

When many identical concrete elements are needed they are pre-cast in a separate yard, transported and installed in their final positions.

Pipe rack supports are seen in this picture.

**EVAPORATION POND**

Large ponds are created by building up bunds around them, levelling the internal area, laying a sand bed and installing an HDPE membrane welded and tucked into the earth bund.



**BP KHAZZAN RO PLANT**

For its operations to develop Block 61, British Petroleum (BP) would require a large quantity of pure water to be used in the fracking process aimed at extracting tight gas.

BP commissioned Veolia as the EPC contractor to design, procure, and construct a Reverse Osmosis Plant that could produce up to 8000 m<sup>3</sup> of water per day.

Veolia, upon BP's recommendation assigned the civil works to SCC.

The works comprised of a vast geotechnical campaign that led to soil replacement under all structures; also concrete foundations, tank foundations, pits and chambers, ramps, buildings and sheds, access roads, street lighting, and fencing.

A major part of the civil works consisted of the construction of vast evaporation ponds lined with HDPE membrane laid on sand bed.

Many concrete elements were pre-casted outside the site, transported and placed in their final locations.

Starting the works at such an early stage of the oilfield development represented a challenge, particularly arranging decent accommodation for the work force until such time that a proper camp base was built.

**RAFT FOUNDATION**

Large raft foundations had to be cast.

This represented a real challenge in terms of supplying ready mix concrete in such large volumes in the middle of the desert and under harsh climatic conditions.

