

# KLEAN



**KLEAN ENVIRONMENTAL CONSULTANTS PVT. LTD.**

**KLEAN LABORATORIES & RESEARCH PVT. LTD.**

## **KLEAN ENVIRONMENTAL CONSULTANTS PVT. LTD., MUMBAI**

KLEAN Environmental Consultants Pvt. Ltd., (KECPL) was established 35 years ago to provide Environmental Engineering Services and have so far completed more than 400 projects. This includes Water Treatment, Sewage Treatment and Industrial Waste Treatment Plants. As per prevailing standards Zero Liquid Discharge plants are provided to meet industrial need.

Industries served include Textile, Pulp & Paper, Dyes and Chemicals, Fertilizer, Engineering, Pharmaceuticals, Hotels, Food & Beverage etc. This includes export projects in East African countries such as Kenya, Tanzania, Uganda & Democratic Republic of Congo. KECPL has an experienced team for Design, Execution and Commissioning of Environmental projects and have associates in all disciplines of Engineering including Structural, Mechanical, Electrical, Instrumentation, Automation, Chemical, Finance etc.

## **KLEAN LABORATORIES & RESEARCH PVT. LTD., PUNE**

Klean Laboratories and Research Pvt. Ltd., Pune (KLRPL) formerly known as Klean Laboratories, is in operation since 1978. It is recognized by Ministry of Environment, Forest and Climate Change (MoEFCC) as an "Environment Laboratory". Laboratory has various precision equipment including Atomic Absorption Spectrophotometer, Gas Chromatographs apart from other chemical and physical testing apparatus.

KLRPL also has following accreditations;

- ◆ NABL for Chemical and Microbiological testing,
- ◆ ISO 9001: 2008,
- ◆ EMS 14001: 2015 and
- ◆ OHSAS 18001: 2007.

KLRPL provides various services keeping in pace with Environment (Protection) Act 1986 and various rules published therein.

Major activities of the Laboratory includes following;

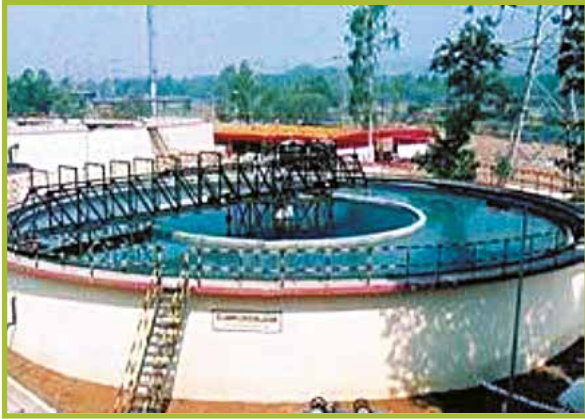
- ◆ Analysis of Water, Sewage and Industrial waste,
- ◆ Air emission measurement in Ambient air, Stacks and other sources.
- ◆ Soil analysis and Hazardous waste as per Hazardous waste Management 2006.
- ◆ Pilot plant studies
- ◆ Operation and Maintenance services for treatment plants.

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## SERVICES OFFERED



### A. WATER SUPPLY and TREATMENT

- ◆ Design of Intake works.
- ◆ Water treatment plant designs for community or industry.
- ◆ City water supply and distribution network analysis.
- ◆ Investigate networks for leak detection and pressures.

### B. SEWAGE COLLECTION AND TREATMENT

- ◆ Prepare comprehensive sewerage scheme based on CPHEO manual.
- ◆ Prepare sewerage scheme including design of various mains, sub-mains, laterals, pumping stations and appurtenance.
- ◆ Design of sewage treatment plant based on latest Technology and Techno-Economic solution.
- ◆ Detailed engineering of the project and assistance in commissioning.
- ◆ Study existing sewerage scheme and suggest modifications/ rectifications.

### C. EFFLUENT TREATMENT & REUSE PLANTS

- ◆ Analysis and treatability studies for the industrial effluents to determine optimum treatment.
- ◆ Design of waste treatment plant to meet State Pollution Control Board's standards.
- ◆ Design of waste treatment plant for process reuse (ZLD).
- ◆ Prepare budget estimates for the project.
- ◆ Provide detailed engineering services like,
  - a. Structural drawings & designs,
  - b. Site selection
  - c. Detailed drawings and designs,
  - d. Equipment specifications, Vendor selection and inspection,
  - e. Commissioning supervision.

### D. LABORATORY SERVICES

- ◆ Water & Waste water analysis conforming "Standard Methods" or BIS
- ◆ Pilot plant studies
- ◆ Air emission monitoring
- ◆ Solids & Hazardous waste management conforming to Environment Rules 2004.
- ◆ Environmental Impact Assessment (EIA) and Environmental Management Study (EMS) for project.
- ◆ Operation & Maintenance of Water, Sewage and Industrial Waste Treatment plants

## LIST OF SOME MAJOR PROJECTS

KLEAN

### A. WATER TREATMENT PLANT

- ◆ 450 MLD Municipal Corporation of New Delhi (North Shahadra)
- ◆ 150 MLD Kalyan Dombivli Water Treatment Plant
- ◆ 20 MLD M/s. A.G.C.C.LTD., Assam
- ◆ 20 MLD Singrauli Water Supply Scheme
- ◆ 5 MLD Canacona Water Treatment Plant, Government Of Goa,
- ◆ 3 MLD Tata Iron & Steel Co. Ltd., Jamshedpur
- ◆ 5 MLD Godhra Water Treatment Plant, Gujarat
- ◆ 1 MLD Bombay Suburban Electric Supply Co. Ltd., Dahanu
- ◆ 3 MLD M/s. J N Medical Colledge , Belgaum
- ◆ 1 MLD M/s. Jaysynth Dye Chem. LTD., Patalganga
- ◆ M/s. Zenith Steel Pipes Industries Ltd., Khopoli
- ◆ M/s. Indian Oxygen Ltd., Madras
- ◆ M/s. C & M Hatcheries Pvt. Ltd. Nashik



### B. SEWAGE TREATMENT PLANTS

- ◆ 1000 m<sup>3</sup>/d, Indian Telephone Industries Ltd., Bangalore ("A" Area)
- ◆ 1000 m<sup>3</sup>/d, Indian Telephone Industries Ltd., Bangalore (B area)
- ◆ 1000 m<sup>3</sup>/d Bombay Suburban Electric Supply Co. Ltd., Dahanu.
- ◆ 2000 m<sup>3</sup>/d Ammunition Factory, Kirkee, Pune.
- ◆ 600 m<sup>3</sup>/d General Motors Ltd. Nairobi, Kenya.
- ◆ 600 m<sup>3</sup>/d The Willingdon Sports Club, Mumbai
- ◆ Mormugao Port Trust, Goa
- ◆ Cummins (I) Ltd., Pune.
- ◆ Associated Bearing Co. Ltd., Pune
- ◆ Sandvik Asia Ltd., Pune
- ◆ KSB Pumps Ltd., Pune.
- ◆ Spicer India Ltd., Dharwad, Karnataka
- ◆ MICO, Nashik.
- ◆ Indian Card Clothing Co. Ltd., Pune
- ◆ Vinati Organics Limited, Lote Parshuram
- ◆ Vinati Organics Limited, Mahad
- ◆ Paranjape Autocast, Satara
- ◆ Paranjape Metal shapers, Shirwal.
- ◆ Harita Seating Systems, Pune
- ◆ Harp Constructions, Kenya.

### TECHNOLOGY USED

#### Biological Treatment

- ◆ Anaerobic (Upflow Anaerobic Sludge Blanket Reactor (UASB), Natural systems.
- ◆ Aerobic treatment based on Activated Sludge Process(Extended Aeration, Moving bed bio reactor (MBBR), Membrane bio reactor (MBR), Sequential batch reactor(SBR) etc.
- ◆ Tertiary Treatment comprising,
  - a. Pressure filter.
  - b. Activated Carbon Filter
  - c. Ultra-filtration System etc.
- ◆ For Reuse purpose  
Reverse Osmosis system,  
Multi Effect Evaporator.

## C. INDUSTRIAL WASTE TREATMENT PLANTS

### Engineering Industry



- 1 Alfa Laval (I) Ltd.
- 2 Associated Bearing Co. Ltd.
- 3 Atlas Copco (I) Ltd., Dapodi
- 4 Bharat Bijlee
- 5 BRT Limited
- 6 Cummins India Ltd.
- 7 Gabriel India Ltd
- 8 Indian Card Clothing Co.Ltd.
- 9 Kider (I) Pvt. Ltd.
- 10 Kirloskar Oil Engines Ltd
- 11 Mahindra Hinoday
- 12 Pune Pressings
- 13 PMT Machines Tools Automatics Pvt. Ltd.
- 14 Sandvik Asia Ltd.
- 15 Spicer India Ltd, Satara
- 16 Tata Cummins Ltd.
- 17 Tata Engineering & Locomotive Co.Ltd.
- 18 Tractor Engineers Ltd, Mhape
- 19 Weir BDK , Dharwad
- 20 Spicer India Ltd.



### Automobiles

- 1 Automobile Corporation of Goa Ltd., Honda
- 2 General Motors Ltd, Nairobi.
- 3 Hindustan Motors, Pithampur
- 4 John Deere (I) Ltd., Loni Kalbhor
- 5 John Deere (I) Ltd., Sanaswadi.
- 6 Tata Engineering & Locomotive Co. Ltd., Pune
- 7 Visteon Automotive systems (I) Pvt. Ltd., Pune
- 8 Tractor Engineers Ltd., Navi Mumbai

### Textile Industry

- 1 Parvathi Mills, Quilon, Kerala
- 2 Banswara Textiles, Rajasthan
- 3 Aloka Exports, Navi Mumbai
- 4 Bombay Dyeing Industries, Lower Parel
- 5 Dicitex Furnishings Pvt. Ltd., Tarapur
- 6 India United Mills No.6, Mumbai



- 7 Mudra Fashions, Tarapur
- 8 Kamadgiri Fashion, Navi Mumbai
- 9 Karmayogi Dyeing, Navi Mumbai
- 10 Model Mills, Nagpur
- 11 Rapid Machining Technologies Pvt. Ltd., Vapi
- 12 Siyaram Silk Mills Ltd (Balkrishna Textiles), Tarapur
- 13 Empire Dyeing, Mumbai
- 14 D'décor Processors, Tarapur
- 15 Décor Exports (G7-1), Tarapur
- 16 Mandhana Industries Ltd. (C-3), Tarapur
- 17 Siyaram Silk Mills Ltd. (G1/1), Tarapur

## Pharmaceuticals Industry

- 1 Associated Capsules Pvt. Ltd., Tarapur
- 2 Charak Pharma Pvt. Ltd., Silvasa
- 3 Chemopharma Laboratories Ltd.,
- 4 Duphar Interfran Ltd., Thane
- 5 Elder Pharmaceuticals Pvt. Ltd., Navi Mumbai
- 6 German Remedies Ltd., Goa
- 7 Indoco Remedies Ltd., Goa
- 8 Johnson & Johnson Ltd., Mumbai
- 9 Lucid Colloids Ltd., Aurangabad
- 10 Unisearch, Goa
- 11 N R Jet Pharmaceuticals Ltd., Mumbai
- 12 Ranbaxy Laboraotires Ltd., Goa
- 13 Ranbaxy Laboraotires Ltd., Jejuri.
- 14 Roussel Pharmaceuticals Ltd., Navi Mumbai
- 15 Sun Pharmaceutical Industries Ltd., Ahmednagar
- 16 Unichem Laboratories Ltd., Roha

## Food & Dairy

- 1 AJE Fruit Processing, Patalganga
- 2 American Dry Fruits Ltd., Sinnar
- 3 Bhawari Starch Ltd., Islampur
- 4 Bombay Breweries & Bottling Ltd., Taloja
- 5 Capital Foods Ltd., Nashik
- 6 Enkay Texofoods Ltd., Vapi
- 7 Gadre Marine Export, Ratnagiri
- 8 Hindustan Breweries and Bottling Unit, Thane
- 9 Kenya Tea Development Authority,(KTDA) 6 units, Kenya



- 10 MAFCO Ltd., Aurangabad (Slaughter House ETP).
- 15 Maharashtra Agro-Industrial Dev. Corpn., Rasayani.
- 16 Maize Products, Ahmedabad.
- 17 P. T. Rimba Subur Sejahtera Co., Indonesia.
- 18 Taiyo Lucid (P) Ltd., Jodhpur.
- 19 Tantia Agro-chem Industries, Kolkata.
- 20 Tetrapack India Pvt. Ltd., Chakan.



#### Dyes & Chemicals

- 1 Schenectady Chemicals (I) Ltd., Chiplun
- 2 Berger Becker Coatings Pvt. Ltd., Goa.
- 3 Diamond Shamrock (India) Ltd., Ratnagiri
- 4 Engineering Projects India Ltd. (Ammunition factory), Pune
- 5 Garodia Chemicals (P) Ltd., Patalganga
- 6 Henkel Chemicals (I) Ltd., Ratnagiri
- 7 Indian Dyestuff Industries Ltd., Kalyan
- 8 Indian Dyestuff Industries Ltd., Tarapur
- 9 Jaysynth Dyechem Ltd., Navi Mumbai
- 10 Lubrizol India Pvt. Ltd., Taloja, Dist. Raigad
- 11 Metox Fine Chemicals (P) Ltd., Pune
- 12 Nirlon Synthetics Fibres & Chemicals Ltd., Mumbai
- 13 S M Zschimmer & Schwarz Chemicals Ltd., Pune
- 14 Satyadev Chemicals Ltd., Baroda
- 15 Schenectady Specialities Asia Ltd., Pali
- 15 Sunshield Chemicals, Pali
- 16 Western India Erectors Ltd., Roha
- 17 Colgate Palmolive India Ltd., Mumbai
- 18 Siddharth Colourchem Pvt. Ltd., Mumbai
- 19 Sajjan Chemicals Pvt. Ltd., Kota
- 20 Apar Pvt. Ltd., Mumbai



#### Metal & Materials

- 1 Ark Industries, Pune
- 2 Atlas Copco (India) Ltd., Dapodi, Pune
- 3 Crane Process Flow Technologies Ltd., Satara
- 4 F. C. I., Sindri
- 5 Floatglass India Ltd., Ratnagiri.
- 6 Hyderabad Asbestos Cement Products Ltd., Hyderabad
- 7 Indian Seamless Steels and Alloys, Pune
- 8 Indian Telephone Industries (Electro Plating), Bengaluru.

- 9 Mahindra Hinoday, Pune
- 10 Mukand Ltd., Kurla, Mumbai
- 11 Spica Elastics Ltd., Hadapsar, Pune
- 12 Taparia Tools Ltd., Nashik
- 13 Tata Iron & Steel Co.Ltd., Pune
- 14 Zenith Steel Pipes & Industries Ltd., Khopoli.
- 15 Ahmedabad Advanced Mills Ltd., Navsari.
- 16 BALCO Emulsion Waste Treatment Plant, Korba
- 17 Bhilai Steel Plant (Water Reuse), Bhilai.

## Sugar Mills

- 1 Ajinkyatara Sahakari Sakhar Karkhana Ltd., Satara
- 2 Alam Group Sugar Mills, Uganda
- 3 Butali Sugar Mills, Kenya.
- 4 Kakira Sugar Mills, Uganda.
- 5 Kumbhi-Kasari Sahakari Sakhar Karkhana Ltd., Satara.
- 6 Motilal Padampat Udyog Ltd., U.P.
- 7 Sarwati Sugar Mills, U.P.
- 8 Shirpur Sahakari Sakhar Karkhana Ltd., Sangli
- 9 Transmara Sugar Mills, Kenya.
- 10 Warna Sahakari Sakhar Karkhana Ltd., Warnanagar

## Oil Mills

- 1 Special Oil Refinery, Mumbai
- 2 Kamani Oil Industries Ltd., Mumbai
- 3 Jai Hind Oil Mills Co. Ltd., Mumbai
- 4 Apar Pvt. Ltd. (Special Oil Refinery), Mumbai
- 5 Marsavco Oil Company, Congo
- 6 Bunda Oil Mill, Kenya
- 7 Kapa Oil Mill, Nairobi, Kenya

## Pulp & Paper Mills

- 1 Aurangabad Paper Mills Ltd., Paithan.
- 2 Balkrishna Industries Ltd., Kalyan.
- 3 Orient Paper Mills Ltd., Amlai.
- 4 Orient Press Ltd., Tarapur.
- 5 Pudumjee Pulp & Paper Mills Ltd., Chinchwad, Pune.
- 6 Reliance Cellulose Products Ltd., Hyderabad.
- 7 Shree Raj Rajeshwari Pap-Chem Industries Ltd., Sinnar.
- 8 Warna Sahakari Sakhar Karkhana Ltd., Warnanagar
- 9 West Coast Paper Mills Ltd., Dandeli





## KLEAN LABORATORIES & RESEARCH PVT. LTD. PUNE



Klean Laboratories & Research Pvt. Ltd. was established in the year 1977 to provide Environmental Services and Laboratory support. It also helps in the design of Water, Effluent, Air and Solid wastes treatment plants.

### ACCREDITATIONS

- ◆ Ministry of Environment, Forests and Climate Control (MOEFCC), New Delhi.
- ◆ National Accreditation Board for Testing and Calibration Laboratories ( NABL )
- ◆ ISO 9001: 2008
- ◆ ISO 14001: 2015
- ◆ OHSAS 18001: 2007

### SERVICES OFFERED

#### 1 ANALYSIS AND MONITORING OF:

- ◆ Water & Waste water samples
- ◆ Hazardous Wastes
- ◆ Stack, ambient & work zone sampling analysis for air pollution studies
- ◆ Noise Levels
- ◆ Soil Samples
- ◆ Microbiological studies of water.
- ◆ Ventilation & Light Illumination Survey

#### 2 SOLID AND HAZADOUS WASTE MANAGEMENT

- ◆ To identify suitable site for disposal of Organic/In-organic sludge



#### 3 ENVIRONMENTAL STUDIES

- ◆ Environmental Impact Assessment Study(EIA)
- ◆ Environmental Due Diligence Report
- ◆ Various Environmental Services to Industry as per Environmental Act 1986
- ◆ Environmental Clearance
- ◆ Central Ground Water Authority Approval

#### 4 OTHER SERVICES

- ◆ Pilot Plant Studies
- ◆ Operation & Maintenance of Water, Sewage and Waste Water Treatment Plant
- ◆ Setting up of Environmental Laboratories at the treatment plants
- ◆ Assistance with State & Central Pollution Control Boards on various issues
- ◆ Environmental Surveillance Reports / Environmental Statements
- ◆ Training program in Operation and maintenance of ETP & STP
- ◆ Health & Hygiene studies

## ENVIRONMENTAL IMPACT ASSESSMENT STUDIES

FOR MINISTRY OF ENVIRONMENT , FOREST AND CLIMATE CHANGE (MOEFCC) NEW DELHI

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- ◆ Hindustan Antibiotics Ltd., Pimpri, Pune (For G-Max Project)
- ◆ Indian Oil Limited, Mumbai (Virtual Jetty at Kandla)
- ◆ Garodia Chemicals Ltd., Patalganga (Dyes Intermediate)
- ◆ Knoll Pharmaceuticals Ltd., Ahmednagar
- ◆ Teksid Kalyani Iron Foundry Ltd., Goa
- ◆ Govt. of Maharashtra (Mumbai- Nashik Expressway)
- ◆ Pudumjee Pulp & Paper Mills Ltd., Pune
- ◆ Suman Phosphates & Chemicals, Madhya Pradesh
- ◆ M/s Lakeland Chemicals Pvt. Ltd., Patalganga
- ◆ Agro Phos India Limited

FOR DEPARTMENT OF ENVIRONMENT, MAHARASHTRA

- ◆ Co-Nick Alloys (India) Pvt. Ltd., Taloja
- ◆ Baker Oil Treating (I) Pvt. Ltd., MIDC, Jejuri, Pune
- ◆ Performance Polymers (I) Pvt. Ltd., Pune
- ◆ United Van Der Horst Ltd., MIDC Taloja
- ◆ Bombay Breweries Ltd., New Bombay
- ◆ Alfa Laval (I) Ltd., New Bombay
- ◆ Jaysynth Dye Chem Ltd., Thane
- ◆ S M Dye Chem Ltd., Pune
- ◆ Chemo-Pharma Laboratories, Kalyan
- ◆ National Wire Heald Works Pvt. Ltd., Sinnar, Nashik
- ◆ Exemplar Engineering Pvt. Ltd., Sinnar, Nashik.
- ◆ Shree Raj Rajeshwari Pap Chem Industries (P) Ltd, Nashik
- ◆ Mazda Colours Limited, Navi Mumbai
- ◆ Sarex Overseas, Tarapur
- ◆ John Deere (I) Ltd., Sanaswadi

ENVIRONMENTAL DUE DILIGENCE REPORT

- ◆ Schenectady Inc., Schenectady, New York. (Study of Sunshield Organics Ltd., Pali, Tal. Sudhagad, Dist. Raigad)
- ◆ BASF India Ltd., Navi Mumbai (Study of JBA Printing Inks Ltd., Bhandup, Mumbai)
- ◆ SILCO S.R.L. Italy (Study of Scooters (India) Ltd., Lucknow U.P.)
- ◆ Stallion Shocks, Gurgaon
- ◆ M/s Ascendas India Pvt. Ltd., (Hazardous Soil Remediation Study),



MAJOR CLIENTS



Mercedes-Benz







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