

Terminals Tank Farm & Evaporation Ponds ETP

Produced Water from Oil & Gas Fracking

The oil and gas fracking is a widely used process which also is creating some by-products in produced water to be stored and cleaned. This needs treatment of bottom sediment and water dewatered from crude oil tanks, accumulating in evaporation ponds.

This drained water shows high salinity and needs reduction on the BOD values and other contaminants to comply with the marine discharge limits, such as COD, TOC, heavy metals and Ammonia.

Waste Water Treatment

To treat this special water with capacity of 250 m³/d, a dedicated cutting edge treatment plant including several specific treatment steps is necessary.

**FRACKING
WASTEWATER
TREATMENT**
250 m³/day

Scope and Realization

In 2017 MENA-Water took the challenge to develop an ETP including the complete design, construction and commissioning for a client in KSA. As scheduled the plant was built and successfully put into operation.

For quick realization and full flexibility the complete plant was implemented as containerized package plant. It is fully controlled by PLC and remote monitoring allows to observe the plant from control center. Now the effluent water can be disposed safely into marine water.



Equipment

Chemical neutralization and coagulation

Free oil separator / Precipitator

Electrocoagulation

Secondary coagulation / flocculation

Dissolved Air Flotation

Biological stripping and clarification

Multiple filtration processes

Advanced UV Oxidation

Ultrafiltration

Field Instruments

MCC Panel /PLC/HMI

