

You see **Effluents...**



We see **Profits** for you

Pollution and increased demand have made good quality water scarce and expensive, both in terms of direct cost of water and the effect of unsuitable water on plant economics and product quality. Meanwhile, disposal norms are getting tighter and their enforcement stricter. Ion Exchange can help you to effectively and economically solve your water scarcity problems by conserving vast volumes of water and protecting the environment by reducing discharge ..... while generating substantial savings for you.

## Water Recycle... good for your bottom-line and good for the environment too

Our effluent recycle solutions are integrated to yield optimal benefit. For instance, recycle systems are combined with speciality water treatment chemical programmes that substantially reduce water discharge (for example, cooling tower blowdown); and state-of-the-art effluent treatment plants are integrated with zero liquid discharge processes. They are backed by comprehensive operation and maintenance services, for high performance continuity. Industries that have installed our effluent treatment, recycle and zero liquid discharge systems have gained an excellent payback on their investment through:

- Assured availability of water for process needs as well as low end uses.
- Less requirement of fresh water. Therefore, considerable savings in fresh water costs.



- Additional savings through recovery of valuable by-products for re-use in process.
- Compliance with pollution control regulations and a clean environment through reduced / zero effluent discharge.

## See how our customers have benefited

- A leading fertilizer company in North India has installed a recycling plant - design capacity 128 m<sup>3</sup>/h. Cooling tower blowdown and regenerant waste from the demineralization plant are recycled and reused in process.
- Several engineering component manufacturers have installed state-of-the-art membrane systems for recovering emulsified oil & water thereby recovering by-product, water & minimizing discharge.
- For a textile major, a 30 MLD sewage recycle plant & 2.4 MLD effluent recycle system have been installed as alternate sources of water.
- Leading automobile companies have installed effluent recycle & **zero liquid discharge plants** for total water & environment management as part of brown field & green field expansion project.

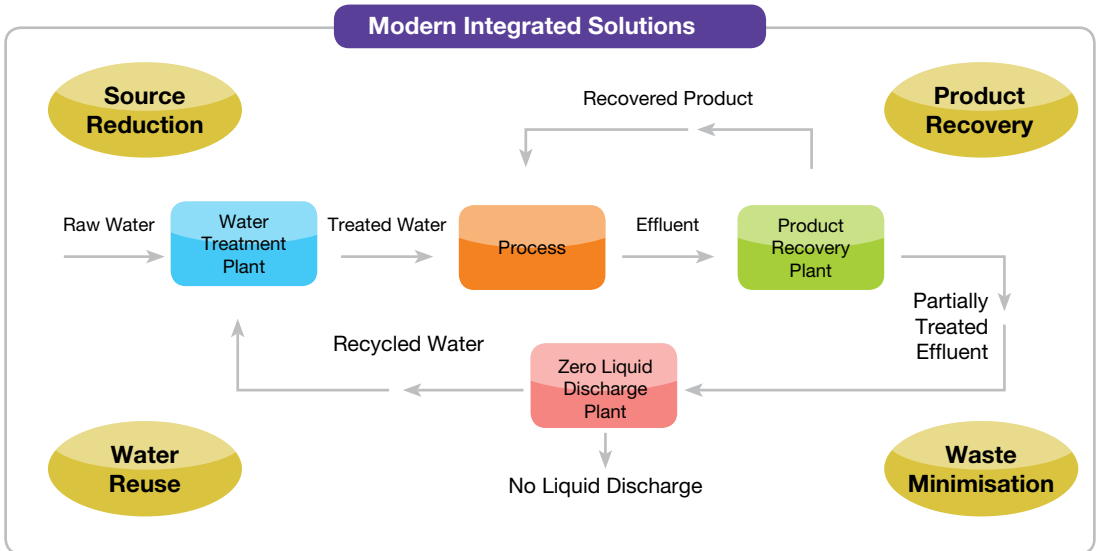
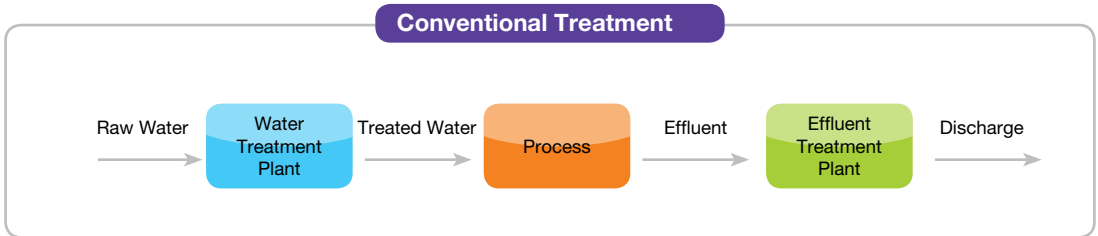


- A refinery in Jamnagar, installed a 48 MLD effluent treatment & recycle plant that is designed to contain and treat all internal process/utility waste water and storm/fire water, with the objective of **zero liquid discharge**.
- In keeping with their eco-vision, a premium hotel installed a **zero liquid discharge system** that recycles over 800 m<sup>3</sup>/d waste water.
- A speciality paper manufacturing company invested INR 300 lakhs to recycle its white water effluent. The benefits- uninterrupted and good quality water supply of 500 m<sup>3</sup>/h, recovery of fibres worth INR 6.3 lakhs a month and compliance with disposal regulations.
- A multinational cement company in North India installed a **complete zero liquid discharge system** that recovers 85% of the waste water for reuse.
- A synthetic rubber company in Panipat, installed a **complete zero liquid discharge plant** to meet the challenges of availability, cost and quality of water.
- A leading synthetic fibre manufacturer in Silvassa has installed a **complete zero liquid discharge system** to meet environmental compliance regulations.
- Leader in the brewery industry have installed a **complete zero liquid discharge plant** to meet PCB compliance & augmented needs of water in various locations.
- Leading FMCG company in Haridwar, installed a **complete zero liquid discharge plant**.



# Experience the Gains of Total Water Management

Our recycle solutions integrate physicochemical, biological and membrane separation processes for optimum water recovery. They include advanced effluent treatment processes, micro filtration, ultra filtration, nano filtration and reverse osmosis systems, membrane bioreactors and advanced photochemical oxidation.



Greater water demands, increasing environmental pollution and industrial & municipal waste disposal pose crucial challenges that call for an integrated approach of total environment management.

Ion Exchange (India) Ltd. offers a complete portfolio of advanced environmental products, solutions and services for industrial, institutions and municipal segments. Technology solutions encompass water, liquid, gaseous effluents, solid waste, bio-solids and renewable energy, while services include consultancy, turnkey contracting, O&M and BOOT projects.



**INDION<sup>®</sup>**  
Multi-Effect  
Evaporator (MEE)



**INDION<sup>®</sup>**  
Plate Frame  
(DT/PF) RO  
system\*

\* In collaboration with Rochem Group S.A.



**INDION<sup>®</sup>**  
Integrated Dye  
Desalting,  
Water Recovery  
& ZLD System



Electrodeialysis  
Reversal (EDR)

\* In collaboration with **ASTOM**  
ACROPL Corporation

**Our manufacturing units are ISO 9001 & 14001 certified. Our Patancheru unit is also OHSAS 18001 certified.**

## ION EXCHANGE (INDIA) LTD.

### Corporate Office

Ion House, Dr. E. Moses Road, Mahalaxmi,  
Mumbai - 400 011.

Tel: +91 22 6231 2000 | Fax: +91 22 2493 8737

E-mail: [ieil@ionexchange.co.in](mailto:ieil@ionexchange.co.in)

### International Division

R-14, T.T.C MIDC, Thane - Belapur Road,  
Rabale, Navi Mumbai - 400 701.

Tel: +91 22 6857 2400

E-mail: [export.sales@ionexchange.co.in](mailto:export.sales@ionexchange.co.in)