



# WATER & WASTEWATER MANAGEMENT SYSTEM



## AN INTRODUCTION



## OUR SERVICES

**INDUSTRIAL RO PLANT**

**SEWAGE TREATMENT PLANT**

**EFFLUENT TREATMENT PLANT**

**PORTABLE STP/ETP SYSTEM**

**ULTRA FILTRATION (UF)**

**MECHANICAL EVAPORATOR**

**AGITATED THIN FILM DRYER (ATFD)**

**OPERATION & MAINTENANCE (O&M)**

## ABOUT US

EGT provides complete water and wastewater engineering management solutions. Our technical experts are best in designing, planning, Erection and commissioning of turnkey, customized, portable projects in recent advanced Technology like Membrane Bio Reactor (MBR) & Zero Liquid Discharge (ZLD).

We undertake all kinds of water and wastewater treatment solutions on turnkey basis. Furthermore, we also carry out Environmental risk Assessment Contractor, Environmental product Developments Environmental consultancy and Laboratory Services.

Our Directors are highly Qualified Environmental Engineer. They have done their post-graduation in well reputed Government Institution. Their agricultural family background and personal aspiration to protect the environment have let them to take up a career in Water and Wastewater management Studies & business which is a key element our environment clean.

## VISION & MISSION



To achieve and maintain total Customer Satisfaction by providing on-time delivery of high-quality products and services to our esteemed customers



To develop the necessary competence and upgradation of design, engineering and manufacturing capabilities for total customer satisfaction



To fulfill legal requirements, compliance obligations and other statutory mandates



To protect the environment and ensure prevention of pollution, injuries and ill-health.



To impart training for all-round development of our employees



To periodically review the adequacy of our QEHS system and continually motivate our employees to improve our processes and QEHS system.

# ACHIEVEMENTS

## OUR ACHIEVEMENTS

1000+  
INSTALLATIONS  
ACROSS INDIA



ADDING OF NEW CLIENTS  
EVERY YEAR UPTO  
1.5 TIMES



SUCCESSFULLY  
INSTALLED PLANTS  
UP TO 1800 KLD



EXPERIENCED STAFFS  
WITH STRONG TECHNICAL  
ADMINISTRATIVE TEAM



SPECIALIZED IN  
BOTH WTP & ZLD CLIENTS



### EGT IS COMMITTED TO

Provide world class quality  
products & services at  
a competitive price

Large number of repeat  
customers

Best in class customer  
after sales service

# EGT DEPARTMENTS

Our endeavor has always been customer-centric, focussing on tailor-made solutions.

Keeping this in mind, EGT brought under its umbrella, a cross section of qualified professionals with expertise in their respective functions.



# INDUSTRIES SERVED

## APPLICATION OF WATER & WASTEWATER TREATMENT PLANT IN VARIOUS INDUSTRIES



Automobile  
Tyre / Rubber  
Electronics  
Tannery / Sugar



Apartments  
Villas  
Gated Community



Textile Manufacturing  
Pharmaceutical  
Dairy & Food Products  
Distilleries

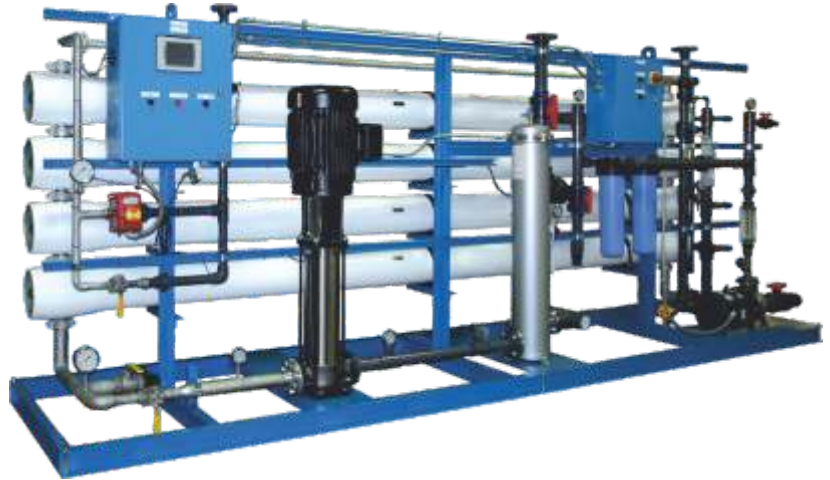


Hospitals  
Institutions  
Hotels



# INDUSTRIAL RO PLANT

- ⊙ The ability to remove many dissolved substances efficiently, yet produce good tasting finished water.
- ⊙ RO does not add any other chemical to your water. It merely separates the dissolved substances from the incoming water.
- ⊙ RO performs a separation without a phase change. Thus, the energy requirements are low.
- ⊙ RO equipment is standardized - pumps, motors, valves, flowmeters, pressure gages, etc.
- ⊙ Our most of the RO systems are fully automated and designed to start-up and shutdown automatically through interlocks. Thus, RO plants usually requires Skilled.



- ⊙ Due to our modular design, maintenance is easy. Scheduled maintenance can be performed without shutting down the entire plant.
- ⊙ The modular design also makes expansion an easy option.
- ⊙ We are experts in designing, erection & commissioning of RO Plant ETP's post treatment.
- ⊙ Upto 95% of recovery can be achieved on providing various stages.

# SEWAGE TREATMENT PLANT

- ⊙ STP is proven technology which offers reliable performance at all time.
- ⊙ Sewage treatment plant preserve natural environment against pollution.
- ⊙ STP meet the standards for emission of pollutants set by the Government & avoid heavy penalty.
- ⊙ Simple and easy installation, low operation and maintenance of plant.
- ⊙ Installation of sewage treatment plant reduces risk to public health and the environment.
- ⊙ Any biodegradable material remaining is dried in “drying lagoons” and is then turned into natural fertilizer. The resulting natural fertilizer is then used in the agricultural sector, increasing crop yields.



- ⊙ Through the treatment of wastewater, the amount of waste that is usually released into the environment is reduced thus improving environment's health. By doing so, the government in turn reduces the health risks associated with environmental pollution, and reduces the water loss induced through water pollution.
- ⊙ Type/method of STP and MoC/Structure of STP will vary depends on site condition and client requirements.

## **TYPE OF STP:**

- ⊙ Activated Sludge Process (ASP)
- ⊙ Moving Bed Bio Reactor (MBBR)
- ⊙ Sequential Batch Reactor (SBR)
- ⊙ Membrane Bio Reactor (MBR)

## **MOC/STRUCTURE OF STP:**

- ⊙ Pre-Fabricated STP
- ⊙ Civil works based STP

# EFFLUENT TREATMENT PLANT

## ⦿ Provides clean, safe water processed

You may not realize it but waste water can actually be turned into reusable water. The treatment process eliminates any toxins from the water and produces clean, safe water instead. Only around 3% of the Earth's water is drinkable. It's a renewable resource but it takes quite a long time for evaporation and rain to filter out the toxins. Wastewater treatment speeds the process up and provides clear, safe reusable water.

## ⦿ Beneficial to the environment

As the water is treated, it removes any unsafe chemicals. This means when it enters the ground, it won't have any negative impacts on the environment. It can be a worry when you're dealing with industrial waste so a high quality Industrial wastewater treatment system is an essential investment.

## ⦿ Saving water

You're actually saving water thanks to the Effluent treatment plant. As the plant recycles old water, it means less water waste which again is good for the environment. If you care about your businesses carbon footprint, this is one way to ensure you're helping the environment.



## ULTRA FILTRATION (UF)

- ⊙ Ultrafiltration (UF) is a type of membrane filtration in which hydrostatic pressure forces a liquid against a semipermeable membrane.
- ⊙ UF can be used in treating Water, Sewage and Effluent.
- ⊙ Maintenance cost very low.
- ⊙ No need for chemical (coagulants, Flocculates, disinfectants, pH adjustment)
- ⊙ Size exclusion filtration as opposed to media depth filtration.
- ⊙ Good and constant quality of the treatment water in terms of particle and microbial removal process and plant compactness simple automation.



## MEMBRANE BIO REACTOR (MBR) based STP/ETP

### BENEFITS OF MBR BASED ETP/STP:

- ⊙ Completely Automatic Plant with PLC based Automation
- ⊙ Low Foot Print
- ⊙ Less Maintenance
- ⊙ Lesser Sludge Generation
- ⊙ Better Treated Water Quality
- ⊙ Completely Reusable Water for Gardening, Flushing & Floor Washing
- ⊙ Easy and Faster Installation
- ⊙ Better COD/BOD reduction compared to ASP, MBBR, SBR and others.
- ⊙ Higher Nutrient Removal



# MECHANICAL EVAPORATOR

- ⦿ Evaporation is being considered as an alternative process in an increasing number of wastewater treatment applications. It can be effective for concentrating or removing salts, heavy metals and a variety of hazardous materials from solution.
- ⦿ Also, it may be used to recover useful by-products from a solution, or to concentrate liquid wastes prior to additional treatment and final disposal.
- ⦿ Most applications of the technology also produce a high quality, reusable distillate-a very important feature where water conservation is a priority.
- ⦿ During evaporation, a solution is concentrated when a portion of the solvent, usually water, is vaporized, leaving behind saline liquor that contains virtually all of the dissolved solids, or solute, from the original feed.
- ⦿ The process may be carried out naturally in solar evaporation ponds, or through the use of commercially available evaporation equipment.
- ⦿ Solar evaporation ponds usually are limited by land availability and cost, potential odor problems, or meteorological and climatological conditions, whereas mechanical evaporators are relatively compact, reliable and efficient.



# AGITATED THIN FILM DRYER (ATFD)

- ⊙ The feed material passes through phases of liquid, slurry, paste, wet powder and finally dry powder while in the form of an agitated thin film.
- ⊙ ATFD has two configurations, vertical and horizontal. The vertical dryer accepts feed in solution and slurry form. The horizontal dryer, along with solution and slurry, also accepts feed in paste or wet powder form. Thus dilution of feeds is avoided arising from such limitations. Absence of air makes it suitable for oxygen sensitive products. Powders are of uniform consistency, free from large agglomerates or grits. Continuous discharge of powder from vacuum is possible.
- ⊙ Applications Drying of bulk drugs and intermediates, dyes and pigments, value added food products, clean room applications, possibility of amorphous powders.

## Features

- Residence time of a few seconds, well suited for heat sensitive products
- Can be used Vacuum Dryer for reduced temperature, operating pressure as low as 1 mbar
- Indirect heating, particularly effective for oxygen sensitive products
- Air free operation, full recovery of organic solvents
- Dust free powder of relatively higher bulk density
- Powder of uniform consistency, eliminating downstream pulverizer



## PRE FABRICATED SYSTEM ( MS & SS )



- ⊙ Customized Unit based on Client and OEM's requirement MS/SS Filter Vessels & Tanks with Inner FRP Coating / Epoxy Painting with outer enamel painting.
- ⊙ All kinds of water and wastewater pipeline with end-to-end works are carried out.
- ⊙ SS 304 vessels for food grade systems are fabricated. Plug & Play portable readymade prefabricated WTP/STP/ETP systems are done.

## WATER DISPENSER

- ⊙ Water purification methods based on the quality of raw water.
- ⊙ Eco Green water purifier has an advanced, Micro controller based PCB ensures 100% purity.
- ⊙ Eco Green water purifier uses World's best purification methods like UV, OZONE, RO etc., Conway water purifier has an advanced preventive maintenance information display.
- ⊙ Eco Green water purifiers are heavily built, using stainless steel housings, MS powder coated frames.
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## WATER SOFTENING PLANT



- ⊙ Cleaner and shinier silverware, glassware, mirrors, tiles, cars, or any plumbing fixtures.
- ⊙ Softer skin and clean, smooth hair.
- ⊙ Reduced soap curd makes cleaning easier and reduces housework.
- ⊙ Uses less soap and shampoo because of the rich lather softened water and soap produces.
- ⊙ Softer clothes without hard minerals trapped in the fabric. Fabrics last longer and whites stay whiter without the dingy gray caused by hard water.
- ⊙ Preserves the life of all water appliances such as coffee machines, ice makers, dishwashers, water heaters and laundry equipment. Save money on monthly energy costs and damages to appliances.

# SERVICES

## OPERATIONS AND MAINTENANCE (O&M)

- ⊙ ECO GREEN TECH serves 24 X 7 full-fledged operation and maintenance. We have strong technical O & M team.
- ⊙ The Effluent Treatment plant or Sewage Treatment Plant once constructed/established need to have operation & maintenance through qualified & experience persons to serve efficient & effective operation of ETP/STP, qualified operator & supervisor are being provided by Perfect Pollution Services who maintains all the records of the operation and attends the day to day trouble shooting.
- ⊙ Maintenance of Pumps and Motors, Electrical Panels (Starters, Meter, (Energy, Voltage, Amperage, Power factor), Blow out Fuses, Valves, Gates, Scraping Bridge Trolley, Aerators, Reduction Gears, Open Air Weather Casings for Motors, Sprocket wheels and Chains for Mechanical Grit and Screen removing devices.
- ⊙ Saving you money A well maintained and operated Industrial Wastewater Treatment system will help to save money in the long term, it can also ensure you comply with regulations and legislation.
- ⊙ Type of plants - STP,ETP, RO, WTP, DM plant, Swimming pool, Mechanical Evaporator & ATFD.

## REVAMPING AND RECOMMISSIONING OF EXISTING STP/ETP

- ⊙ We firmly believe in optimum utilization of existing plants. We offer comprehensive revamping and Recommissioning options to our customers. We study existing systems of clients and offer detailed options for meeting standards, capacity enhancement and optimum utilization of existing electro mechanical equipment. We offer following services for Revamping and Recommissioning of Plants.
- ⊙ Detailed on site study of existing systems by our qualified engineers
- ⊙ In depth analysis for under performance of systems
- ⊙ On Site study and trails of capacity enhancements
- ⊙ Detailed reports, presentations on operational failures
- ⊙ Detailed reports on proper size of equipment needed to run the plants
- ⊙ Validation for investments to revamps or Recommission the plants





## LABORATORY SERVICE

### TESTING & CONSULTING

We provide Testing, Design and Consulting Services in the area of Water, Wastewater, Air, Noise and Soil.

Our laboratory division was setup in the Mission of providing Quality reports with respect to Indian Standards.

We used to carry the field Investigation as well as Laboratory Analysis.

We not only test the samples, used to give the proper technical guidance to the clients with the experts.



#### DRINKING WATER

Test as per BIS 10500 norms. Accurate results will be furnished. Sample collection also made to ensure accurate result.

#### WASTE WATER

Sewage & Effluent water both at inlet and outlet are analyze of as per the CPCB norms.



#### AIR QUALITY MONITORING (AQM)

Complete package for surface & stock air monitoring will be done on 24 x 7 as per CPCB norms.

#### NOISE

CPCB has chalked out standards for noise pollution. The ambient noise standards have been notified for different categories.

#### SOIL

Testing of Soil is mandatory before we start the construction work.

## Our Few Valuable Clients



Water & Waste Water Management System



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