

# AQUATREAT MOBILE WATER SERVICES

Flexible solutions at Zero Capex

Quick Response | 24/7 Deployment | Minimal Downtime.

UAE - Saudi Arabia - Jordan - Lebanon - Iraq



## AQUATREAT MOBILE SERVICES

**Water Desalination** 

**Ultra Filtration** 

**Filtration Unit** 

**Wastewater Treatment Plants** 

Industrial Effluent Treatment

**Tertiary Treatment Plants** 

**Dissolved Air Flotation** 

**Sediment Removal** 

**Odor Control** 

Ozone Remediation

Chemical pH Adjustment

**Oil Water Separators** 

Oilfiled Recycling Unit



When you have a short-term project or limited CAPEX funding, uninterrupted process is essential, and you need effective equipment operated by experts. Equipment that are mobile or otherwise temporarily contracted can be the solution.

#### **Fast Track Water**

AquaTreat delivers water fast-when and where it is needed.

AquaTreat combine highly mobile and modular design, to deploy, install and commission mobile water solutions with days.

### **Fine Tuned**

The same can be modified to any kind of water; salinity and site conditions. AquaTreat assets can be fine tuned for any specific requirement.

### Connectivity

AquaTreat mobile units, can be connected to the grid, generator modules and/or solar panels. plug and play solution delivered to any site.

### **Efficiency**

AquaTreat mobile systems are highly efficient in supporting fast track water production, whether is fulfilling continuous operation, covering peak loads or covering shut down periods.

### **Maintenance**

AquaTreat operates maintains its own water treatment and desalination plants, including site preparation, integration with existing systems.

### Mobile

Our in-house custom build units comes all in 20 foot or 40 foot container modules, easily moved from one site to another.

### WATER DESALINATION

# The first regionally based company with emergency water desalination rental units.

Units can be supplied on rental basis, water produced basis, with operating staff, with chemicals and consumables. Rental periods can vary from months to years.

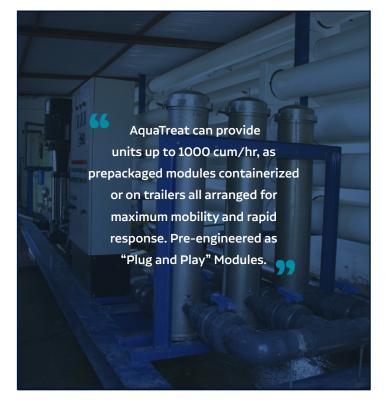
Sea Water

**Brackish Water** 

### **Comprehensive O&M**

Turnkey Solutions Full Service Offerings

Supervisory Services



Remote Monitoring Fast mobilization of maintenance staff

Fast deployment of Back up units

Large stock of spare parts in the region

### **ULTRA-FILTRATION UNITS**



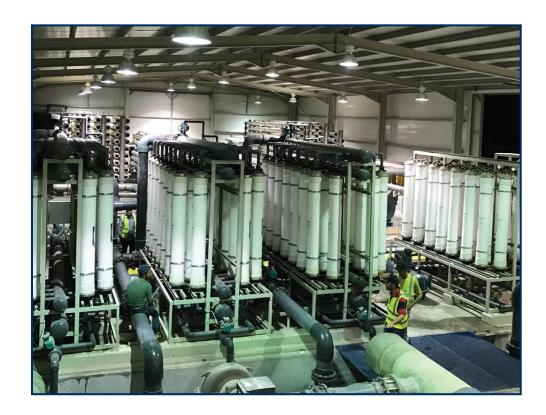
# Ultrafiltration (UF) is a process of separation underpressure, Ultrafiltration (UF) is a variant of membrane-based technology.

Ultrafiltration works best in cases of open intake for seawater reverse osmosis plants, as conventional sand filtration is less effective here. Ultrafiltration modules are also often used to treat river water, due to feed water being prone to fluctuation in turbidity, especially over seasons UF is capable to separate insoluble particles form the water.

Ultrafiltration systems are ideal for ground water and surface water treatment, as well as seawater desalination pretreatment applications.

AquaTreat UF mobile systems are containerized on trailers that are fast to be deployed and mobilized.





### **FILTRATION UNITS**

Filtration is the primary technology for reducing TSS (Total Suspended Solids).



Filtration is usually used in several steps in a treatment train. Filtration captures particles of various sizes, such as clays, sands, colloids, microorganisms and organic particulates.

Filtration, alone or with other processes, can reduce total suspended solids (TSS), turbidity, biological oxygen demand (BOD), chemical oxygen demand (COD), and metals.

AquaTreat uses many different types of water and wastewater filters. These include bag and cartridge filters, sand filters, multi-media filters, and membrane filters. The same can be supplied on skids or trailer mounted for fast deployment inside cities or remote locations.

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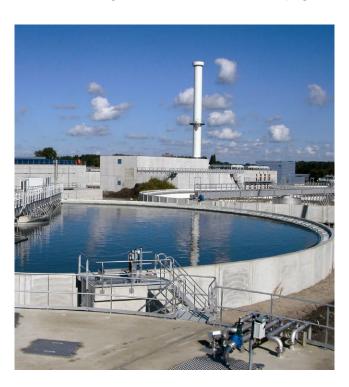
### WASTEWATER TREATMENT PLANTS

## AquaTreat containerized, and decentralized sewage treatment plants can handle populations from 30 to 10000.

Containerized, modular, mobile wastewater treatment systems offer a flexible solution for recycling and reuse of sewage form all sources. AquaTreat mobile rental units are a perfect solution for temporary installation, like temporary labor camps, remote offices and construction sites.

AquaTreat containerized, and decentralized sewage treatment plants can handle populations from 30 to 10000 persons and designed to achieve effluent standard that allow reuse for irrigation, construction or even dumping into sea or deep aquifers...

#### Benefits of the unit include:



Suitable for applications in the domestic, municipal and industrial wastewater markets.

Maximum treatment efficiency Modular construction allows for ease of installation

Minimal field assembly required

Water reuse for irrigation and gray water Minimum skilled attendance required

Minimum maintenance required Designed for above or below grade installation

# INDUSTRIAL EFFLUENT RECYCLING UNITS

AquaTreat's Packaged Plant has the ability to supply all ancillary equipment to a customer as a complete package ready for easy installation. Applied in locations requiring industrial effleunt recycle and reuse.



Effluent from industries is the consequence of water usage in manufacturing processes on a commercial scale. Water is used extensively for manufacturing food items, clothing, paper. Water from manufacturing processes pick up contaminants throughout the process flow. This needs to be treated to compliance prior to disposal or, in many cases, for reuse. Contaminants vary depending on the type of industry. Contamination includes parameters such as pH, TDS, TSS, BOD, COD, and FOG to name a few of the important parameters to be considered while designing a industrial effleunt recycling plant.

AquaTreat 0!

## TERTIARY TREATMENT UNITS

AquaTreat Tertiary mobile units, can be trailer mounted and used to complement existing Wastewater treatment plants.

Tertiary water treatment is the final stage of the multi-stage wastewater cleaning process. This third stage of treatment removes inorganic compounds, bacteria, viruses, and parasites. Removing these harmful substances makes the treated water safe to reuse, recycle, or release into the environment.

Tertiary treatment of wastewater normally means final filtration of the treated effluent and the addition of chlorine to the final effluent before discharge. chlorination kills bacteria and viruses, and eliminates parasites such as Giardia and Cryptosporidium, which can cause very serious illnesses.





## DISSOLVED AIR FLOTATION

Dissolved Air Flotation is a clarification process for the separation of solids, grease and oils from water.

It achieves this by the production of a stream of micro fine air bubbles, which attach to the solid particles and float them up to the surface, forming a "sludge blanket", which is then scraped off by way of a series of scraper blades into a sludge hopper.

AquaTreat DAF are constructed of steel or stainless steel and is supplied as a complete system, pre-assembled and skid mounted prior to despatch, including all interconnecting plumbing and wiring. The same can be also trailer mounted.





# SEDIMENT REMOVAL SYSTEMS

AquaTreat mobile and emergency solutions can be used for sediment control in applications like construction sites, mud drilling, pilling, dams, oil and gas mud drilling.

Most construction sites in our region needs dewatering; this includes the removal of water from deep excavations, trenches and dredges as the water is usually high in solids, clay, slit and mud.

AquaTreat Sediment Removal Systems guarantees the removal of such solids from concrete hydro-demolition wastewater, construction dewatering, dredge dewatering, trench dewatering, and manufacturing processes. AquaTreat Separation System is designed to treat this water and wastewater along with other applications that require pH, turbidity and total solids control.

AquaTreat Solid Separation systems are manual or automated this includes in line metering to monitor the influent process water for turbidity and pH. The control measures are automatically metered to adjust the dosing for pH control and Coagulant and polymer feed systems for superior floc farmation.



# MOBILE ODOR CONTROL SCRUBBER SYSTEMS

Odor control scrubbers are designed to eliminate the issue of odor in wastewater treatment plants entirely by absorbing soluble gases into water or a chemical reactant.

AquaTreat Odor Scrubbers systems are typically installed along with the grit chambers, bio-solid treatment areas, and wet wells within a wastewater treatment system. The scrubber works by taking in-process air from a fume source before sending it to a scrubber unit. To make sure that contaminants aren't released from the air before reaching the scrubber. By using an odor scrubber in your facility, it's possible to

remove flammable, odorous, and toxic gases from your wastewater treatment systems. With the high concern over air emissions, many countries in the region have adopted more stringent regulations for control and reporting of these air emissions during truck vacuum operations.

AquaTreat provides scrubber systems and services.
These scrubbers are great for odor control and treatment of vapors from sources such as API separators, frac tanks, vacuum trucks and more.





# OZONE REMEDIATION SYSTEMS

# Ozone water treatment is a treatment method that reduces contaminants through ozone's oxidative strength.

Ozone water treatment begins with the creation of ozone in an ozone generator. Then, ozone is injected into water, and immediately starts oxidizing and eliminating contaminants, such as bacteria, viruses, and metals.

Ozone oxidizes organic material in bacteria, viruses, and parasites. This weakens, ruptures, and kills their cells, eliminating the troublesome contaminants. Ozone also oxidizes iron, manganese, and copper into solid particles that can be easily filtered from water by mechanical filtration. Through oxidation, ozone water treatment systems can even rid water of turbidity and bad tastes and odors caused by chlorine.

AquaTreat completely enclosed ozone injection systems are available for accelerated in-situ site remediation. Our fleet of mobile Ozone injection systems come complete with PLC control and remote monitoring capability.





## CHEMICAL AND PH ADJUSTMENT UNITS

AquaTreat Mobile Chemical injection units are designed to either manually or automatically adjust pH in a water stream.



Based on water treatment applications, contaminant concentrations, and desired flowrates, pH adjustment and selection of appropriate equipment can easily be integrated into an existing or new water treatment system.

Chemical injection units can be used for pH adjustment and any chemical dosing or controlling. Moreover, it can be either manually controlled or automatically by receiving signals from online sensors.

## OIL/WATER SEPARATORS

Oil/Water Separations systems have been designed to separate large amounts of oil which has been mixed in water.

Oil/water separators are gravity feed systems, which allows the oil to rise to the top of the water surface then skimmed off and collected in a container. The water is then allowed to pass for further processing.

AquaTreat systems can handle up to 30,000 Bpd

These units can be used in oil fields, small industries and petrochemical industries and large petrol stations.





# OILFIELD PRODUCED WATER RECYCLING UNITS

AquaTreat enables Oil and Gas service companies to put produced water back to use in fracking and other operations.

Advances in water treatment technologies paired with potential restrictions on oil and gas produced water disposal could incentivize the beneficial reuse of treated produced water in the O&G industry.

AquaTreat offers mobile automated rental units, fast and easily deployed on onshore remote areas and offshore installations.

Water withdrawals for hydraulic fracturing in times or areas of low water availability



OIL & GAS

POWER

PETROCHEMICAL

CONSTRUCTION SITES

INDUSTRIAL SITES

**MINING** 

FOOD AND BEVERAGE

**RESORTS** 

UAE - Saudi Arabia - Jordan - Lebanon - Iraq



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