

Diva Envitec Pvt Ltd Wastewater Treatment, Management & Re-cycle

Diva Envitec Pvt Ltd - a green engineering company with extensive experience in developing & implementing Customized Environmental process Solutions in the water space.



The company has a team of Chemical, Environmental Engineers, scientists and PhD Doctorates working across multiple disciplines to find bespoke solutions in waste water treatment

The company takes up work in the following areas :

- Zero Liquid Discharge Design and implementation
- Water Treatability studies
- Piloting Toxic wastewater to find plausible solutions
- Industry water management and water cycle

Over the past 35 years the company has handled many process based projects based on the infrastructure and associations created to work across industry verticals. Diva Envitec Pvt Ltd has :

- 1. A dedicated Environment division for wastewater and water treatment.
- 2. Done may turn arounds and brought in innovation in many assignments.
- 3. Spearheaded over Rs. 500 Million worth wastewater treatment Projects as a consortium.
- 4. Developed, in process of patenting & Commercializing industrial processes
- 5. Implemented & maintained compliances related to ISO, EMS, OHSAS.



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Launch of New Products and Process

- CHD-Ox Catalytic Hydro-Oxidation for recalcitrant and Toxic COD
- VAPOZEM-MVR Low energy Evaporation system for ZLD
- NANOPOREX Micronising and cavitating system for COD breaking using hydrodynamic cavitation
- **SUPERCAV** Aeration system for large MBBR systems making Diffusers redundant and bring down the costs of aeration by 50-70%
- **RF Assisted CHD-Ox** System, using effects of High frequency and corona to break the organics chemical bonds by attacking the bond vibration frequencies

Diva Envitec provides all these services having an independent

- Research & Development Center
- Lab facility for testing wastewater
- Pilot plants for Direct Field Installations

We have done extensive work where we have developed & implemented customized process solutions for following industries:

Paper, Textile, Pigments, Synthetic as well as agro-chemicals, Pharmaceuticals, Distilleries, Oil & Gas, Refineries, Sugar, Dairy, Engineering and Electroplating industries



SOME INNOVATIONS

- Introduction of Innovative solutions like "sludge less" process for textile effluent treatment
- Design and operation of effluent treatment plant treating complex effluents from pigments, pesticides and chemical intermediates effluent.
- Successful installation and commissioning of ETP, recycle system and MEE for ZLD in electroplating and engineering industry.
- Major orders booked for effluent treatment, recycle, RO pre treatment and O&M. Successfully achieved Metric related to this in business verticles of pharma, textile etc.
- Treatability study in Oil and Gas Produced water
- Successfully developed and commissioned process for treatment of RO reject for reducing evaporation volume in "Zero Liquid discharge systems" at a leading textile mill in India.
- Successfully developed system for CPU (condensate polishing units) for distillery segment.
- Processes developed for colour brine in Sugar refining process.
- Biological colour reduction in textile effluent.
- Development of specialized bacteria for effluent treatment Biosequestration.



Summary highlights of some key consulting assignment :

- A large chemical manufacturing complex in Maharashtra was facing problems in ETP whereby they could not recycle treated effluent. Activities for improving performance included monthly visit for review of existing system, generating ideas for improvement and monitoring performance thru follow up. Result was increasing recycle efficiency from initial 20% to 80%+ with cost effective solutions. Skills of operative team enhanced
- A chemical manufacturer in north was facing problem in ETP system due to presence of certain effluent streams. Assignment included adequacy of existing system to treat entire effluent along with developing process for handling of difficult to treat effluent. Root cause analysis was done and effluent sources were studied. Successfully developed cost effective process to treat the difficult to treat effluent streams successfully without generating foam.
- An alcohol based chemical manufacturer was facing problems in ETP operations wherein ETP performance was not as per their internal standard. Also they were losing the biomass from system on a regular basis. Assignment included ETP adequacy audit along with biodegradation study to identify root causes of problems and develop economical solution for handling the same. Biodegradation studies included both anaerobic as well as aerobic biodegradation in batch mode. Difficult to treat streams were identified and handled separately. Activities for improving performance included monthly visit for review of existing system, generating cost effective solutions & ideas for improvement and monitoring performance thru follow up.
- A large multi locational pharma unit was facing problems in ETP operation wherein treatment performance was not as per internal standards. Assignment included ETP adequacy audit with anaerobic as well as aerobic batch biodegradation studies to identify root causes and develop techno economical solutions for handling them. Actions included stream segregation & developing chemical additives for enhancing biomass activity in ETP. Activities for improving performance included monthly visit for review of existing system, generating ideas for improvement and monitoring performance thru follow up.



- A large textile unit in Maharashtra wanted to improve ETP performance so that treated effluent can be made suitable for recycle. Assignment included ETP adequacy audit with anaerobic & aerobic batch biodegradation studies to identify root causes and develop cost effective solutions for handling them. Developed treatment scheme whereby at least 50% of treated can be recycled.
- An engineering manufacturing unit's ETP was getting disturbed due to presence of certain streams. Assignment included system audit & effluent treatability. Root cause of problem was identified & cost effective solution was developed to bring system online to meet internal standards.

It will be a pleasure to work on any wastewater and water treatment consulting or Turn-key supply assignment.

In case you have any specific requirement, please contact the undersigned to take this forward

Best regards

Guru Vashista Founder & CEO

