

We make the Environment Crystal Clear



#### The Company

Paleo Crystal Enviro Technologies Pvt. Ltd. is a bunch of innovative and experienced people who look towards wastewater in a different prospect &work relentlessly to offer specialized solutions with a solid optimism and positive approach. We accept challenging tasks and take them through offering high-quality, effective wastewater & water treatment solution is our specialty.











**PALEO CRYSTAL ENVIRO TECHNOLOGIES PVT. LTD** provides a wide range of products for water & wastewater treatment including design/build of packaged type plants; design, engineering and project management of turnkey solutions.

With decades of experience in water & wastewater treatment, PALEO CRYSTAL personnel are dedicated to providing sound engineering solutions to clients while minimizing overall project costs and surpassing extreme quality expectations.

#### **Wastewater Treatment Systems**

- Complete Package System for ETP/STP
- Turnkey Solution Provider for ETP/STP
- Biological Systems Experts
- Effluent Recycling Systems
  - UF / RO System
  - ZLDSystem
  - Tertiary Treatment System (PSF/ACF/DMF)

#### **Water treatment Systems**

- UF-RO System
- DM Water Plants
- Water Softeners
- Filtration Systems (PSF / ACF)
- Special Treatment Technologies (Heavy Metal Removal / Fluoride Removal)

# **Air Pollution Control Systems**

- Scrubber Systems
- Cyclones & Multicyclones
- Bag Filters

# WasteWaterTreatment Equipment & Chemicals

- Oil Removing Equipment/Oil Skimmer
- Tube Settlers
- Screens
- Diffused Aeration System & Equipments
- MBBR Media / SAFF Media / Tube Settler Media
- MBR Membranes
- Water & Waste Water Pump
- Sludge Dewatering Equipment
  - Filter Press
  - Basket Centrifuge
  - Decanter Centrifuge
  - Sludge Bag Filler
- WaterTreatmentChemicals

#### **Wastewater Management**

- Operation & Maintenance Contract
- Equipment & Media Replacement
- Repair & Renewal in Wastewater Plants



# **BUSINESS SEGMENTS**

#### WASTEWATER TREATMENT SYSTEMS

Being an emerging and experienced wastewater treatment plant manufacturer in the country, Paleo Crystal aims at providing excellent wastewater treatment systems that are hassle-free, easy to use and efficient in execution. Each product is factory-tested and guarantees good performance, Plug and play installation, long-lasting service and smooth working are the distinct features.



You can find every variants of wastewater treatment plant. Each one has some distinct features and usage. Here are few popular products of wastewater treatment:

#### Package Type Sewage Treatment Plant/Effluent Treatment Plant

We offer compact wastewater treatment package systems for communities, hospitals, Institutions and even industries based on the level of treatment requirements, ranging from 5 KLD to 200 KLD of capacity. The treatment methods we offer are:



SAFF (Submerged Aerobic Fixed Film) Reactor

MBBR (Moving Bed Bio Reactor)
MBR (Membrane Bio Reactor)
SBR (Sequential Batch Reactor)



# Turnkey Industrial Effluent Treatment Plants

Based on the wastewater from different sources in industries, we analyze the wastewater characteristics and provide a custom based treatment solution on turnkey basis to some wide industrial segments:

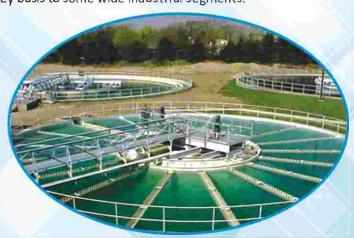
- Textile & Dye Industries
- Pharma & Chemical industries
- Food & Beverage Industries
- Sugar Industries
- Dairy & Dairy product Industries
- Municipal Sewage Treatment Plants
- Breweries & Distilleries
- Pulp & Paper
- Automobile & Many more....

#### **Technologies Employed**

ASP/EA/SAFF/MBBR/MBR/SBR/UASB

#### Tertiary Treatment (Filtrations System)

Paleo Crystal Offer Multigrade Filter, Dual Media Filter, Activated Carbon Filter in MSEP / FRP material for removal of suspended Solid, Color & Odor.





#### WATER TREATMENT SYSTEM

Water treatment is any process that makes water more acceptable for a specific end-use. Water treatment removes contaminants and undesirable components, or reduces their concentration so that the water becomes fit for its desired end-use.

### A) UF System/RO System/MF System

Paleo Crystal holds expertise in developing reverse osmosis systems and offers customized industrial reverse osmosis systems and commercial RO water purification systems at reasonable price throughout India. Using trusted membrane technology, rugged construction and certified instruments.

Our engineering team carefully designs RO systems that meet and exceed required water quality standards. Configured with different pre-and post-treatment systems, these units are made for water and wastewater treatment across pharmaceutical, healthcare, laboratory, food and beverage and steel industries etc.

### B) DM Plants & Water Softeners

Demineralization process involves removal of minerals by means of lon Exchange Resins. Demineralization of water is achieved by passing water through Cation Resin Column and then though Anion Resin Column.

The DM plants are used for various industrial applications for boilerfeed water and process water.

Paleo Crystal demineralization plants are mainly divided in to

- i) Packaged Demineralization Water Plants
- ii) Industrial Demineralized Water Plants.

# C) Filtration Systems

Side stream filters is very essential system for smooth operation and performance of cooling tower and heat exchangers. Side stream filter remove atmospheric impurities like dust, particles, suspended solids and reduce fouling and biological growth help to control the issue. Paleo Crystal Offer Multigrade Filter, Dual Media Filter, Activated Carbon Filter in MSEP / FRP material for removal of suspended Solid, Color & Odor.













#### AIR POLLUTION CONTROL SYSTEM

Air pollution cause diseases, allergies or death of humans; it may also cause harm to other living organisms such as animals and food crops, and may damage the natural or built environment. Paleo Crystal is engaged in manufacturing and supply of air pollution control equipment.



### 1) Wet Scrubbers System

Wet scrubbers are generally the most appropriate air pollution control device for collecting both particulate and gas in a single system.

Paleo Crystal offers a variety of wet scrubber systems specifically designed for your process application. Many important operating variables are considered when evaluating the size and type of scrubber for any specific application, and your deadline is always a factor in our responsiveness.



# 2) Cyclone & Multicyclone System

Cyclone Systems are generally used to roughly remove larger pieces of particulate matter. This prevents more fine filtration methods from having to deal with large, more abrasive particles later one. As well, several cyclone separators can operate in parallel, and when this is set up the system is known as a multicyclone.

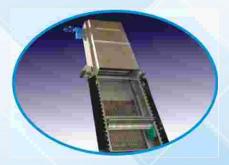
Paleo Crystal customizes this system based in client requirement and for even product recovery system.





# **WATER & WASTEWATER TREATMENT EQUIPMENT & CHEMICALS**

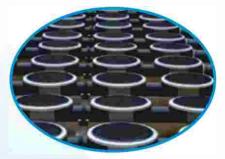
Paleo Crystals holds a very experience knowledge in supply of all types of water & wastewater treatment Equipments. Some of them are featured below:



All types of Mechanical & Manual Screening Equipment



All types of Air Blowers & Compressor System



All types of Disc, tubular fine bubble diffusers



All types of Sludge dewatering centrifuges



Lamella Clarifiers & Tube Settlers



Plate & Frame Filter Press



Chemical



MBBR / FAB Media



Filter Media

Paleo Crystal having a wide experience in wastewater treatment operation and maintenance understands that chemicals are the key for any wastewater treatment plant. Based on our expert advice Paleo crystals supplies the appropriate chemicals such as coagulants, flocculants, antiscalents, polymers, defoamers, heavy metal precipitants, sludge conditioners, swimming pool chemicals and many more for all type of wastewater/water treatment plants.





Oil Skimmer



**Electromagnetic Flow Meter** 



Ozonators



Carbon & Sand Filter



**Activated Carbon** 



Resins



**RO** Membrane



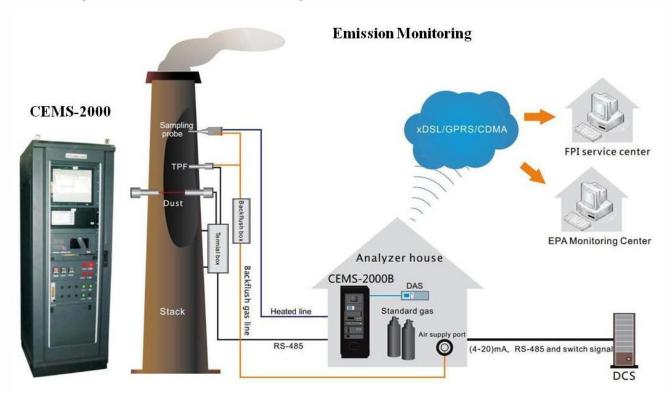
Softener



Anti Sealant Chemicals & Coagulant and flocculent



# CONTINUOUS EMISSION MONITORING SYSTEM (SOX / NOX / SPM) (AS PER CPCB / SPCB GUIDELINES)



# **Special features of CEMS:**

Microprocessor based electronics.

Alarms for Low & High.

Specific sensor as per the measuring gas, range & application.

Sample conditioning system offered, as per the application.

Complete automatic operation.

Self diagnostic check facility.

The dust guard sereis operate on the principle of Tribo-electric charge transfer.

Dust guard is most suitable for use in low humidity gas streams with reasonably constant flows.

#### **SPECIAL FEATURES:**

Quick & easy single point installation with no moving parts.

Can be calibrated to show levels in mg/m3.





# ONLINE CONTINUOUS EFFLUENT MONITORING SYSTEM

(AS PER CPCB / SPCB GUIDELINES)

#### ORGANIC POLLUTANT MONITOR

The unit can be used as an organic pollutant monitor at drainage system for determining compliance with monitoring regulations, for monitoring quality of water measuring levels of organic matter at water supply intakes, and as an organic monitor on process lines (phenol meter).

#### **Measurement Items:**

UV absorbance, VIS absorbance, Converted effluent level, Converted TURB level.

#### **Principle:**

2 light path 2 wavelength cell length modulation Continuous measurement with low maintenance.

Sensor that makes full use of Rotary Cell Length Modulation

Zero drift correction is performed in every cycle of measurement. This correction can eliminate the effect of any interference on cells.





Cell length modulation provide reading from multiple measurements, making available results from various cell length. This allows the single device make measurements on a land range of concentrations from low as 0 to 0.1 Abs, up to 0 to 5 A.

Easy to use control panel. Automatic data recording



#### WASTEWATER MANAGEMENT

Paleo Crystal Wastewater Management group, our wholly owned water resource systems construction, management, and operations subsidiary, has performed routine maintenance activities at the number of wastewater, water treatment and recycling systems including repair, rehabilitation, and replacement of pumps, gauges, sensors, chemical feed units, sand filters, piping, and other components.





Paleo Crystals also undertakes Annual Operation & Maintenance Contract for all types of Wastewater Treatment Systems

Paleo Crystal offers following Consultancy Services for Water & Wastewater Treatment Systems:

- 1) Environment Clearance
- 2) Feasibility Report
- Consent management as per guidelines of Pollution Control Board
- 4) Environment Audit & Management
- 5) Water & Wastewater Control Equipment Design & Services



# **Our Prestigious Clients**

























































and many more .....



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