

## **WASTEWATER TREATMENT PLANTS**

Our great 18<sup>th</sup> century industrial revolution and rapid urbanization has lead to higher use of fresh water which resulted wastewater output both in terms of wastewater volume and its deteriorated effluent qualities. General types of water pollutants include heavy metals, organic compounds, soil particles, animal wastes, pathogenic organisms, oxygendemanding wastes, plant nutrients, synthetic organic chemicals, inorganic chemicals, microplastics, sediments, radioactive substances, oil and fats etc.

Industries such as oil & gas, textiles, paper, leather, sugar, chemical, mineral processing etc., generates higher effluent volumes with high pollution loads. All such waste water are predominantly being discharged untreated to nearby surface waters or to open land which poses serious risks to aqua-culture, water animals and surrounding lands. Looking into its serious impact on our weak socioeconomic structure, sustainable environment, it is now required that all wastewater discharges must comply with Environment Protection Authority standards (NEQS).



Water 2000 has taken up initiative to provide complete consultancy, analysis, design, engineering, fabrication & turkey installations to industrial, commercial & residential sectors for treating complex wastewater sources and installed its first wastewater plant at Sarah Textiles in 1995, Lahore. Suitable wastewater treatment technologies are employed depending on the influent's water quality and the effluent discharge standard. EPA laws only allows release of treated wastewater to the environment via waterways, irrigation to land, or to the ocean via outfall pipes.

Wastewater treatment is basically categorized as pretreatment, primary, secondary and tertiary treatment and involved various suitable physical, chemical and biological steps. We select a series of appropriate treatment processes, for example, bar screening, degreasing, air flotation, primary sedimentation, biofilm process/activated sludge process, and secondary sedimentation, are applied. Biological treatment is more widely used than any other option where reasonably complete treatment is required.



## **Providing treatment mainly for:**

- Power Plants
- Mining and metal processing
- Food & Beverage
- Textiles
- Petrochemical
- Pulp & Paper
- Tannery
- Sugar
- Sewage
- Chemical and allied



Water 2000 execute a wide range of technologies and systems for both industrial and municipal wastewater management, treatment, disposal, recycle and reuse. These includes

Grit chamber, Oil - water separator, bar screen, Clarifier (Circular, lamella plate), Coagulation, Flocculation & sedimentation, Filtration, media filters, UV, chlotination, ozonation

Dissolved air floatation (DAF), trickling filter, biofilter, activated sludge systems, bio-oxidation process, advanced oxidation process, contact stabilization, aerated lagoon, oxidation ditches, anaerobic digester, anaerobic lagoon, extended aeration, enhanced biological phosphorus removal, facultative lagoon, membrane bioreactor (MBR), Reverse osmosis (RO), sequencing batch reactor, rotating biological contactor (RBC), sequencing batch reactor (SBR), stabilization pond.

Water 2000 offers a wide range of wastewater treatment systems for industrial, commercial, residential and municipal applications. Please give us a call on 042 3542039-40 or email us at sales@water2000.com.pk and one of our professional team member will happily demonstrate, using our solutions, how we can save your significant cost and greatly improve the performance of any of your water or wastewater treatment system.