



# THE DHARAMSI MORARJI CHEMICAL CO. LTD.



Responsible Care®  
OUR COMMITMENT TO SUSTAINABILITY



THE DHARAMSI MORARJI  
CHEMICAL CO. LTD.



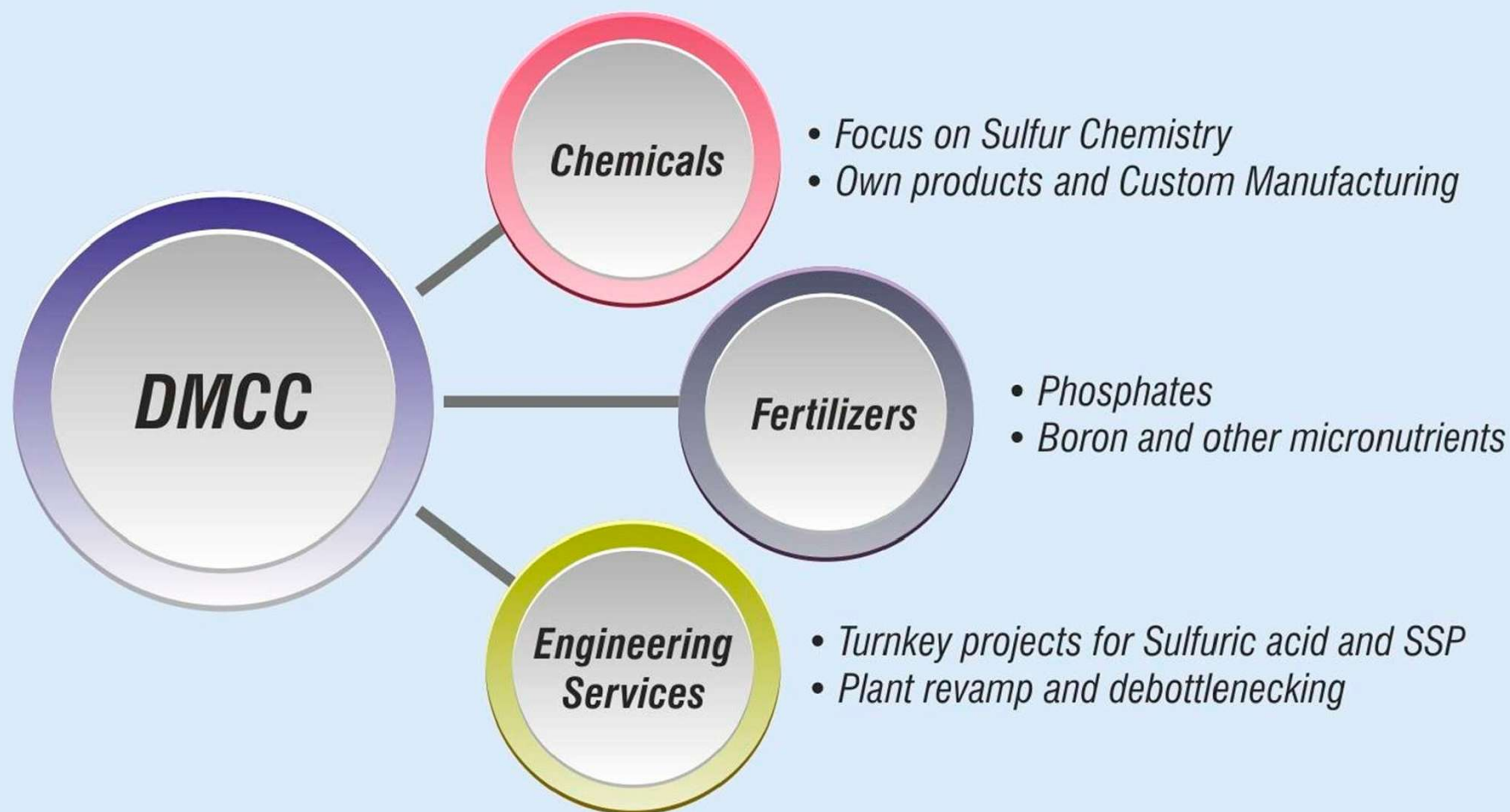
1919 - 2019

**100 Years of Sulphur Chemistry**

[www.dmcc.com](http://www.dmcc.com)

## Overview

- *Established in 1919*
- *Built the first plant of Sulphuric Acid in India Sulphur chemicals remains a focus area*
- *Expanded into Specialty / Performance Chemicals & Engineering Services*
- *Strong “SHIP” brand backed by widespread sales, distribution and manufacturing network*
- *Products are based on processes developed by in-house R&D Division*







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**THE DHARAMSI MORARJI  
CHEMICAL CO. LTD.**



**Dahej Unit**

**385KM**

**Corporate Head Office Mumbai  
with Satellite Offices at  
Vidyavihar & Ambernath**

**125KM**



**Roha Unit**

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THE DHARAMSI MORARJI  
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## *Manufacturing Facility, Roha*



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## *Manufacturing Facility, Roha*



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## *DMCC: A Company with a conscience*

*Renewable  
energy  
provides 25%  
of total need*

*Support for  
NGO's involved  
in conservation  
and education.*

*"Green Cover"  
at all our  
factory sites*

*ISO 9001:2015*

*Responsible  
Care*

*TFS*



## RECOGNITION



### RESPONSIBLE CARE

#### PROUD HOLDER OF RESPONSIBLE CARE LOGO VALID UPTO 2022

Responsible care is a voluntary commitment by the global chemical industry to drive continuous improvement and achieve excellence in environmental, health and safety and security performance



#### TOGETHER FOR SUSTAINABILITY : VALID UPTO 2021.

Together for Sustainability is a joint initiative of chemical companies, founded in 2011. It focuses on the promotion of sustainability practices in the chemical industries.

## ***Core Technology***

- *Sulfonation*
- *Chloro Sulfonation*
- *Friedel-Craft Reaction*
- *Esterification*
- *Boron Chemistry*
- *Methylation*
- *Ethylation*
- *Nitration*
- *Reduction*
- *Amidation*



## Selected Product List

PRODUCT	CAS NO.	PRODUCT	CAS NO.	PRODUCT	CAS NO.
■ Benzene Sulphonyl Chloride	98-09-9	■ Sodium Benzene Sulphonate	515-42-4	■ Diethyl Sulphate	64-67-5
■ Benzenesulphonic Acid 70%, 90%, 99%	98-11-3	■ Sodium Phenol Sulphonate	1300-51-2	■ Para Chloro Thiophenol	106-54-7
■ p-Phenol Sulphonic Acid (65%)	98-67-9	■ Diphenyl Sulphone - Paper / Polymer Grade	127-63-9	■ Menthyl Lactate	61597-98-6
■ Sodium Vinyl Sulphonate 25%, 30%, 35%	3039-83-6	■ 4,4'-DiHydroxy Diphenyl Sulphone	80-09-1	■ Thiophenol	108-98-5
		■ Sulfuric Acid (All grades), Oleum (23% & 65%), Chlorosulfonic Acid, Sulfuric Anhydride.		■ Lasamide	2736-23-4

## *Markets by end-use*

- *Textile processing*
- *Emulsions*
- *Polymers*
- *Dyes and Pigments*
- *Pharmaceutical Intermediates*
- *Electroplating*
- *Fire Retardants*
- *Agrochemicals*
- *Water Treatment*
- *Fertilizers*
- *Speciality paper*



## ***Markets by geography***

- *Commodity chemicals: 95% in India*
- *Specialties: 30% in India; 70% exports*
- *Markets in over 25 countries including the USA, European union, Japan & China*
- *REACH registration in the EU through an subsidiary company.*

## *Research & Development Lab at Roha*





## *Multi Purpose Plant Equipment Available*

- *Glass lined Reactors ( 5 KL, 3 KL)*
- *SS 316 Reactors ( 5KL, 3 KL)*
- *Centrifuges ( SS, Rubber lined)*
- *Chilling plants, 150 TR, 50 TR, 20TR*
- *Nutsch Filter*
- *Vacuum Glass distillation systems*
- *Flakers, SS 316*
- *AGNF, SS316L , 2 KL*
- *Gas Scrubbers*
- *Grinders*
- *Rotary dryers, 10 MT/day*
- *Spray driers, 10 MT/day*
- *Thermic fluid Boilers*
- *Steam Boilers*

## ***Boron & Specialty Chemicals at Dahej***

- *Boron business was started by Borax Morarji Ltd in 1963*
- *Shifted to Dahej in 2013*
- *The merger of Borax Morarji Ltd. with DMCC has facilitated expansion of the product portfolio with a new location at Dahej in Gujarat*
- *Plant in operation at Dahej, Gujarat.*



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## ***DMCC Plant, Dahej, Gujarat***



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## ***Boron Business Areas***

- *Electroplating*
- *Thermal power station*
- *Detergents*
- *Electrolytic capacitors*
- *Ceramic Frit and Tiles Industries*
- *Steel Industries*
- *Catalysts*
- *Hydraulic / Brake fluid*
- *Micronutrient*
- *Boronated Fertilizers*
- *Timber preservatives*
- *Boronated Fertilizers*

## Boron Product List

PRODUCT	CAS NO.
Boric acid, Technical	10043-35-3
Boric acid, Chemically Pure	10043-35-3
Boric acid, Special Quality	10043-35-3
Borax Pentahydrate	12179-04-3
Borax Decahydrate	1303-96-4
Disodium Octaborate, Tetrahydrate	12280-03-4
Potassium Tetraborate, Tetrahydrate	12045-78-2
Ammonium Pentaborate, Tetrahydrate	12046-04-7

PRODUCT	CAS NO.
Zinc Borate-2335	12767-90-7
	138265-88-0
Zinc Borate -223	1332-07-06
Cal Plus ( 40% B <sub>2</sub> O <sub>3</sub> )	

### New Boron Products

Triethylene glycol monomethyl ether, borate	30989-05-0
Trimethyl Borate	121-43-7

## ***Future Expansion at Dahej***

- *New Sulfuric acid plant with 300 MT/ day capacity*
- *New Speciality products in Multi purpose plant*
- *Expansion of Benzene sulfonyl chloride*
- *Range of Thio Compounds.*
- *Sulfones and derivatives for Paper and Polymer Industries.*



## Exhibition Participation





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## CERTIFICATES & AWARDS

### CERTIFICATE OF MERIT FOR WATER RESOURCE MANAGEMENT IN CHEMICAL INDUSTRY - 2014

(Category-1: Annual Sales Revenue below Rs.500 crore)

Conferred on

**THE DHARAMSI MORARJI CHEMICAL CO. LTD.**

#### CITATION

**T**he Dharamsi Morarji Chemical Co. Ltd. (DMCC), Mumbai, is a public limited company. Its manufacturing unit is located at MIDC Industrial Estate Dhatu, Taluka Raha, Dist. Raigad, Maharashtra. The company started its first plant to manufacture Sulfuric Acid in 1919 and shifted to manufacture of commodity and specialty chemicals (Sulfuric Acid, Oleum 23%, Oleum 60%, Liquid SO<sub>2</sub>, Ubbelohde), Chlorosulfonic Acid, Specialty Chemicals Benzene Sulfonyl Chloride, Sodium Vinyl Sulfonate, Diglycidyl Sulfonates, Diethyl Sulfonate, Phenyl Sulfonic Acid, DMCC is a Responsible Care Committed Company.

The company has carried out several measures for reducing water consumption by:

- Process Improvement e.g. Benzene Sulfonyl Chloride manufacturing process was reviewed and modified to reduce 5m<sup>3</sup> / day of wash water.
  - Process Modification e.g. Diglycidyl Sulfonates a byproduct of Benzene Sulfonyl Chloride was being washed with 50 M<sup>3</sup>/day wash water. The process was modified to eliminate washing.
  - Recycle of Water - In the Sodium Vinyl Sulfonate process part of the cake wash water (1m<sup>3</sup> / day) was recycled back in to the process.
  - Proper Monitoring and education of employees.
- All these efforts have resulted in:
- Within 7 months (SEP- MAR 2014) water consumption has been reduced by 15.85%.
  - 20 m<sup>3</sup> / month wash water recycled in SWS plant.
  - Treatment cost saving of Rs. 33,345 in seven months (SEP- MAR 2014) in ETP.
  - For 7 months (SEP- MAR 2014) cost saving on incoming water from DMCC is Rs.82,506/-.

In recognition of the above, **INDIAN CHEMICAL COUNCIL** is pleased to confer the **CERTIFICATE OF MERIT FOR WATER RESOURCE MANAGEMENT IN CHEMICAL INDUSTRY** for the year 2014 on **THE DHARAMSI MORARJI CHEMICAL CO. LTD.**, Mumbai.



CHEMICAL NEWS NOVEMBER 2015 33

**Certificate of Merit for  
Water Resource Management in 2014**

### ICC CERTIFICATE OF MERIT FOR EFFICIENT WASTE MANAGEMENT - 2015

(Category-4: Annual Sales  
Revenue below Rs.500 crore)

Conferred on

**THE DHARAMSI  
MORARJI  
CHEMICAL  
CO. LTD.**

#### CITATION

The Dharamsi Morarji Chemical Co. Ltd. (DMCC) was established in the year 1919 and started the first plant of Sulfuric Acid in India. The Company was a pioneer in the manufacture of Phosphate based Fertilizers. The Company has now shifted its focus to Specialty Intermediates based on Sulphur and Ethanol. DMCC's plant, is located in MIDC Industrial Estate Dhatu, Raigad District, Maharashtra.

The Company introduced Waste Management in:

● **Chlorosulfonated Hydrocarbon 2014.**

● **Fully Automatic Pneumatic Filter Press at ETP May 2015.**

● **Allyl Ester of Sulfuric Acid September 2015**

**Chlorosulfonated Hydrocarbon Plant Process:** The Company is the largest manufacturer of "Chlorosulfonated Hydrocarbon" in the world. The plant capacity is 20 TPD. In this process a solid waste residue is generated during distillation. Earlier the Company used to treat the residue to recover a co-product. Effluent with a high COD level was sent for effluent treatment. DMCC in-house R & D has developed a Process of "Controlled Catalytic Isolation" of waste distillation residue. This has not only eliminated this step but has also converted this waste in to additional useful co-product. As a result, equivalent solid waste generation and effluent from this step is totally eliminated.

**Reduction of Hazardous Solid Waste in ETP:** Previously an ordinary leaf filter was being used for filtration of the primary and secondary clarifier settings. Solid waste cake of 700 to 2500 kg/day containing 70% to 80% moisture were generated. A fully automatic pneumatic filter press with PLC control has been installed in their ETP. The cake quantity has now reduced to 450 to 600 kg/day with 35 to 40% moisture.

**Allyl Ester of Sulfuric Acid Plant:** Allyl Ester of Sulfuric Acid process was generating waste residue from distillation. This waste residue contained 45% solids, with poor fluidity. Setting of solids used to take place during transfer which prevented acceptance of the product by the company's customers. Company's R & D has modified the process to eliminate solids in the process. Fluidity of the waste distillation residue has also been increased. The by-product generated has been tested and approved by customers and is now being sold commercially. Thus all these efforts have resulted in - (1) **Reduction of Effluent;** (2) **Reduction of Hazardous solid waste;** (3) **Conversion of waste residue in value added product;** and (4) **Improvement in Overall Yield.**

In recognition of the above, **INDIAN CHEMICAL COUNCIL** is pleased to confer the **ICC CERTIFICATE OF MERIT FOR EFFICIENT WASTE MANAGEMENT** for the year 2015 on **THE DHARAMSI MORARJI CHEMICAL CO. LTD.**, Mumbai.



MR. BIMAL SINGH AND COLLEAGUES RECEIVING THE CERTIFICATE OF MERIT AND CITATION FROM MR. MANOJ KUMAR

CHEMICAL NEWS NOVEMBER 2015 39

**Certificate of Merit for  
Efficient Waste Management in 2015**

### ICC CERTIFICATE OF MERIT FOR EXCELLENCE IN ENERGY CONSERVATION AND MANAGEMENT - 2017

Conferred on

**THE DHARAMSI MORARJI CHEMICAL COMPANY LTD.**

#### CITATION

The Dharamsi Morarji Chemical Company Limited (DMCC) is a pioneer in sulphuric acid manufacturing in India. DMCC started its first plant at Ambarnath, Maharashtra in 1919 and followed onto manufacture of phosphate based fertilizers. After several decades into it, DMCC shifted their focus to specialty & fine chemicals and industrial intermediates. At present, their commodity chemicals include Sulphuric acid, Oleum 23%, Oleum 65%, stabilized liquid SO<sub>2</sub> and Chlorosulfonic acid. The specialty chemicals include benzene, and huge variety of sulphur based chemicals and derivatives.

DMCC is a Responsible Care committed company and also allowed to use the ICC Logo by ICC.

Based on an integrated all round approach the energy conservation schemes implemented have included new heat pump based chiller, improved chiller ejector

system, replacement of old ejector vacuum system with new rotary vacuum system, replacement of inefficient waste heat recovery system with new higher efficiency system, enhanced condensate recovery, improvements in elimination of hot seal tank and hot well pumps in chiller and installation of variable speed drives and variable frequency drives.

It was ensured that heat pump based chiller, heat pump based ZLD system and new waste heat recovery system in sulphuric acid plant were all designed and executed to attain maximum energy efficiencies.

In recognition of the above, **Indian Chemical Council** is pleased to confer the **ICC CERTIFICATE OF MERIT FOR EXCELLENCE IN ENERGY CONSERVATION & Management** for the year 2017 on **THE DHARAMSI MORARJI CHEMICAL COMPANY LIMITED, Mumbai.**

MR. BIMAL SINGH AND COLLEAGUES RECEIVING THE CERTIFICATE OF MERIT AND CITATION FROM MR. MANOJ KUMAR



36 | CHEMICAL NEWS NOVEMBER 2017

**Certificate of Merit for  
Energy Conservation & Management 2017**

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## Chemexcil Award



**Ajay Kadakia**  
Chairman

**CHEMEXCIL**  
रासायनिक, सौंदर्यसामान एवं रंग रसायन निर्यात प्रमोशन  
(रासायनिक, सौंदर्यसामान एवं रंग रसायन निर्यात प्रमोशन)  
BASIC CHEMICALS, COSMETICS & DYES EXPORT PROMOTION COUNCIL  
(Set up by Ministry of Commerce & Industry, Govt. of India)  
Jharkhand House, 4th Floor, 7 Colaba Road, Mumbai 400 001 India.  
Tel: +91 22 2202 1288 • Fax: +91 22 2202 8884 • Web: <http://chemexcil.in>  
CIN: U61101MH1903NPL012677 • GSTIN: 27AAAT83675E1Z1

DO NO EPC/EXPORT AWARD 2017-18 24<sup>th</sup> July, 2019

Dear Shri. *Laxmikumar N. Goculdas*

I have great pleasure to inform you that your Esteemed Company has been aptly selected for the 'Certificate of Merit' instituted by the Council under the category of Panel - II: BASIC INORGANIC AND ORGANIC CHEMICALS INCLUDING AGRO CHEMICALS (LSM) for the outstanding export performance for the year 2017-18.

Myself and my peers and colleagues in the Committee of Administration join me in extending our warm felicitations and heartiest congratulations to you on being conferred this Prestigious Award.

In the meanwhile, may I take this opportunity and pleasure to inform you that CHEMEXCIL will be inviting the Hon'ble Union Minister of Railways & Commerce and Industry, Government of India **Shri Piyush Goyal**, as Chief Guest to distribute the Awards at a Special Glittering Function to be held in the month of September, 2019.

As a first step therefore and in order to commence the preparatory work related to compilation of Citation book, we request you to kindly furnish to us the following details by e-mail ([dmchemexcil@gmail.com](mailto:dmchemexcil@gmail.com)), together with the hard copy by courier.

1. About your Company in brief – (not more than 100 words)
2. 2 Passport size colour photographs, name and designation of the person, receiving the Award.

Needless to mention, I am sure and confident that this Award will indeed spur you and provide you the much needed fillip to ameliorate your achievements during the coming years.

I once again convey my Heartiest Congratulations.

With kind regards,

Yours sincerely,  
  
(AJAY KADAKIA)

MR. LAXMIKUMAR N. GOCULDAS  
Chairman  
The Dharamsi Morarji Chemical Co Ltd  
317/321, Prospect Chambers, Fort,  
Mumbai- 400 001  
E-Mail: [info@dmcc.com](mailto:info@dmcc.com)

CHAIRMAN'S OFFICE : M/s Vakil Exports Pvt. Ltd., 3-A, Dharmur Bldg., 3rd Floor, Sir P.M. Road, Fort, Mumbai 400 001 India.  
Mob: +91 9821028950 E-mail: [vakelexport@vakil.com](mailto:vakelexport@vakil.com), [chairman@chemexcil.gov.in](mailto:chairman@chemexcil.gov.in)



## CSR Activity by DMCC



Funded & Supported By



**Dharamsi Morarji Chemicals Co. Ltd**

Concept & Implementation By



## CSR Activity by DMCC





## CSR Activity by DMCC

***The Company/ Management stands committed for the Corporate Social Responsibility ( CSR activity) . The Board of Directors of the Company has constituted – Corporate Social Responsibility Committee.***

***The Company is incurring expenditure in the following areas.***

### Education / E-learning

*The Company is Sponsoring and supporting e-learning in the Schools and Educational Institutions. This is done through supply of computers, Projectors and allied equipment's. Company is providing the Text Books to Students in primary School as per need based required during the year.*

### Donations

*The Company gives financial support/donations to various Institutions in and around the areas of its operations.*

### Sports Activity

*The company sponsors sport events during the year as a part of its commitment to develop Sports Activity. The Company also organizes Sports Events / Competitions and matches by and between the employees of the Company.*

### Social Events

*The Company also organizes social events and festivals such as Republic Day Celebrations , Independence Day Celebrations, Ganesh Puja etc.*



## CSR Activity by DMCC





## Environment day Celebration at Roha Factory







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# Sustainability @ DMCC



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**“Green Cover at our Factory”**

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**Solar Panel Installation at Roha Plant -  
Reduction of CO<sub>2</sub> footprint through solar power generation**

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**A Farm Pond has been created serving as a reservoir for harvested rain water, this water is being used in cooling towers and gardening**

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**Zero Liquid Discharge**

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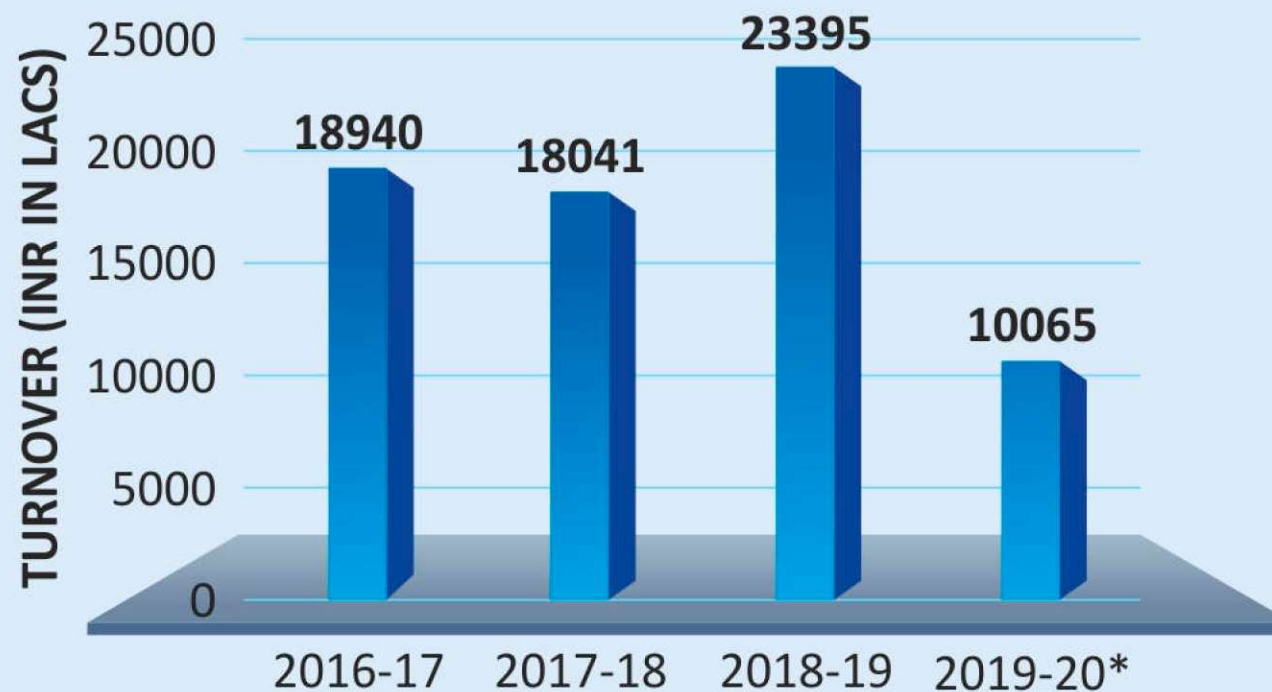


## Sewage Treatment Plant





## **TURNOVER**



**\*H1 FY 2019-20**

## EBITDA



*\*H1 FY 2019-20*

## **PROFIT BEFORE TAX**



**\*H1 FY 2019-20**



## NET WORTH



*\*H1 FY 2019-20*

## TOTAL DEBT



*\*H1 FY 2019-20*



## DEBT SERVICE COVERAGE RATIO



*\*H1 FY 2019-20*

Thank  
you



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