The Karbala Refinery Project, which includes the construction of four refineries, is expected to produce a range of products including liquefied gas, petrol, gas oil, fuel oil and jet fuel to serve growing domestic needs.
SWT was awarded the contract to engineer and supply a complete turn-key, industrial wastewater treatment system for the Karbala Oil Refinery plant. This massive project consisted of API oil/water separator, dissolved air flotation, membrane bioreactor (MBR), activated carbon filters, ultrafiltration, softener, reverse osmosis, sludge thickeners and dehydrators.

The product water will be re-used in the refinery plant while solid waste and RO brine will be sent to an incinerator and brine concentrator, respectively (provided by others), completing the Zero Liquid Discharge System.

Operational Data:

- 1st RO product: TDS < 100 mg/L
- 2nd RO product: TDS < 150 mg/L
- 3rd RO product: TDS < 300 mg/L