



WATER EAS

Wastewater Treatment Plant based on Extended Aeration (EAS) Technology



Top view of Activated Sludge Process Plant



Aeration Tank With Fine Bubble Diffusers

Effluent Rich in NPK Making it ideal for irrigation

1

Minimal Operation and Maintenance Costs and use of Chemicals

2

Well digested Sludge with no Odor used as Fertilizer

3

Save Water, Energy, Money and Conserve the Environment

4

**MBBR Wastewater Treatment Plants
Compact yet Complete and Affordable**

FOR COMPLETE INFORMATION CONTACT:

Sameer Khan
Director Business Development

skhan@iwater-tech.com
skhan168@eim.com
www.iwater-tech.com
Cell: +971-52-8078080

Earthcad Environment FZ-LLC
Office 3/3 RAK Business Square, 12th Floor
Amenity Center, Tower -1, P.O Box 86301
RAK Investment Authority Free Zone, RAK, UAE

Possible Application

- Labor Camps
- Small Industries
- Residential Areas
- Hotels and Resorts
- Construction Sites
- Universities

In Earthcad Environment iWater Extended Aeration systems, the biological process is Aerobic and the raw sewage after screening is first sent to the aeration tank for digestion of organic matter and its treatment. The treated effluent thereafter undergoes secondary treatment and is sent to the settling tanks which have Hopper Bottom clarifiers for solid/liquid separation.

The treated water will be disinfected with Sodium hypochlorite solution and then pumped into to the Multi Media filters for tertiary treatment thereby making the final treated sewage effluent of high quality standards

Design Basis

PH	7.0-8.5
BOD (mg/l)	300-350 mg/l
COD (mg/l)	400-600 mg/l
Suspended solids (mg/l)	300-400 mg/l
Ammonical Nitrogen	40-50 mg/l

Treated Effluent Quality

BOD	< 15 mg/l
COD	< 100 mg/l
Suspended solids	< 15 mg/l
Ammonical Nitrogen	< 5 mg/l



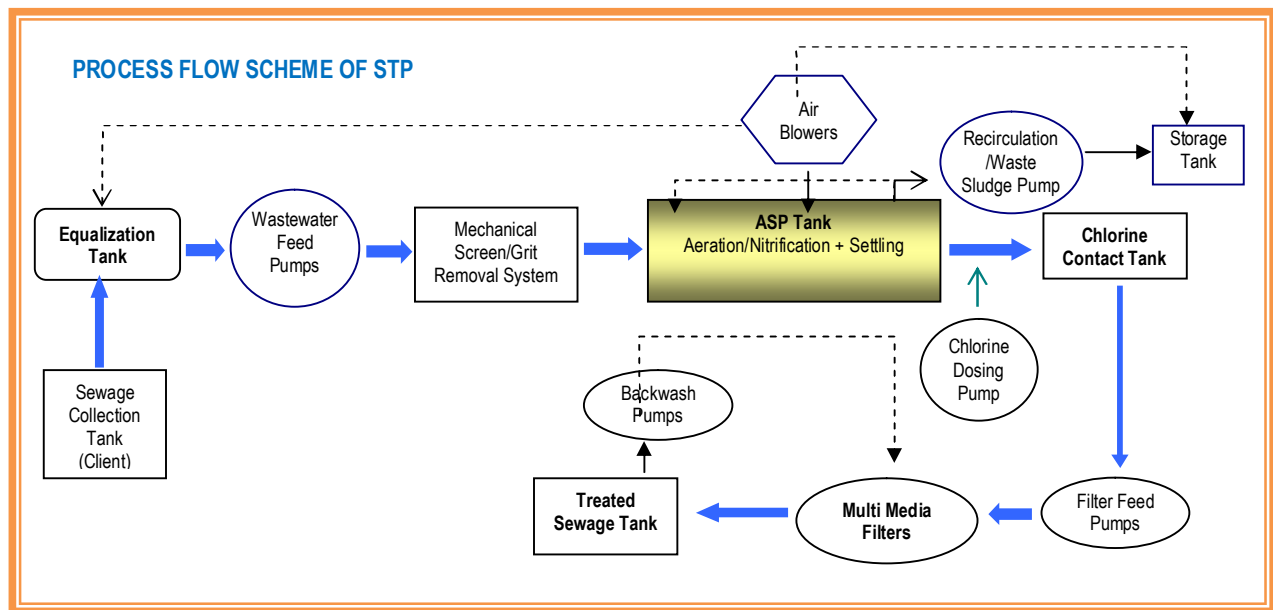
Good Quality MLSS inside Aeration Tank

Process Flow Scheme

- Manual Coarse Bar Screen, 10 mm
- Raw Wastewater Submersible Type Feed Pumps
- Air Blowers and Coarse Bubble Diffusers for Equalization/Sludge Tank (Optional)
- Electromagnetic Flow Meters at Inlet of STP
- Pre-Treatment including Mechanical Fine Screen and Grit removal System
- Aeration Tanks with Fine Bubble Diffusers and Air Piping
- Air Blowers for Aeration Tanks
- Sludge Recirculation/Waste Pumps
- Motorized Valves for Sludge Wasting
- Hopper Bottom Settling Tank
- Sodium Hypochlorite Disinfection System
- Manual/Automatic Multi Media Filter
- Filter Feed Pumps



Filtration System of ASP STP



Salient Features of I Water - EAS

- All Electrical and Mechanical Units are taken on a duty standby basis with International Makes.
- Safe HRT and SRT enabling stable and sustainable Biology and better Aeration and Nitrification.
- Positive Displacement Blowers for Aeration instead of Side Channel Blower which are better in quality and long lasting
- Filtration Velocity of not more than 10 m²/m³.h inside the Multi Media Filter thereby ensuring good tertiary treatment
- MSEP Tank structurally very stable and fabricated in such a way that there is no bulging



Mechanical Fine Screen, 6 mm



Treated Sewage Effluent from a EA STP



Secondary Effluent from Settling Tank