

AQUATECH

ZERO LIQUID DISCHARGE

Technologies that eliminate liquid waste discharge and recover water for re-use



Falling Film Brine Concentrators
Forced Circulation Crystallizer
Horizontal Spray Film Evaporator
Hybrid Systems with Membrane Pre-concentrators



Aquatech

GREEN TECHNOLOGY, YES.

DIRTY PLANET, NO.

Today's strict discharge requirements demand cost-effective, energy-efficient and reliable wastewater treatment solutions.

More and more, industries are prohibited from discharging any liquid waste originating from their facilities. Whether to meet regulations – for difficult-to-treat wastewaters – or for situations where scarcity of water demands water recovery (recycle/reuse) – Aquatech's innovative Zero Liquid Discharge (ZLD) technologies help you achieve environmental compliance, reduce your carbon footprint, create positive public perception, and recover high purity water for reuse.

Our proven ZLD technology eliminates liquid waste by converting it into disposable dry solids. Aquatech has extensive experience treating a wide variety of industrial wastewaters from various industries such as power, petrochemical, and oil & gas with our revolutionary technology.

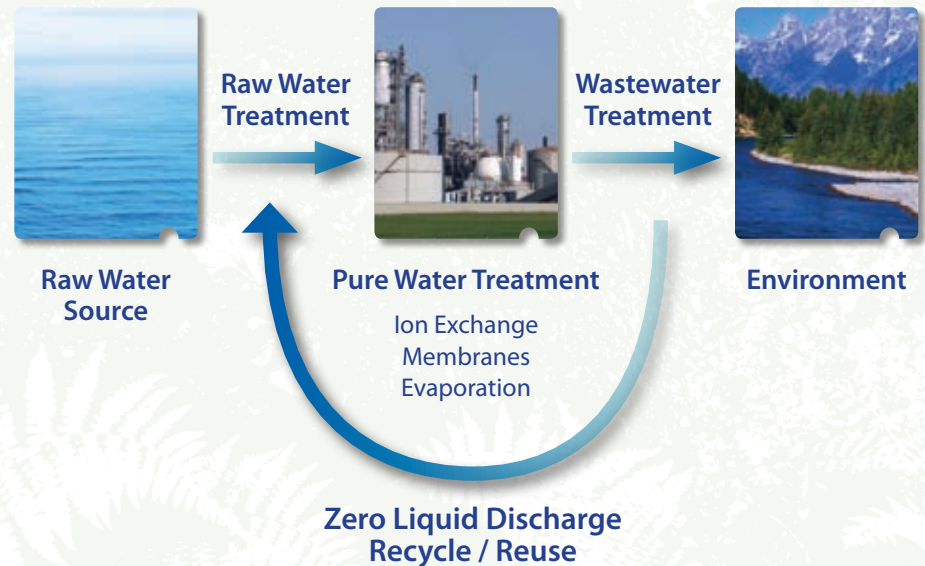
Truly in line with the "green movement," Aquatech ZLD systems are environmentally friendly and highly reliable.

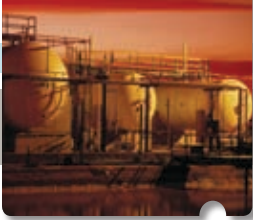
To meet strict environmental discharge guidelines and provide effective treatment with the lowest possible life-cycle costs, we offer integrated,

site-specific ZLD solutions.

These are based on standalone thermal/evaporative processes, membrane processes, or a combination of the two, namely, hybrid systems resulting in added value, ease of operation and reduced operating costs.

Integrated Systems Capabilities





Hydrocarbon Processing



Oil & Gas



Food & Pharmaceutical



Power Generation



Chemical Processing

Applications, Technologies, and Industries

APPLICATIONS

- ▶ Cooling tower blowdown
- ▶ Produced water
- ▶ FGD purge wastewater
- ▶ IGCC wastewater
- ▶ Reverse osmosis reject
- ▶ Demineralization regeneration wastewater
- ▶ Other complex industrial wastewaters

TECHNOLOGIES

Thermal/Evaporative ZLD:

- ▶ Vertical tube falling film evaporators
 - Seeded slurry (brine concentrators)
 - Non-seeded evaporators
- ▶ Forced circulation crystallizers
- ▶ Sludge dewatering
 - Filter press
 - Centrifuge
 - Drum dryers

Hybrid ZLD:

- ▶ An integrated automated system incorporating a membrane pre-concentrator or HERO™ technology, followed by the thermal/evaporative technologies above



FGD Waste ZLD System



Cooling Tower Blowdown, Brine Concentrator



World's Largest Produced Water Evaporator System

INDUSTRIES

- ▶ Power Generation
- ▶ Oil & Gas
- ▶ Hydrocarbon Processing
- ▶ Chemical Processing
- ▶ Metals & Mining
- ▶ Food & Pharmaceutical

Want to know more about Aquatech ZLD? E-mail us at: zld@aquatech.com



Oman, Middle East



Nevada, USA



Alberta, Canada



Brindisi, Italy

FROM INNOVATION FLOWS LEADERSHIP

Aquatech is a global leader in water purification technology for the world's industrial and infrastructure markets, with a focus on Desalination, Water Reuse and Zero Liquid Discharge.

Aquatech's product groups include:

- Raw Water Treatment
- Ion Exchange
- Membrane Processes (UF/RO/MBR)
- Thermal Desalination (MED/MVC/MSF)
- Wastewater/Effluent Treatment
- Zero Liquid Discharge

The company also offers a large portfolio of water management services designed to help plant personnel and end user organizations get the most out of their water treatment system, whether originally supplied by Aquatech or not. These services include:

- Spare parts supply
- Operation and maintenance contracts
- Technical audits
- Leased water treatment systems
- Technical training
- Annual, quarterly, and monthly maintenance contracts
- Remote monitoring
- Build-own-operate contracts (BOO)

CORPORATE HEADQUARTERS

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U.S. LOCATIONS

- California
- Florida
- Ohio
- Tennessee
- Texas

WORLDWIDE LOCATIONS

- Canada
- China
- India
- Italy
- Oman
- United Arab Emirates



Industrial Process Water • Membrane Desalination • Thermal Desalination • Wastewater Recycle and Reuse • Zero Liquid Discharge • Total Water Management

