

# **ECO-CHEM LABORATORIES**

towards safe environment...



" Environmentally Responsible in Providing Cost Effective

Drinking Water and Waste Water Management"

# About Us

Eco-Chem Laboratories Private Limited (Eco-Chem Lab) is a global leader in water purification technology for industrial and infrastructure market. Eco-Chem Lab focusing in water treatment plant, sewage treatment plant, Industrial effluent treatment plant, desalination plant, water re-cycle and reuse, zero liquid discharge, water treatment chemicals and allied products.

Eco-Chem Lab, established in the year 2004 specializing in Water Treatment and waste water treatment in the south India and today we have grown well and established our business activity in countries like Oman, Maldives, Sri Lanka and Bangladesh.

We are a certified ISO 9001:2008 company for the Scope of Design, Manufacturing, Engineering, Erection & Commissioning of Water and Wastewater Treatment Plants, RO Plants, Desalination Plants, Allied Spares, Chemicals and Servicing of Plants. We also provide excellent after sales support and services through O&M for our clientele solution.

# Why Eco Chem Lab?

#### **Commitment, Dedication, Solutions**

Eco-Chem Lab is committed in creating, utilizing and introducing the state of the art advanced technologies in order to help cleanse and restore the environment. Eco-Chem Lab has established a solid reputation with a proven track record of success for a wide range of Govt. industrial, commercial and institutions by providing solutions to their water and waste water treatment problems.

Eco-Chem Lab has been at the forefront of technology and expertise to improve the quality of water, a critical need to sustain quality of life. Eco-Chem Lab is dedicated in maintaining a strong, committed management team, supported by a staff of qualified engineers and specialists. Combined with the flexibility and readiness to incorporate and utilize changing and challenging environmental changes, we can adapt to circumstances that extend beyond cultural and social barriers.

Eco-Chem Lab has the solutions to improve and sustain our environment by using the most innovative and appropriate technologies. As water and waste water treatment engineers and specialists, Eco-Chem Lab has the experience, qualification and capabilities to design, manufacture, install, and maintaining our superior systems and processes...

# Why Eco Chem Lab?

Eco-Chem Lab is committed to meet customer satisfaction by supply of quality products, timely delivery and services through continual improvement of quality management system.





## **Industrial Waste Water Treatment & Products**

Eco Chem Laboratories Private Limited designs and manufactures various kind of products for various applications made of Mild Steel, Mild Steel Rubber Lining, Stainless Steel, FRP and PP.

## Products

- Pressure Sand Filter
- **Dual Media Filter**
- Multi Media Filter
- Side Stream Filter
- ♠ Iron Removal Filter
- Activated Carbon Filter
- Water Softener
- Bag Filter
- Micron Cartridge Filter
- Ultra Filtration
- Nano Filtration
- ♠ Sea Water Desalination Plant

- ♠ Brackish Water Reverse Osmosis Plant (R.O)
- Ozonator
- Demineralized Plants (DM Plants)
- Degasified Tower with storage tank
- Mixed Bed Plant
- Packaged D.M Plant
- ♠ Ejectors for Softener and D.M Plants
- **(a)** Chemical Dosing System
- Packaged Drinking Water Plant
- **Swimming Pools Filtration Plant**

## **Applications**

- Drinking Water
- Packaged Drinking Water
- Disinfection
- Boiler Feed Water
- High Purity Water
- Dialysis Water
- Pharma Grade Water
- Beverages Production
- Distilled Water
- Cooling Tower Feed Water
- Process Applications
- Breweries & Distilleries
- Desalination









# **Effluent Treatment & Recyling Plant**

Eco Chem Laboratories Private Limited designs and manufacture Effluent Treatment & Recycling Plant to treat effluent from various industries.

## **Products**

- **▲** Effluent Treatment Plants
- ♠ Electro Coagulation Systems
- ♠ Oil & Grease Removal System
- Flash Mixers
- Extended Aeration Systems
- Primary / Secondary Clarifiers
- Aerators
- **Lamella Clarifiers**
- ▲ Tube Settlers
- ♠ High Rate Solid Conduct Reactor (HRSCR)

- ▲ Sludge Handling Systems
- Filtration
- Multi Stage R.O Plants
- Multistage Evaporation System
- Energy Recovery System
- Centrifuges
- Filter Press
- MBR (Membrane Bio-Reactor) System
- ♦ SBR (Sequential Batch Reactor)

# Applications

- Waste to Portable water
- A Zero Discharge Plant
- ♠ COD, BOD Reduction

- Heavy Metals Precipitations
- Recycling Applications
- Recovery Applications











# **Sewage Treatment Plant**

Eco Chem Laboratories Private Limited expertise in the design of sewage treatment plant and recycling plants. The domestic sewage from Toilet, Bathroom, Kitchen, wash water can be biologically treated with the State of the Art Sewage Treatment Plants using various technologies using packaged and conventional types.

# Products

- Packaged Sewage Treatment Plants
- **\( \)** UASB Based Sewage Treatment Plants
- **ASP Based Sewage Treatment Plants**
- **▲** MBBR Based Sewage Treatment Plants

- Primary / Secondary Clarifiers
- Diffused / Floating / Surface Aerators
- Membrane Bio Reactors (MBR)
- Oil Skimmers

# **Applications**

- Industries
- Institutions
- Apartments
- Hospitals

- **Motels**
- Shopping Malls
- **BOD** Reduction
- Reuse









## **Technical Support & Services**

- On call services.
- ♠ Consultancy & survey of water and waste water management.
- On-site Technical Support via experienced Technical Specialists.
- On-site Training Programs and Seminars.
- Plant operation Training.
- Suggesting measures to enhance efficiency save on capital costs and reduce operating costs.
- Modifying plants to improve efficiency and handle changes in influent quality, capacity and treated quality.
- Plant up-gradation, refurbishing and retrofitting.
- **(a)** Chemical Dosage Optimization.
- Trouble shooting of water and waste water treatment plant problems and operation.
- Trouble shooting of softener and DM plant resin problems and operation.
- ♠ Trouble shooting of RO/UF/NF quality and quantity problems and operation.
- Preventive & Breakdown Maintenance.
- Operation and Maintenance Contracts.
- Annual Maintenance Contracts.
- ♠ Spares replacement of all equipments.

## Chemicals

- ♠ ECO TREAT Range of Reverse Osmosis Plant Chemicals.
- ♠ ECO TREAT Range of Ultra Filtration Plant Chemicals.
- ECO TREAT Range of Polyelectrolyte's.
- ♠ ECO TREAT Range of Broad Spectrum Biocides.
- ♠ ECO TREAT Range of Waste Water Treatment Chemicals.
- ♠ ECO TREAT Range of Cooling Water Treatment Chemicals.
- **ECO TREAT Range of Boiler Water Treatment Chemicals.**







## **Eco Chem Lab Speciality Chemicals**



ECO TREAT 1107 is a very effective antiscalant for waters with LSI upto +2.5, iron upto 1.5 ppm in reject, Silica upto 325 ppm, High SDI. It is also very effective in minimizing scaling in presence of foulants like calcium carbonate, sulfate salts of calcium, barium, strontium and magnesium, calcium fluoride, iron and silica.

## **Benefits and Features:**

- Effective silica scale inhibition.
- Highly effective in a wide range of feed water types and pH ranges.
- Cost effective.
- Effective iron fouling control by sequestration.
- Reduced frequency of membrane cleaning.
- Completely organic and biodegradable.
- Compatible with all leading RO membranes.

#### **ECO TREAT 1107**

#### RO Silica Antiscalant - Liquid

#### **Product Data Sheet**

#### Description:

Reverse Osmosis system maintenance generally consists of pre-filter cartridge changes, mixing and addition of chemicals, and periodic membrane cleaning. These processes are critical to membrane longevity and proper system operation.

ECO TREAT 1107 is a specific antiscalant for RO membrane feed water effective in controlling deposition of inorganic scales and higher levels of silica and metal oxides. It helps in control of silica scales and ideally suited for increasing membrane life and reduces unscheduled shutdowns for cleaning operations.

#### Directions for Use:

ECO TREAT 1107 is directly dosed to the RO feed water tank or feed water line (after pretreatment) between 3-7 ppm, subject to inlet water quality and parameters. (Caution: overdosing and under-dosing may cause fouling so please monitor the system regularly and confirm an optimum dosage)

#### **Product Specifications:**

Appearance	Pale Yellow to Amber
pH as supplied	2.5 ± 0.5
Specific Gravity @ 20°C	1.10 ± 0.05
Solubility	100%

#### Storage & Packing:

ECO TREAT 1107 is a stable chemical and is not expected to deteriorate significantly with time, provided it is stored as indicated. As a good industrial practice, it is however recommended that it should not be stored for periods longer than 2 years. ECO TREAT 1107 is available in 25/50 kgs HM-HDPE carboys.















































































#### **ECO-CHEM LABORATORIES PVT. LTD.**

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