Terra Eco Systems

PVTLTD

WATER • AIR • SOIL

ABOUT US

Terra Eco Systems Pvt. Ltd. is a joint venture of the legacy of two distinguished organizations, combining decades of industry leadership, technical expertise, and environmental commitment to establish a comprehensive environmental solutions company dedicated to sustainable development and industrial compliance. With a strong legacy of over 35 years in environmental consultancy, statutory consent management, and regulatory coordination with State Pollution Control Boards, the company brings unmatched experience in managing environmental obligations across a wide spectrum of sectors including steel, manganese ore (MnO), thermal power plants, coal industries, and large-scale infrastructure projects. This extensive background enables Terra Eco Systems to provide strategic guidance, regulatory support, and effective environmental planning tailored to the complex requirements of modern industries.

Strengthening this legacy further is over 10 years of specialized experience in the design, engineering, execution, and operation of advanced pollution control and treatment systems. The company possesses substantial expertise in wastewater management solutions such as Sewage Treatment Plants (STP), Effluent Treatment Plants (ETP), Wastewater Treatment Plants (WWTP), and integrated environmental technologies that ensure sustainable resource management and regulatory compliance.

Terra Eco Systems Pvt. Ltd. is committed to addressing the full spectrum of environmental challenges by delivering innovative solutions in water, air, and soil pollution treatment. The company's services extend beyond traditional consultancy to include the development and implementation of advanced systems for industrial wastewater treatment, air pollution control devices, emission reduction technologies, hazardous waste management, and soil remediation solutions. By offering holistic environmental services, Terra Eco Systems ensures that industries can achieve compliance, improve operational sustainability, and minimize their ecological footprint.

Through the strategic integration of long-standing consultancy expertise and modern engineering capabilities, Terra Eco Systems Pvt. Ltd. stands as a trusted environmental partner for industries and infrastructure projects seeking end-to-end pollution control solutions. The company's mission is to create sustainable, efficient, and technologically advanced environmental systems that contribute to cleaner air, safer water, healthier soil, and a more sustainable future for industries and communities alike.

- **Our Mission:**

  To Contribute in Sustainable Developments Projects by providing Economical and Ecological Water Treatment Systems.
- **Our Vision:**

  To Be a Leader in Water Treatment Industry & Preferred Choice When Comes to Water Management.
- **Our Values:**

  Together Win-Win Approach in Collaborative Environment.

OUR INFRASTRUCTURE

PROMOTERS PROFILE

Mr. Vipul Bhoyar- Managing Director, B.Tech Chemical Eng. LIT, Nagpur & Diploma in Process Eng.

- More than 11+ years of experience in projects, marketing, sales in Indian, South Africa & Nigerian Market, In Turkey Key projects for veg oil refinery & Waste Water Management & Renewable Energy Industry Sectors.
- Strong analytical skills and knowledge of statistical analysis, project & Business management and administration.

Mr. Pranay Bhoyar- Executive Director, B.Tech Chemical Technology UDCT Amravati University

- More than 7+ years of experience in production, projects in swimming pool filtration & sewage treatment plants.
- Expertise in strategic planning and market plan execution
- Pre-sales efforts with skills in staffing and targeted marketing
- Rich entrepreneurial and leadership experience of running established businesses as well as creating new ones.

Mr. Parth Rajesh Shriwastava – Executive Director, B. Tech in Civil Engineering from GHRCE, Nagpur

- Trained in Geographic Information Systems (GIS) and Remote Sensing, with the ability to leverage geospatial intelligence for strategic decision-making in environmental and infrastructure projects.
- NABET-accredited Functional Area Associate (FAA) in Land Use, providing strategic oversight on land utilization, environmental impact assessments, and regulatory compliance.

Mr. Vishwa Rajesh Shriwastava - Executive Director, BE in Civil Engineering from RCOEM, Nagpur

- Directing the operations of a non-ferrous metals recycling unit, integrating sustainability, regulatory adherence, and operational excellence to support circular economy goals.

CLARIFIER SYSTEM

- Clarifiers are required where ever the Suspended solids in raw/waste water are higher in concentration. Almost all treatment plant (Clarifiers) sedimentation tanks of circular or sometimes rectangular design.
- Clarifiers work on the principle of gravity settling. The heavier suspended solids settle in the clarifier due to the quiescent conditions provided in the Clarification zone. The settled solids are swept to the center well provided for collection of sludge with help of moving scraper blades.

Configurations

- The clarifiers are designed based on the intended function & the space availability. In conventional waste water treatment plants there are normally two types:

a. Primary Clarifier- Rectangular or Circulator Clarifier

b. Secondary Clarifier- Rectangular or Circulator Clarifier

Applications

- Clarifiers find application in almost all water & waste water plants depends on the influent TSS and turbidity. The major applications would be as below.

a. Raw Water Clarification

b. Primary Effluent Clarification

c. Secondary Effluent Clarification

d. Sludge Thickener

e. Lime Soda Softening

FILTRATION SYSTEM

Pressure filtration can be used for a variety of conventional filtration media; oxidative media for iron and manganese removal; activated carbon media in any one of several grades and mesh sizes. We provide pressure vessels as stand-alone systems, or we can provide assistance and components for entire systems.

Key Features

- Fully Assembled and Tested
- Small Plants Skid Mounted for easy installation and leveling
- Backwash Control Panel with LCD display & PD switch
- Backwash Valves / Pneumatic or Manual Operation
- Side-Access Manhole

Type Of Filters

Industrial Series Filters are mainly classified according to media used-such as : – Sand Filters – Dual Media or Sand / Anthracite Filters – Activated Carbon Filters – BIRM Filters. Depending upon mode of operation, these filters can further be classified as: (a) Manual Filters And (b) Automatic Filters.

Applications

- Sand Filters: Removal of turbidity and suspended solids from lightly contaminated water sources such as deep wells and municipality water supplies. Used frequently upstream of reverse osmosis and demineralization systems.
- **Dual Media or Sand / Anthracite Filters** Removal of turbidity and suspended solids from heavily contaminated water sources such as gray water and domestic sewage tertiary treatment.
- **Activated Carbon** Filters: Removal of free chlorine upstream of RO or Softening plants and removing from smell and odor from lightly contaminated water supplies.
- **Birm Filters:** Removal of Iron and Manganese from contaminated water supplies.

WATER SOFTENING PLANT

A water softener reduces the dissolved calcium, magnesium, and to some degree manganese and ferrous iron ion concentration in hard water. We design our industrial water softener systems to meet your exact specifications. Our team will work closely with you to ensure that you have the perfect water softener system for your application.

Key Features

- Fiberglass reinforced polyester (FRP) pressure vessels for 150 PSI working pressure.
- High capacity, sulfonated polystyrene cation exchange resin in sodium-form.
- Internal distribution system for minimal pressure drop and optimal regeneration.
- Rigid, polyethylene brine tanks with dry-salt shelf platform and water re-fill valves.

Applications

- Refineries
- Power plants
- Food processing
- Hospitals
- Cooling Towers
- Boiler Feed
- Hotels And many more

INDUSTRIAL WATER SOFTENER SYSTEM

Capacity Range Chart

Softener Model	Capacity (LPH)	Typical Application
SOF-2000	2,000 LPH	Small Industries/ Boiler Feed
SOF-5000	5,000 LPH	Hotels/ Commercial Utilities
SOF-10000	10,000 LPH	RO Pretreatment Systems
SOF-20000	20,000 LPH	Medium Industrial Plants
SOF-25000	25,000 LPH	Process & Utility Water
SOF-30000	30,000 LPH	Heavy Industrial Usage
SOF-50000	50,000 LPH	Large Industrial Facilities

ULTRAFILTRATION SYSTEM

Ultrafiltration (UF) is a pressure-driven process that removes organics, emulsified oils, metal hydroxides, emulsions, dispersed material, suspended solids, silica, and other large molecular weight materials from water and other solutions. Ultrafiltration membranes are characterized by their molecular weight cut-off. Ultrafiltration excels at the clarification of solutions containing suspended solids, bacteria, and high concentrations of macromolecules, including oil and water.

Key Features

- Minimum pumping energy required, thus energy saving
- Chemical resistance, wide PH ranges
- Back-washable
- Easy to operate & maintenance
- Low investment cost
- No contaminant residue caused by chemical reaction
- Recovery ratio up to 98%

INDUSTRIAL ULTRAFILTRATION (UF) PLANT

Capacity Range Chart

UF Model	Capacity (LPH)	Typical Application
UF-1000	1,000 LPH	Pretreatment for RO
UF-2000	2,000 LPH	Commercial Water Systems
UF-5000	5,000 LPH	Industrial Process Water
UF-10000	10,000 LPH	RO Pretreatment Systems
UF-20000	20,000 LPH	Medium Industrial Utilities
UF-25000	25,000 LPH	Manufacturing Plants
UF-30000	30,000 LPH	Process & Utility Water
UF-40000	40,000 LPH	Large Industrial Facilities
UF-50000	50,000 LPH	Heavy-duty Industrial Systems

Applications

- Surface | River Water Clarification
- RO System Pre-Treatment
- Waste Water or Sewage Treatment
- Drinking Water
- Industries such as Chemical and Pharmaceutical, Food and Beverage processing and waste water treatment install ultra filtration in order to add values in process water.

REVERSE OSMOSIS SYSTEM

We offer a wide range of Industrial Reverse Osmosis Plant according to We need for tap water, brackish water & sea water application. The production range starts from 100 LPH (Liter per hour) to 100 M3 per hour for 400 to 45,000 TDS and reduce TDS @ 90-99% All our Industrial Reverse Osmosis Plant are carefully customized and configured to suit the individual requirement of the output water, which varies from normal drinking application to the specific usage, such as food Processing, pharmaceuticals and boiler feeding requirement. This is done through an in depth and complete chemical analysis of the feed water available to us in specific location.

Key Features

- Process design of the whole treatment system
- Supply the completely RO Plant
- Installation service
- Commissioning
- After-sales service

MODEL-WISE INDUSTRIAL RO PLANT

Model	Capacity (LPH)	Application	
RO-500	500 LPH	Small Industries / Labs	
RO-1000	1,000 LPH	Hotels / Hospitals	
RO-2000	2,000 LPH	Food & Beverage	
RO-3000	3,000 LPH	Manufacturing	
RO-5000	5,000 LPH	Pharmaceuticals	• Medium Industries
RO-20K	10,000 LPH	Process Industries	• Textile / Dyeing
RO-50K	50,000 LPH	Large Industrial Plants	• Large Industrial Plants

Applications

- Refineries
- Power plants
- Food processing
- Hospitals
- Cooling Towers
- Boiler Feed
- Hotels And many more

SEWAGE TREATMENT PLANT

VP Eco Trade has many years of Sewage Treatment Plant Solution experience in the design, construction, and operation of wastewater treatment plants, we are using proprietary technologies for a wide range of municipal, commercial, and industrial client projects. We has a professional technical team, our service includes custom-designed wastewater treatment solutions are reliable and cost-effective, which from process designation to installation, operation and maintenance. High quality control reliable and price reasonable. We have a good after-sales service team to make sure your project are running well all the time.

Sewage treatment is the process of removing contaminants from wastewater, primarily from household sewage. It includes physical, chemical, and biological processes to remove these contaminants and produce environmentally safer treated wastewater (or treated effluent).

Model Code	Treatment Capacity	Typical Application
STP-05	5 KLD	Individual Buildings, Small Offices, Clinics
STP-10	10 KLD	Apartments, Hostels, Schools
STP-20	20 KLD	Commercial Complexes, Resorts
STP-50	50 KLD	Hotels, Institutions, Industries
STP-100	100 KLD	Large Compuses, Townships, Industrial Units

Technologies

- ASP-Activated Sludge Process
- MBBR- Moving Bed Bioreactor
- MBR-Membrane Bioreactor
- SBR-Sequential Batch Reactor
- SAFF-Submerge Aerobic Fixed Film
- IWT-Inland Wetland Technology
- Phytorid Technology

Key Features

- Output water quality stable and good
- Easy operation and maintenance
- Fully automatically controlling
- Cost acceptable

SARAL™ FRP STP

CPHEEO-Aligned, Compact Onsite Sewage Treatment

SARAL™ FRP STP is a prefabricated, decentralized onsite sewage treatment system designed in accordance with CPHEEO guidelines for residential, institutional, and commercial developments without a municipal sewer network. The system combines anaerobic treatment, aerobic biological treatment, and clarification within a compact FRP structure to deliver stable, reuse-ready treated wastewater with low energy and minimal operation & maintenance.

Key Features

- CPHEEO-compliant biological treatment design
- Decentralized onsite STP for non-sewered areas
- Prefabricated FRP construction (corrosion-proof & durable)
- Compact footprint; suitable for underground installation
- Low power consumption and simple operation
- Stable performance under hydraulic and organic load variations
- Treated water suitable for flushing, gardening & landscapin

SARAL™ FRP STP

Model Range

Model	Treatment Capacity	Typical Application
SARAL-2.5	2.5 KLD	Individual Houses, Small Offices
SARAL-5	5 KLD	Villas, Clinics, Cafes
SARAL-10	10 KLD	Apartments, Schools
SARAL-15	15 KLD	Small Residential Blocks
SARAL-20	20 KLD	Residential Societies
SARAL-25	25 KLD	Resorts, Hostels
SARAL-30	30 KLD	Large Campuses, Institutions

EFFLUENT TREATMENT PLANT

The Effluent Treatment Plant (ETP) is an environmental facility that removes pollution from the water released during the industrial process. Almost all industries use water to produce their products, generate wastewater, which must be treated before being released into the environment. Many manufacturing industries have byproducts that they can treat as effluent. Treating wastewater includes chemical, membrane, biological, and physical processes.

ETP Offering And Features

- Containerized ETP
- Batch Type ETP
- Compact Modular ETP Plant
- Chemical and Biological Type CETP
- Zero Liquid Discharge (ZLD) Plant

PACKAGE EFFLUENT TREATMENT PLANT (ETP)

Capacity Range Chart

ETP Model	Treatment Capacity	Typical Application
ETP-05	5 KLD	Small Manufacturing Units
ETP-10	10 KLD	Food & Beverage Units
ETP-20	20 KLD	Textile/ Dyeing Units
ETP-50	50 KLD	Medium-Scale Industries
ETP-100	100 KLD	Large Industrial Plants

Application

- Hospital,
- Labs,
- Sugar,
- Pharmaceutical,
- Electroplating,
- Dairies,
- Paper & Pulp,
- Automobile,
- Food processing,
- Chemical,
- Paint & Any Chemical Process Industries

CHEMICAL MIXING & DOSING SYSTEM

Chemical dosing is the adding of chemicals into water/fluid or sludge to achieve required conditioning. This would make the treatment effective by various mechanisms such as charge neutralization, settling of solids etc.

Key Features

- Proportionate Dosing of Chemicals
- Pre-plumbed, factory pre-commissioned – save on install costs
- Automated, hassle-free dosing solutions

Our units offer a variety of measurement and output options, including

- Free and total chlorine residual
- Ph & (ORP)
- Chlorine dioxide
- Temperature
- Time

Application

- Boiler
- Cooling Tower
- HVAC
- Municiple/Rural Water Supply
- Other Chemical Process, Food, Beverages Industries

OEM FABRICATION & ENGINEERING SERVICES

MS Tank Fabrication

We design and fabricate mild steel tanks for water and wastewater applications, ensuring high structural strength, durability, and leak-proof performance. Fabrication is carried out through controlled processes including plate rolling, welding, surface preparation, and finishing, suitable for ETP, STP, WTP, and industrial storage systems.

Skid Fabrication (All Types)

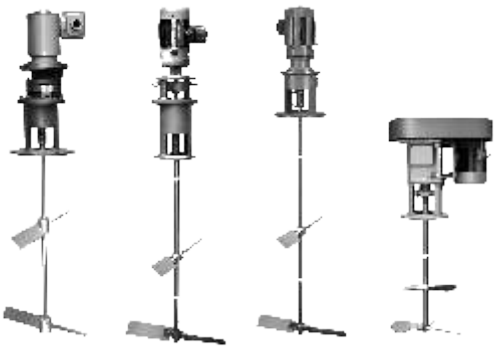
We offer custom skid fabrication solutions for water and wastewater treatment plants. Skids are assembled using precision-cut pipes, fittings, valves, pumps, and motors in our fabrication facility. All components are integrated on a robust structural frame for easy installation, compact layout, and reliable operation.

MS Pressure Vessels

Our mild steel pressure vessels are designed to safely contain liquids under pressure for industrial water treatment, ETP, STP, and process applications. Manufactured using high-quality low-carbon steel, these vessels provide excellent mechanical strength, long service life, and compliance with industrial standards.

Flocculators

We manufacture mechanical flocculators for efficient particle agglomeration in water and wastewater treatment processes. These units promote the formation of larger flocs, enabling effective solid-liquid separation in ETP, STP, and WTP systems, resulting in improved treatment efficiency.



STP / ETP / WTP / WWTP / ZLD Services

We offer end-to-end engineering and technical services for Sewage Treatment Plants (STP), Effluent Treatment Plants (ETP), Water Treatment Plants (WTP), Wastewater Treatment Plants (WWTP), Zero Liquid Discharge (ZLD) systems, and Water Softening Plants, serving clients across Maharashtra and India.

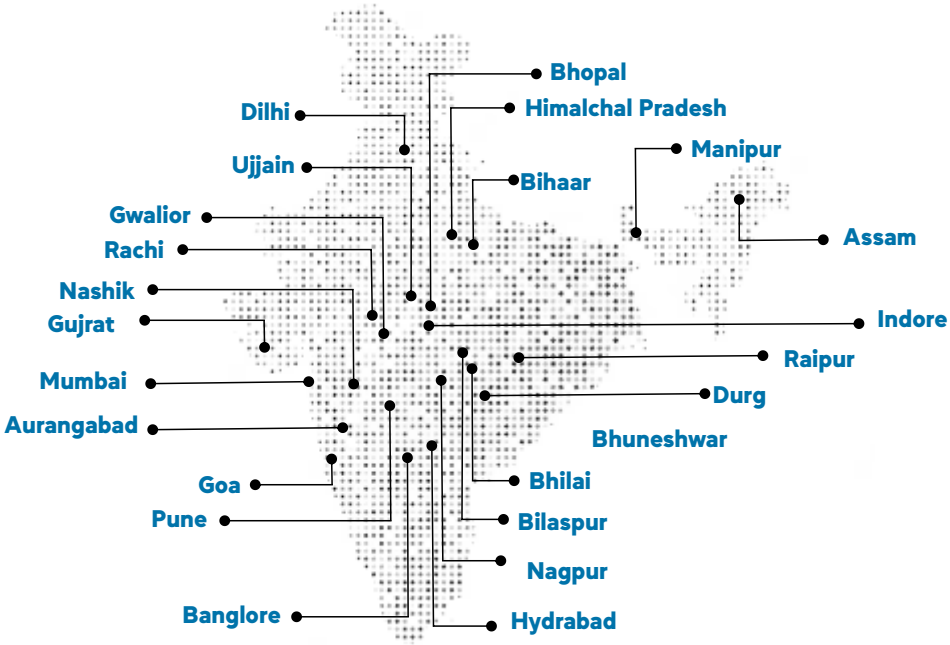
CTE & CTO Services

Industries generating pollutants or handling hazardous waste are required to obtain statutory approvals from the Pollution Control Board. We assist clients in securing CTE (Consent to Establish) and CTO (Consent to Operate) approvals for industrial and commercial projects, ensuring full compliance with regulatory requirements.

CTE – Consent to Establish | CTO – Consent to Operate

Our team provides professional support for documentation, application processing, and liaison work related to CTE & CTO approvals, helping clients achieve timely clearances for smooth project execution and operation

OUR INSTALLATIONS & SUPPLIES



CERTIFICATION & MEMBERSHIP

Ministry of MSME, Govt. of India

ISO 9001 CERTIFIED

ISO 14001 CERTIFIED

ISO 45001 CERTIFIED

CLIENTS


SABICO
Simply Good Food!


Sadâtan Ayurveda Pvt. Ltd.


VCA


VISA
STEEL


UTTAM


Tuli Hotels & Resorts


TATA STEEL


TESLA
environment first


TATA
TATA POWER


Supreme
SUPREME INDUSTRIES LIMITED


SUNFLAG
STEEL


SAMBHV
STEEL


TAJ
Hotels Resorts


Public Health Engineering Organisation


SOBISCO
Cita Rasa Pilihan


SBS
SBS WATER & INFRA
PROJECTS PVT. LTD.


MM ENVIRO
Projects Pvt. Ltd.


VIDARBHA
CRICKET
ASSOCIATION
STADIUM
NAGPUR


MASO AUTOMOTIVES


SPML
Engineering Life


State Water & Sanitation Mission


SPACEWOOD


Lars


KKE


JSW
Steel

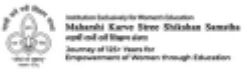

JINDAL
STEEL & POWER


IndianOil


INDiGO


TRANSRAIL


ADITYA BIRLA
UltraTech

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CRYSTAL


HAYMAN


CDET


Midas
Multispeciality
Hospital


AFCONS
AFCONS INFRASTRUCTURE LIMITED


Ambuja
Cement


ACC
ACC LIMITED


adani
Power


ecosoft


हर घर जल
जल जीवन मिशन

OUR PRODUCTS

- Clarifier/ Lamella/ Tube Settler
- Filtration Plant
- Softener Plant
- Ultra Filtration Plant
- Reverse Osmosis Plant
- Sewage Treatment Plant
- Grey Water Treatment Plant
- Effluent Treatment Plant
- Chemical Mixing System
- Dosing System
- Iron Removal System
- Fluoride Removal System
- Chlorine Dosing System
- Electro Chlorination System
- SARAL™ FRP STP
- Swimming Pool Filtration

Terra Eco Systems PVTLTD

WATER • AIR • SOIL

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Manufacturing Unit :

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Sales Office :

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