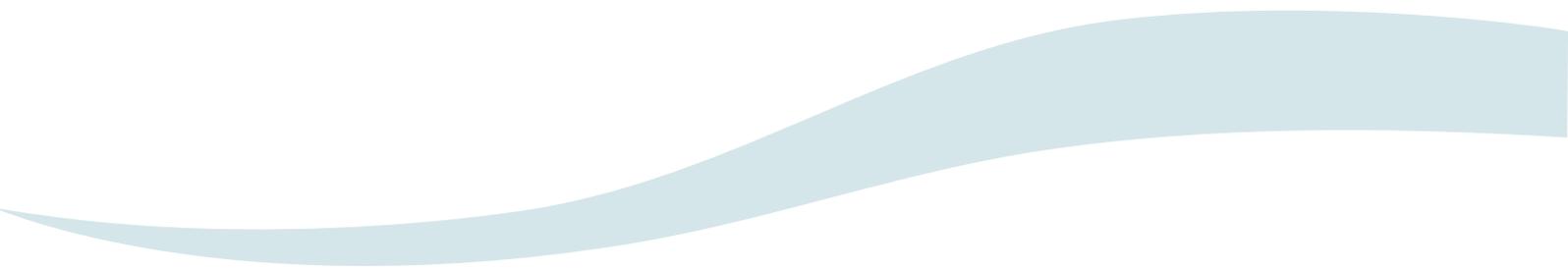




Exploring Water Possibilities...



*Water is the hub of life, the driver of nature. It is a moving, living part of the earth itself. Water is the key element that differentiates Earth from other planets and makes life possible. Water impacts every part of our lives.*

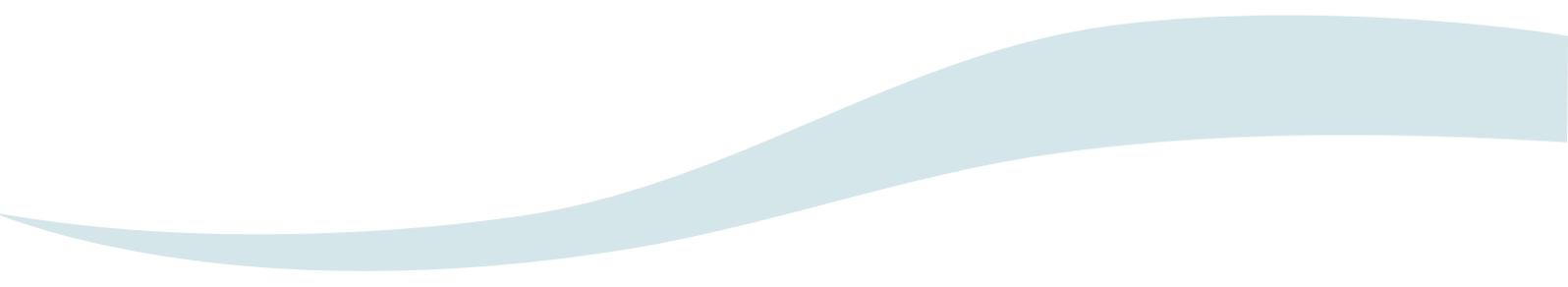
For us, at Indwa Technologies Pvt. Ltd. (Indwa) - an integrated water resources management company, water is a way of life. Our business is driven by the commitment to provide organisations and facilities with cost-effective water, wastewater and environmental management solutions.

We strongly advocate and promote environmental awareness. Our fully equipped team builds unique customised 'zero discharge' solutions along with our clients' regular water related needs. To achieve which, we deploy our unparalleled expertise and extensive industry experience. Focused on technology innovation and top of the line service, our versatile solutions including 100% recycle technologies provide establishments with substantial cost reductions and safety improvements for all their water systems.

### **Idealising 'Concept to Commissioning'**

No project is too big for a capable team - and capable we are. Our 'concept to commissioning' ideology illustrates our wide-ranging expertise in the area. Team Indwa's project managers and engineers act as a virtual extension of the client's own resources to deliver total water management solutions. Regardless of the project's size and complexity, we offer a wide gamut of water management services and tailor customised solutions to client's specific requirements. Team Indwa analyses the project, develops initial ideas and ensures fully operational conclusions.

Some of the biggest names have approved and endorsed us, which is no mean feat. The best of technologies, products & services, and above all, human resources are at hand for new turnkey projects. Our talent resource zone is fully geared to suggest, guide, improve, supply, install and run the complete water management solutions for clients.



## The Company

Indwa is promoted by an inspired set of NRIs driven by the desire to contribute to the community by bringing the latest systems and technology in water and wastewater management to India. Led by a multidisciplinary team of highly qualified, experienced, dedicated engineers and technocrats, we are right on our course to becoming the leading market player in integrated water resources management at the national level in five years' time. A privately owned company, we are self-reliant in terms of infrastructure and finances to achieve our planned growth and targets.

At Indwa, we unquestioningly live up to our status of an 'environment conscious company' by collaborating with facility owners to develop the competence, efficiency, and safety features of all water systems. Our rapid progress into the realms of complete domination of the industry and the precious tag of being the 'leading Water and Wastewater Management Company in Hyderabad' is evidence of our relentless growth curve since our inception in 2005.

## Vision

To be recognized as a trusted company providing single window service in the field of water, wastewater and environmental management

To direct all our experience, energy and expertise to achieve the goal of "zero discharge" through state-of-the-art 'zero wastage' solutions

Keep abreast with the latest technologies and systems in order to achieve 100% 'water recycle' and provide customers with products and services of the highest quality

To create a working environment and culture resulting in a long lasting and mutually beneficial relationship with our customers, employees, eco-partners and shareholders

## Mission

To promote water recycling and become India's leading single window service provider for water, wastewater and environmental management. We will achieve this goal through sustainable growth, by offering unique value adding initiatives for customers, investors, employees and partners, and by strictly adhering to the ethic of providing the best technical assistance and top quality products & services.

## The People

Indwa brings together a team of extensively experienced personnel who have been involved in turnkey projects of massive proportions. In today's dynamic business environment, one thing that really stands out in any organization is the depth of management talent and the visionary focus demonstrated by the people at the helm. Indwa boasts of a best-in-class management team with rich and varied experience and expertise. Each, a leader and achiever in his/her own right, contributes effectively to the making of an organization that is well on its way to market leadership.

The cornerstone of the Company's effort is the ongoing war with processes that cause environmental pollution. The team is an inspired lot that endeavours to make a difference by attacking pollution head-on and controlling the damage to the best of our capabilities.

Name	Designation	Qualification	Expertise	Experience
Sreekanth Katta	Director	MCA	Operations	15 years
Venkat R. Puranam	Head-Technical & Business Development	M. Tech., Env. Engg.	Water & Wastewater Treatment	25 years
Syamalesh Sanyal	Advisor	ME - PH	Water Treatment & Project Management	30 years
Dr. K.V.G.K. Rao	Head – Technical Services	M.Tech. PhD.	Water, Environment & Soil Conservation	30 years
Dr. P.V.R. Subramanyam	Advisor	D.Sc	Wastewater Treatment & Env. Aspects	35 years
Dr. K. Agnihotrudu	Advisor	PhD	Geotechnical Aspects	25 years
A. Ramireddy	Advisor	M.Sc	Water Treatment	35 years

**Mr. Venkat R. Puranam, Head - Technical and Business Development**

– Holds a Masters degree in Environmental Engineering from IIT Kanpur and has more than 30 years of experience and 150 projects in water and wastewater treatment to his credit. His strengths lie in conceptualization, design, detailed engineering, marketing and commissioning of WTPs; ETPs, STPs & CETPs. He has held several senior positions including that of Chief - Consultancy Services at Environment Protection Training & Research Institute (EPTRI), Director (Technical) at Ramky Engineers Pvt. Ltd., and Director (Technical) at Envirad Projects Pvt. Ltd. He has also been extensively involved in the projects for Environmental Impact Assessments (EIA) and Environmental Management Plans (EMP). He was also a key member of the team, which developed the "WATER VISION" document for the Govt. of AP.

**Mr. Syameles Sanyal, Advisor - Water Treatment**

– He has over 30 years of international experience in the fields of water treatment and project management. He has held key positions in companies such as Gannon Dunkerly, Degremont, ACME and others. He has designed and executed major water treatment works all over the Country. He has travelled extensively and has several publications to his credit.

**Dr. KVGK Rao, Head - Technical Services**

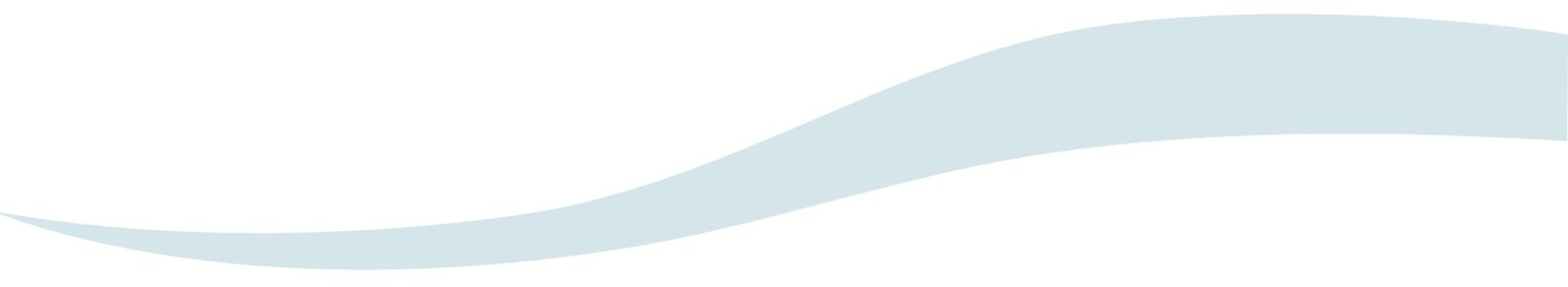
– A PhD in Civil Engineering from IIT Kharagpur with over 30 years of experience in agriculture water management, he brings to board specialized expertise in on-farm irrigation and drainage, reclamation of waterlogged saline soils, participatory irrigation management, water vision & policy development, and capacity building in the water sector. As Member Secretary, AP Water Vision Task Force, he was the coordinator of the team that developed AP Water Vision. He also coordinated the departmental actions for integrated water resources management. His earlier assignments were Rajasthan Agriculture Drainage Project (under Cida) as Research Manager, International project at Central Soil Salinity Research Institute, Karnal as Head and Project Manager and several others. He also has extensive experience in EIA studies for water resources projects. He has travelled extensively across the globe and has several publications in journals of repute.

**Dr. PVR Subramanyam, Advisor** – He has more than 35 years' experience in wastewater management and environmental aspects with major interests in i) Water Pollution Control ii) Wastewater Treatment iii) Hazardous Waste Management iv) Wastewater Utilization for Crop Irrigation and v) Biogas Production from Organic Wastes. Earlier he was Deputy Director at the National Environmental Engineering Research Institute (NEERI), Nagpur. He served as the Regional Coordinator for many International Programs dealing with 'Management of Toxic Chemicals and Hazardous Wastes' and participated in several international conferences. He is currently on the advisory panel of many organizations for wastewater treatment and disposal of hazardous chemicals/wastes.

**Dr. K Agnihotru, Advisor** – With over 20 years' experience in Exploration Geophysics related to the environmental sector, he is keenly focused on soil and water contamination, site selection for hazardous dump sites, hydrological and hydro-geological investigations, groundwater pollution, pathway of migration of pollutants etc.

**Mr. A Rami Reddy, Advisor** – He has more than 35 years' experience in water & wastewater treatment and recycling for agriculture and has been advising many industries on handling of water and wastewater treatment facilities. Earlier, he was in the pulp and paper industries and was also an advisor to major water treatment chemicals manufacturers.

Apart from the above key personnel, we have over 40 technical and secretarial staff. A blend of youthful exuberance and proven experience is what makes up Team Indwa. An enviable knowledge base and in-depth know-how compounded with an innovative approach and practical insight, ensure that Team Indwa is able to provide highly technologically viable solutions that are time and cost effective.

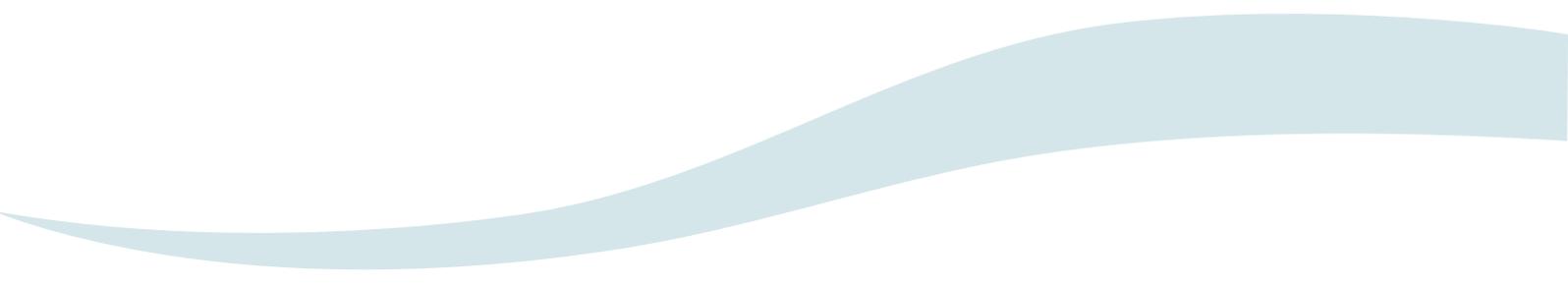


## The Quality & Infrastructure

Indwa has in-house laboratory facilities for analysis and testing of water, wastewater and environmental parameters. Indwa also has a well equipped workshop for fabrication and testing of its product range. Apart from these, Indwa has tie-ups with various organizations and individuals for providing expertise and specific services.

We endeavour to accomplish our quality objectives and sustained quality improvements through a proprietary set of practices and processes. The top-level management is leading the way in strictly adhering to the principle of "no compromise" in the quality of our products and services. This strong belief has stimulated in us, an insatiable hunger to bring solutions stemming out of top-drawer innovations to the water industry. The ISO 9001:2000 accreditation that we hold only adds value to our commitment.

In today's age of reuse and recycling, Water and Wastewater Management has gone a long way in helping businesses realize strategic business advantages. Indwa specialises in building and operating eco-friendly systems that will have a remarkable impact on the operating costs. Our ever-growing list of reputed clientele is testimony of our deep domain skills, growth, reliability and strength.



## Products & Services

Indwa provides a single window service to all issues related to integrated water resources management. Apart from the primary focus on water and wastewater treatment and management, we have forayed into agriculture water management with tremendous success.

### Projects

- Domestic and community drinking water systems including RO Softener plants
- Water treatment plants for townships and municipalities

### Waste water Treatment Plants including

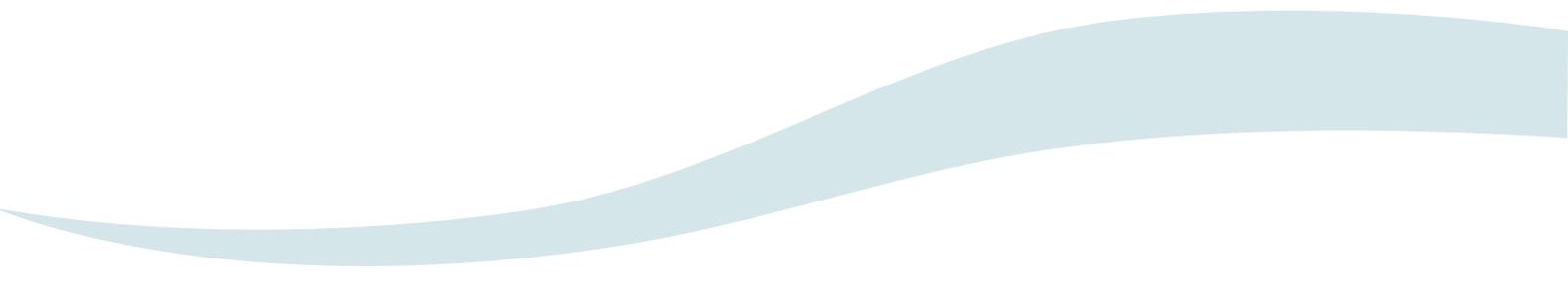
- Sewage treatment plants
- Effluent treatment plants
- Common Effluent Treatment Plants, all with state-of-the-art anaerobic (UASBR, UAF), aerobic(SAFF, Bio-tower, FAB, MBR, SBR) and other conventional technologies

### Industrial water treatment systems

- De-mineralization units (DM)
- Ultra Filtration units (UF)
- Nano Filtration units (NF)
- Pressure sand filter units (PSF/MGF)
- Activated carbon filter units (ACF)
- Softener units
- Heavy metal removal systems
- Bottled / Packaged drinking water systems and disinfection systems (UV, Ozonation)
- Turnkey projects based on state-of-art Ozone Generators from 1 grams/hr to 10 kg/hr capacities, for all air, water and waste water applications
- Industrial water treatment systems (DM, UF, NF, RO, PSF and ACF)
- Swimming pool water treatment & distribution systems
- Resource recovery and reuse, water conservation and wastewater recycling systems
- Solid and hazardous waste management
- Environmental management (EIA, audits, EMP, monitoring etc.)

Our full circle service methodology means we bring to board the option of a 360-degree approach - from concept to commissioning i.e., turnkey basis, and an a la carte approach i.e. per project basis. The concept to commissioning approach facilitates compact project management, reduced operational costs and swift communication, thereby contributing to faster and uncomplicated system set-ups.

## Services

- Integrated water resources planning and management for industries, industrial estates, lakes, agriculture etc.
  - Consultancy for water, wastewater and environmental management
  - Special consultancy team offering “Zero Discharge Solutions” for existing and upcoming industries
  - Sampling and testing of water and wastewater
  - Design and detailed engineering for water and wastewater systems including recycling and zero discharge systems
  - Turnkey projects for water and wastewater treatment and management
  - Solid and hazardous waste management
  - Troubleshooting and upgradation of existing systems (water and wastewater)
  - Annual contracts for operations and maintenance, spares and after sales service
  - Agriculture water management and reclamation of salt affected soils
- 

## The Clients

Indwa has an ever-expanding list of elite clientele spanning individuals, domestic and multinational corporates. Our scope of work stretches across independent houses, residential complexes, commercial establishments, industries and industrial parks, infrastructure development companies and international consultants etc.

## Industrial Parks & Government Institutions

### a) Common Effluent Treatment Plant for IE Nacharam and Mallapur, under APIIC, Hyderabad

IDA Nacharam and IDA Mallapur, amongst the earliest established Industrial Estates by APIIC, are home to several industries of heterogeneous nature. Indwa has been selected as the proponent for establishing its CETP on BOO (Build, Own, Operate) basis. The project is to be established in phases with the first phase catering to a capacity of 2 mld. The peak capacity of the CETP would be 8 mld. Cost of the project: Rs. 23.04 crores.

### b) MIDC Kurkumbh

Indwa was awarded this project based solely on its technical competence. The wastewater reaching the CETP is being generated by several chemical-based small and medium scale industrial units. The existing CETP was non-functional and needs to be upgraded to meet the quality standards. Indwa took up the challenging task of completing the project within a short span of 4 months.

### c) Apparel Export Park (AEP) under APIIC

The AEP houses several apparel units. M/s Indwa was, under nomination, awarded the project of implementing the Common Wastewater Treatment Plant with recycling facility. While Phase I was to be completed in 3 weeks, Phase II was allotted a time period of 3 months for completion. Indwa took up the challenge and completed the project within time. The CWWTP is being operated and maintained by Indwa. The treated wastewater is being reused for maintaining the green belt at the AEP. APIIC wants to duplicate this project at other industrial parks developed by them.

### d) NDMA (Nalgonda Drug Manufacturing Association)

Along with GTZ, NDMA short listed and awarded the prestigious project for conceptualizing CTF (Common Treatment Facility) for a cluster of 60 member units located in Nalgonda district near Hyderabad. The Project, prepared by Indwa (valued at Rs. 70 crores), aims at total waste management along with recycle and reuse.

**e) Municipal Corporation of Hyderabad**

Indwa was awarded the consultancy project for rehabilitation and restoration of Indira Park Lake. The work involved quantification and assessment of inflows to the lake, lake water quality, and developing an appropriate scheme for treatment of the wastewater. The final report provided encompasses detailed engineering drawings, cost estimates and technical specifications.

**f) DHV Water BV**

DHV Water BV was the lead company of the Technical Assistance team providing technical inputs for the ILTM (Integrated Lake Treatment and Management) under GHEP (Green Hyderabad Environment Programme) for HUDA (Hyderabad Urban Development Authority), with assistance from the Royal Netherlands Government. Indwa lent the services of its staff in the capacity of “Wastewater Treatment Expert” for providing technical and engineering inputs for over 12 lakes. Impressed with the quality of work, DHV Water BV has re-hired the services of Indwa for developing the detailed scheme including design, detailed engineering and cost estimates for treatment at two other lakes.

**g) International Water Management Institute (IWMI)**

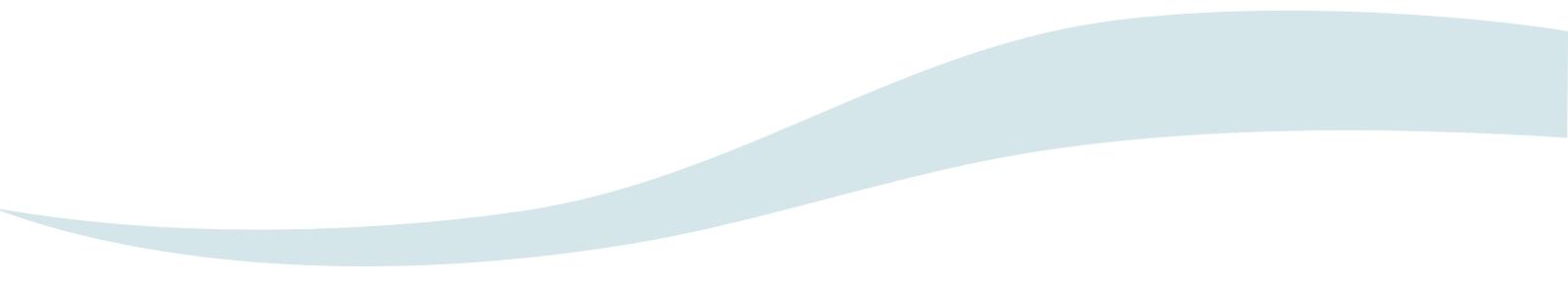
IWMI is an international organization involved with overall water management. Indwa has been selected by IWMI for Integrated Water Management Studies at Indira Gandhi Canal Area at Rajasthan and Polavaram Project in Andhra Pradesh.

**h) Environmental Management Cell at IDA Mallapur and Nacharam**

GTZ, ASEM is a company that provides technical and financial support under Indo-German collaboration for eco-friendly industrial estates. IDA Mallapur and Nacharam have been identified by GTZ as candidate sites for implementing this concept. The responsibility of relevant data collection and generation for environmental management has been entrusted to Indwa.

**i) CPWD (STP for CRPF campus, Chandrayangutta)**

In the face of stiff competition, Indwa bagged the project for executing 1 mld STP for CRPF campus by CPWD.



## Reputed Institutions

### a) National Institute of Technology, Warangal

M/s NIT's Environmental Engineering division chose Indwa for implementing the wastewater treatment and recycling project for its campus at Warangal. Indwa has guaranteed a system, that'll function during all conditions i.e. drastic flow variations, which will be encountered during the off periods of the Institute. The capacity of the wastewater treatment plant is 600 cum/day and by recycling the treated wastewater, the stress on raw water uptake shall reduce by over 500 cum/day.

### b) Wastewater Treatment and Recycle projects for prestigious schools and institutions

Indwa has successfully designed and implemented projects for wastewater treatment wherein the treated wastewater is being reused for various purposes like cooling water, gardening and flushing. Indwa has provided such plants for international schools and institutions including Oakridge International School, Srinidhi International School, Kennedy Global High School, and Sri Sai College of Dental Surgery.

## Cement Sector

### a) ACC Cements Kymore

ACC Cements Kymore awarded the project of wastewater treatment and recycling based on Indwa's experience in this field. Indwa completed the plant in a record 90 days' time, winning enthusiastic praise from the Client.

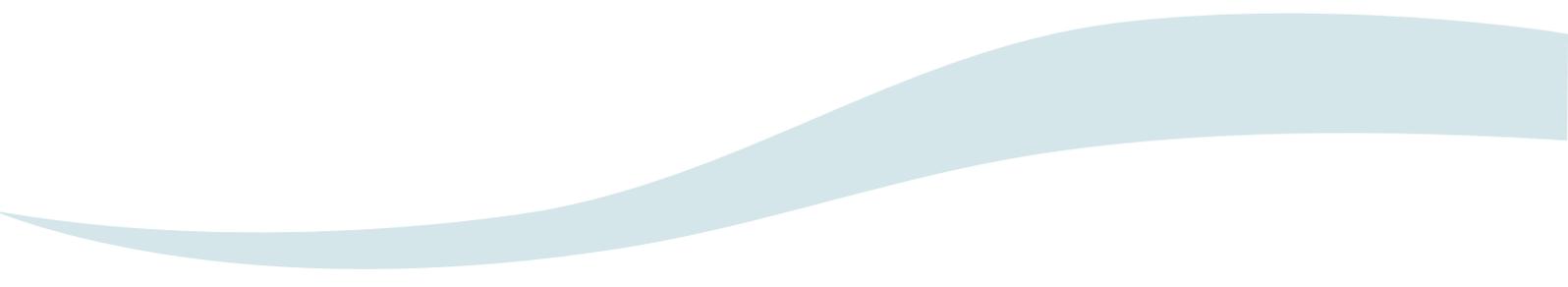
### b) JP Cements Rewa & Bela units

At both these units, Indwa provided tertiary treatment plants for recycling the treated sewage. The tertiary treatment plants have been provided with ozonation and the treated water is being reused for non-potable purposes.

## Bulk Drug Industries

### a) Matrix Laboratories Unit-8 Vizianagaram

Indwa has been awarded the project of establishing the ETP catering 350 m<sup>3</sup>/day. The wastewater is highly complex in nature and has to meet stringent discharge standards. Indwa bagged this project on its technical capabilities. Indwa has also been providing services for upgradation of ETPs at other Matrix group units.



#### **b) YM Drugs and Chemicals Ltd.**

For displaying commendable expertise in the design, supply, erection and commissioning of their raw water treatment plant, YM Drugs and Chemicals Ltd. again awarded projects of water treatment for their pharma needs, overall water management and water conservation, to Indwa. The most challenging of all projects was that of “Zero Discharge“ of wastewater from the unit. Indwa has successfully designed and implemented a pre-treatment plant followed by a 2-stage RO system to reduce the wastewater to less than 30% of the volume that eventually has to be disposed by forced evaporation system. The recovered water (70% of the wastewater) is being reused at the industry as raw water for various purposes. This is the first-of-its-kind plant provided for bulk drug and drug intermediate units.

### **Housing Projects**

a) Wastewater treatment and recycle projects: for prestigious infrastructure and housing projects

Indwa has to its credit, several projects of water and wastewater treatment and recycling of treated wastewater for several infrastructure and housing projects. Aparna Constructions, Prajay Engineers Syndicate Ltd., Konzept Ambience Pvt. Ltd., NK Leasing Pvt. Ltd., Vishal Projects Ltd. Are some of our appreciative clients.

### **Paper Mills**

a) Evaluation and Upgradation of ETP at M/s Cachar Paper Mills, Assam (A unit of Hindustan Paper Corporation): CPM, Assam, invited Indwa to formulate a plan to upgrade their existing facility.

#### **b) Saiyyed Paper Mills Ltd., Vapi, Gujarat:**

Saiyyed Paper Mills had increased their production capacity over the years resulting in an increase of their wastewater flow rate. The existing ETP established for the original capacity was upgraded by Indwa to cater to the increased capacity successfully with newer technology without any add-on. The cost of upgradation came to less than 40% of that of a new plant.



## Bio-energy

### a) Naturol Bio-Energy Ltd.

The ETP for this pioneering bioenergy plant was challenging as there existed no prior experience as regards wastewater characteristics and quantities. Members of NBL and Indwa together worked out the quantity and quality of wastewater that was expected to be generated and got the same confirmed from the international suppliers of the bio-diesel plant. Subsequently, Indwa bagged the order for the turnkey supply of the ETP against strong players with a long term standing in the market.

### 8) Others

### a) LSG Sky Chef

LSG Sky Chef caters to international airlines like KLM and Lufthansa and follows very stringent quality norms in accordance to the EU. To achieve the raw water standards for their usage, LSG awarded the project to Indwa. Within just 2 weeks Indwa provided a drinking water plant to LSG along with a hydro-pneumatic supply system that meets the most stringent international norms and specifications.

### b) L&T Ramboll Consulting Engineers Ltd.

An infrastructure consulting company, they awarded Indwa the project of developing a comprehensive design and basic engineering package for liquid and solid waste treatment and disposal for their proposed integrated leather complex at Nellore. Subsequently they awarded the work of developing a comprehensive design and basic engineering package for liquid and solid waste treatment and disposal for a proposed automobile ancillary park at Adityapur, Jharkhand.

Leading names including Matrix Laboratories Ltd., Indian Railways, AP Tourism, Gland Pharma, HBL Nife, East India Commercial Co. Ltd., Jain Housing Pvt. Ltd., and several reputed educational institutions, colleges and real estate developers have entrusted their projects to Indwa.

*Water is from where life begins. It is by which life is sustained. It is the vehicle that takes life forward. Mankind cannot hide from this fact.*

Indwa is all about safeguarding this precious resource, and making it work for you. Call us, to see how!

