



Potable Water Treatment with Cooling Water Package



THE SITUATION: The 12th largest oil consortium in the world needed a durable and trustworthy source for potable water in the Algerian Desert.

LOCATION: Algeria

INDUSTRY: Oil and Gas

THE CHALLENGE: In the far reaches of the Algerian Desert, a global oil and gas provider needed a potable water source to provide daily service to its field workers.

THE SOLUTION: CECO Peerless provided a containerized (single lift) filtration system to reduce turbidity and fine suspended solids to desired levels. Specifically, brackish reverse osmosis membrane technology was selected to remove unwanted contaminants and eliminate any presence of bacterial viruses from the permeate water.

The total package included:

- Pre-filtration and micron filtration
- Chemical dosing stations
- Reverse osmosis plant
- Re-mineralization (to adjust pH levels)
- Ultraviolet disinfection
- Water cooling system



THE RESULTS:

CECO Peerless optimized the design of the potable water package using reverse osmosis simulation software prior to construction, enabling suitable membrane types to be selected and, thus, ensuring the new potable water source was available and compliant with global health guidelines. Plus, by making this new water source available, the oil and gas provider has been able to eliminate the need to transport potable water to the desert site and reduce plastic waste by curbing the purchase of bottled water.

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