Zuari Cement
HEIDELBERGCEMENT Group

M/s. ZUARI LIMESTONE MINE
(M/s. ZUARI CEMENT LTD.)
Kirshna Nagar, Yerraguntla,
Kadapa (Dist) - 516 311.

ENVIRONMENTAL STATEMENT (AUDIT)
FOR THE FINANCIAL YEAR 2024-25

INTRODUCTION:

M/s. Zuari Cement Limited (ZCL) is part of Heidelberg Cement group, number 1 producer of aggregates, the number 2 in cement and number 3 in ready-mixed concrete worldwide. The Plant was established in the year of 1985 and expanded in 1999& 2010. After the commissioning of Line-2 in the year 2010, the production capacity has enhanced to 5.4 MTPA. M/s. Zuari Cement Limited is manufacturing different types of Cement with a production capacity of Clinker- 4.3 Million Tonne/Annum and Cement - 5.4 Million Tonne/Annum. The Yerraguntla unit is An ISO 9001,ISO14001,50001& ISO 45001certified company.

LOCATION:

The M/s. Zuari Limestone Mines (M/s. Zuari Cement Limited) is situated in Yerraguntla Mandal, Kadapa district of Andhra Pradesh. The area is located between Latitude 14036’10” to 14038’30” N and Longitude 78031’24” to 78033’30” E.

The nearest airport is at Kadapa, which is about 46 km away. The nearest railway station is Yerragunta, which is located on the Chennai – Mumbai broad gauge line. There is a private siding wholly owned by the cement company joining the above said line at Yerraguntla. This is solely used for transport of cement and other raw materials. The mine area is 7 km away from Yerraguntla and nearest business town is Proddatur, which is at a distance of 19 km.

FORM - V
(See rule 14)
ENVIRONMENTAL STATEMENT REPORT FOR THE FINANCIAL YEAR ENDING THE 31ST MARCH, 2025

PART – A

i) Name and address of the owner/ occupier of the industry operation or process.	:	Shri. Vimal Kumar Jain Director –Technical, The Plam Drive,Tower-A Flat No 302,Sector 66, Gurugram, Haryana – 122102.
ii) Date of the last environmental audit report submitted	:	23.09.2024
iii) Production Capacity	:	7.0 Million Tons/Annum
iv) Year of Establishment	:	1984

PART – B

WATER AND RAW MATERIAL CONSUMPTION

Average water consumption m3/day: 65.1

Name of Product	Water consumption per unit of product (KL/MT)	
	During the previous financial year (2023-24)	During the current financial year (2024-2025)
Limestone	0.006	0.006

ii) Raw material consumption:

Name of Raw Materials	Name of product	Consumption of raw material per MT of output Limestone	
		During the previous financial year (2023-24)	During the current financial year (2024-24)
HSD	Limestone	0.481 L /MT	0.502 L/MT
Explosives	Limestone	0.0.089 Kg/MT	0.098 Kg/MT

PART - C
POLLUTION GENERATED
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants Discharged (kg/day) 2023-24	Concentrations Of Pollutants in Discharges (mg/L) 2024-25	Percentage of variation from prescribed standards with reasons
a) Wastewater: (There is no process wastewater)			
b) Air: There are no source emissions, only dust generation during mining operation is monitored by establishing ambient air quality sampling stations at various places in mine premises and surrounding areas. The generated data is enclosed as Annexure-I			

PART - D

HAZARDOUS WASTE

(Under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016)

Hazardous wastes	Total Quantity per Year	
	During the previous financial year (2023-24)	During the current financial year (2024-25)
a) From Process		
i) Waste Oil/ residue containing oil	13.80MT	25.87MT
ii) Waste oil	5.96	7.61 MT
iii) Old Batteries	5.02 MT	6.69 MT
b) From Pollution control facilities	NA	NA

Note: 2024-25 Waste Oil and Grease generated from plant, WHRPP and limestone mine.

PART - E

SOLID WASTES

S.No	Solids Waste	Total quantity	
		During the previous financial year (2023-24)	During the current financial year (2024-25)
a)	From Process Black cotton soil generating in mining operation	Nil	NIL
b)	From Pollution Control Facility	-NA-	-NA-
c)	Quantity recycled or re-utilized	-NA-	-NA-

PART - F

Please specify the characteristics (in terms of concentration and quantum) of Hazardous as well as solid wastes and indicates disposal practice adopted for both these categories of wastes.

Hazardous waste generated in the form of used oil and old batteries. Used oil is sold /internal use in plant. Old batteries are disposed to authorized battery Recyclers.

Solid waste as black cotton soil generated during mining operation is stored in dumps and used in greenbelt developments.

PART – G

Impact of the pollution control measures on conservation of natural resources and consequently on the cost of production.

Evaluation on this aspect is being carried. Reclamation of mined out area as development of water storage reservoirs will be done to facilitate increase in water regime after completion of mining in lease hold areas.

PART - H

Additional investment for environmental protection including abatement of pollution.

The company is committed to preserve and improve the ecological balance in and around the mine area. In order to achieve this company has taken several steps to make the mine Eco-friendly.

- Centralized water-sprinkling system along with a mobile water sprinkler used for haulroad sprinkling and sprinkling on muck pile.
- Oil separation pit near washing ramp for separating oil from overflow water, which is again reused for washing.
- Concreting done at mines garage area to avoid fugitive dust emission.

WET DRILLING

MUCK PILE WETTING

Water Sprinklers at haul road

WATER TANKER

WATER SPRAYING AT CRUSHER

Geo textile matting

Garland Drain and wall

Belt curtains provided at crusher hopper.

PART - I

Any other particulars in respect of environment protection and abatement of pollution.

The management objective is to achieve the production without affecting the physical, chemical and biological environments of the nearby vicinity. Industry has taken lot of efforts to raise the plantation in and around the mining lease area .

Development of deep sump in mines has been taken up, so that rain water can be stored for use during summer. The same sump also helps in recharging of the underlying aquifer. Rain harvesting is practiced and same water is being used for dust suppression. For noise pollution control, down the hole initiation system are used. Over and above greenbelt is developed along the boundary of mine area for reducing the impact of noise due to mining activity on the surrounding environment. Regular water sprinkling is done at mine face and haulage roads to suppress dust. Conservation of resources is done following approved mining plan.

AMBIENT AIR MONITORING RESULTS FOR THE YEAR -2024-25

Location: Mines Office

	April-24		May-24		June-24		July-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		March-25	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
PM10 µg/m3	56.2	51.4	58.1	53.2	54.8	58.4	57.2	56.2	54.5	53.1	51.3	56.7	48.5	54.9	51.4	45.4	53.9	49.8	50.4	52.9	52.6	54.5	56.9	51.2
PM2.5 µg/m3	18.7	17.6	19.5	20.5	20.2	22.2	18.1	20.8	16.4	19.7	18.5	20.6	16.4	18.3	20.2	16.9	21.5	19.3	19.8	20.4	20.5	21.5	21.4	19.5
SO2 µg/m3	6.3	7.4	5.9	8.1	6.3	9.5	7.8	8.4	6.3	7.5	7.3	9.5	6.4	8.3	8.1	6.8	6.5	7.6	5.4	6.5	7.3	5.8	6.1	7.6
NOX µg/m3	16.2	18.1	15.4	19.3	16.7	20.6	17.6	17.3	16.1	16.4	17.2	19.3	15.9	17.1	17.3	15.4	15.7	18.8	16.8	17.8	17.6	15.6	15.2	16.4

Location: Loading

	April-24		May-24		June-24		July-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		March-25	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
PM10 µg/m3	66.7	62.8	63.9	64.7	61.4	66.9	65.8	64.5	62.4	60.9	59.5	62.5	56.3	64.6	59.2	60.2	61.7	64.7	65.6	62.6	67.4	64.3	69.2	62.9
PM2.5 µg/m3	26.4	24.5	23.1	25.6	21.6	27.1	24.3	23.6	22.9	21.7	21.7	23.6	22.6	25.4	23.9	23.8	24.8	25.4	28.2	23.7	26.1	25.1	28.5	23.4
SO2 µg/m3	12.3	11.9	10.7	10.7	12.5	11.5	11.2	10.3	9.7	12.3	8.5	8.7	9.6	9.3	12.3	10.7	10.2	11.5	9.1	10.4	11.2	8.3	13.5	6.5
NOX µg/m3	24.6	22.3	20.4	20.5	23.2	24.3	22.5	20.4	19.6	23.7	18.9	16.4	20.7	19.3	24.6	21.5	21.9	23.2	19.5	21.9	23.5	19.3	25.7	18.2

Location: Near Drilling

	April-24		May-24		June-24		July-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		March-25	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
PM10 µg/m3	64.9	67.9	67.5	69.1	65.9	63.5	67.4	69.3	65.1	65.7	63.4	67.9	60.1	69.2	62.6	63.5	64.4	66.9	62.1	65.1	64.5	67.6	66.4	65.4
PM2.5 µg/m3	24.5	26.3	25.9	28.6	24.7	24.3	27.5	26.7	25.6	24.9	24.2	26.1	23.9	28.3	25.8	26.1	27.1	28.5	26.3	25.9	24.6	26.4	25.7	24.1
SO2 µg/m3	9.5	8.2	11.4	6.8	9.5	7.9	10.4	9.4	7.8	8.7	10.2	10.1	11.5	11.5	9.2	9.3	8.8	6.4	10.6	8.8	9.4	10.9	12.4	9.3
NOX µg/m3	20.4	17.1	22.3	16.4	18.6	17.8	20.9	18.7	18.4	19.2	20.1	21.3	23.4	23.8	20.5	20.1	17.4	16.3	20.7	18.5	18.6	21.5	24.2	19.4

Location: Haul Road

	April-24		May-24		June-24		July-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		March-25	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
PM10 µg/m3	62.6	59.5	60.2	62.3	63.1	60.8	60.6	62.4	58.6	57.5	55.9	59.8	52.6	57.6	55.3	54.9	57.4	59.3	55.8	54.8	57.3	57.2	60.2	55.6
PM2.5 µg/m3	21.3	22.4	20.8	23.5	22.9	21.4	21.5	22.8	19.3	20.8	20.8	21.4	19.7	24.8	22.6	21.7	23.9	23.6	21.2	21.8	22.5	23.5	23.6	22.4
SO2 µg/m3	10.8	10.3	13.2	12.1	11.6	10.3	6.8	12.5	11.3	10.3	13.5	11.4	10.9	12.7	11.2	11.3	12.5	13.2	11.9	9.9	13.7	7.6	10.9	11.5
NOX µg/m3	21.9	20.8	25.7	23.3	20.5	22.6	19.2	24.8	22.9	21.7	26.3	23.9	21.8	25.4	22.8	23.8	25.4	26.7	23.5	20.4	26.1	18.3	20.4	21.9

Location: Valasapalle

	April-24		May-24		June-24		July-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		March-25	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
PM10 µg/m3	45.1	48.1	48.3	45.5	51.6	43.4	54.2	45.2	51.9	43.1	46.3	46.7	44.5	41.6	47.6	43.8	44.9	47.9	46.5	41.5	43.2	43.4	41.7	45.1
PM2.5 µg/m3	15.6	22.6	16.5	20.9	20.9	18.2	22.4	20.6	20.8	16.5	16.8	18.3	17.5	17.5	20.1	15.6	18.6	20.8	20.9	18.2	18.4	19.9	16.2	21.7
SO2 µg/m3	5.7	10.4	6.1	8.8	5.7	6.9	6.9	7.5	5.7	6.4	6.4	9.9	5.8	10.3	8.7	6.8	7.2	8.1	8.4	7.3	9.1	6.5	7.5	9.4
NOX µg/m3	15.9	20.7	16.7	19.3	15.4	17.3	16.3	18.7	15.6	15.9	17.2	21.5	16.5	20.7	20.6	17.8	18.9	19.3	19.5	17.8	18.9	16.5	17.5	20.2

Location: Koduru

	April-24		May-24		June-24		July-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		March-25	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
PM10 µg/m3	49.5	43.5	52.4	40.8	56.3	48.2	58.5	51.9	55.1	48.5	52.2	50.2	49.8	52.9	51.5	48.1	49.3	42.4	51.6	45.6	49.8	47.8	47.5	42.7
PM2.5 µg/m3	19.8	20.3	21.6	18.4	23.8	21.5	25.3	22.4	22.9	18.7	20.3	21.9	19.5	20.7	22.3	19.2	21.1	17.9	23.2	19.5	21.5	21.6	20.5	20.3
SO2 µg/m3	10.1	8.9	8.3	10.5	10.5	8.3	11.2	11.7	10.1	8.1	9.5	7.8	7.7	6.3	6.2	9.8	5.9	7.6	6.9	11.7	5.6	8.4	8.3	7.6
NOX µg/m3	21.4	18.5	19.5	21.9	21.9	18.5	23.6	21.3	21.3	17.3	20.3	18.2	21.5	16.5	17.3	19.4	15.1	18.2	17.4	23.8	15.6	18.3	18.2	16.8

Location: Peddannapadu

	April-24		May-24		June-24		July-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		March-25	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
PM10 µg/m3	54.8	54.4	57.5	51.9	49.7	46.7	52.6	54.3	48.2	52.6	44.9	56.4	41.7	58.5	43.8	55.7	40.6	53.3	42.5	51.2	40.9	49.6	44.6	46.4
PM2.5 µg/m3	23.9	25.7	24.2	21.7	19.3	20.6	20.2	23.1	18.7	20.8	19.1	25.7	16.3	23.2	18.5	22.5	16.2	24.7	18.3	21.6	16.5	20.7	18.6	23.1
SO2 µg/m3	9.3	7.3	7.5	6.2	8.4	10.4	9.5	6.6	8.6	7.3	11.2	11.2	10.1	8.8	7.9	10.2	8.4	6.4	9.5	9.1	10.3	10.8	6.9	8.1
NOX µg/m3	17.6	16.5	18.3	18.4	19.2	20.1	20.6	16.9	19.2	18.6	23.7	23.5	22.9	18.4	18.4	20.5	20.8	16.3	21.6	18.2	20.7	21.4	15.8	19.5

Location: Tummalapalli

	April-24		May-24		June-24		July-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		March-25	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
PM10 µg/m3	51.7	50.6	54.8	53.5	52.2	50.8	50.8	58.2	57.2	55.6	54.7	53.5	52.6	50.8	54.9	52.6	52.4	50.8	49.8	53.9	46.5	51.3	48.3	40.5
PM2.5 µg/m3	51.4	24.9	22.5	23.4	21.8	22.7	18.7	24.8	23.5	22.7	22.6	23.5	20.8	19.4	23.2	20.9	22.5	22.6	21.7	24.5	19.2	23.8	22.9	19.4
SO2 µg/m3	8.2	11.2	9.3	5.9	7.4	9.3	8.3	10.7	9.4	9.3	8.9	6.7	6.7	9.4	5.4	7.6	6.6	5.7	5.4	10.3	6.8	9.2	9.6	5.5
NOX µg/m3	19.3	23.4	21.4	15.4	17.6	19.2	19.4	20.5	18.7	19.4	19.3	15.2	18.3	19.6	15.9	18.9	16.5	15.2	15.7	20.5	17.5	19.7	19.2	15.1

AMBIENT NOISE RESULTS FOR THE YEAR -2024-25

Location	April-24	May-24	June-24	July-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	March-25
	D	D	D	D	D	D	D	D	D	D	D	D
Mines Boundary-East	62.30	60.90	62.30	64.10	62.50	64.10	63.90	61.40	64.50	63.80	61.70	64.30
Mines Boundary-West	64.70	62.40	63.40	66.90	64.90	63.50	65.70	64.20	62.90	61.90	60.40	62.90
Mines Boundary-North	63.10	61.70	59.60	63.80	61.30	60.90	62.40	60.10	61.70	65.40	63.20	65.20
Mines Boundary-South	65.40	64.30	61.70	62.20	65.70	62.40	61.60	58.60	63.40	61.20	62.80	66.70

Location	April-24	May-24	June-24	July-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	March-25
	N	N	N	N	N	N	N	N	N	N	N	N
Mines Boundary-East	57.10	55.40	57.10	59.30	57.40	59.30	58.10	56.80	59.90	58.50	56.80	59.10
Mines Boundary-West	59.80	57.50	58.60	61.80	59.20	58.20	60.70	59.20	57.60	56.40	55.60	57.40
Mines Boundary-North	58.40	56.90	54.20	58.40	56.10	55.40	57.80	55.60	56.20	60.10	58.20	60.90
Mines Boundary-South	60.60	59.20	56.70	57.90	60.70	57.60	56.60	53.80	58.70	56.80	57.90	61.20

D:Day Time N:Night Time

MINES PIT WATER ANALYSIS REPORT FOR THE YEAR 2024-25

	Total Dissolved Solid (TDS)	Bio-chemical Oxygen Demand	PH	Total Suspended solids (TSS)
APR'24	1094	14	7.59	17
MAY'24	1203	15	7.72	19
JUN'24	1083	13	7.89	17
JUL'24	975	12	7.52	15
AUG'24	1170	14	7.7	18
SEP'24	1053	13	7.45	16
OCT'24	1158	15	7.75	18
NOV'24	1274	17	7.81	20
DEC'24	1147	15	7.66	18
JAN'25	1376	18	7.42	22
FEB'25	1238	16	7.69	20
MAR'25	1424	18	7.81	23

(Zero Discharge Water from Mines)

Mines harvested water is being used for Cement Plant Operations.

Green Belt Development

STP Road

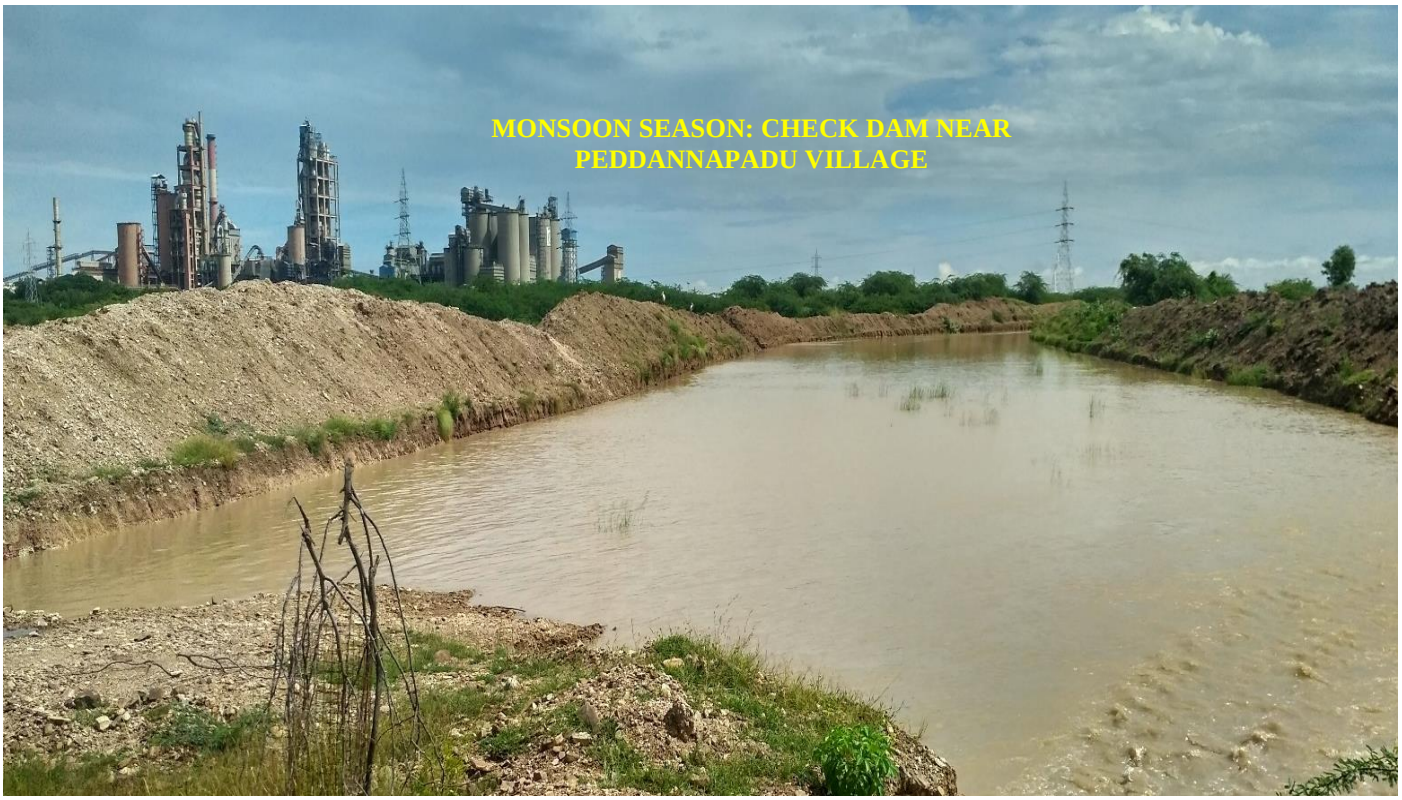
Mines

Miyawaki Plantation

Mines View Point

Total 2024-25: 2200 plants

Rain water harvesting:



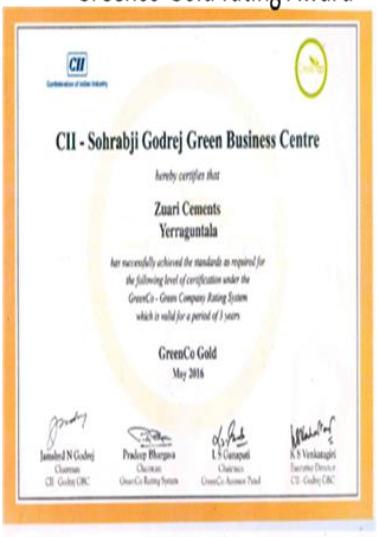
Improving the quality of the environment.

- Zuari Cement has certified ISO-14001 (Environmental Management Systems) by TUV.
- To create Environmental awareness Zuari Cement is celebrated World Environment Day every year.
- Massive Plantation has been done at inside and outside the plant &mines.
- To reduce water consumption, Collection Pond has been made to collect Rainwater/spillage water which is used for the Plant process.
- Ensure water sprinkling system in Crusher and Transfer point of Conveyor belt for effective fugitive dust suppression
- Ensure proper storage and disposal of Hazardous waste.
- Massive green belt development program for dust suppression as well as noise Control.
- Provision bag filters /dust collectors in all material transfer points.
- The pollution auto control equipment's are always maintained in healthy condition and are run as an integral part of production process.
- Dust suppression over the roads by using proper water sprinkling.
- Atomized water spray system at Limestone & Coal handling areas.
- The Sewage Treatment Plant treated water is completely used for Horticulture purpose.
- The sludge form Sewage Treatment Plant used as manure for plantation purpose.
- The valuable raw materials/finished products are recovered from the Pollution Control facility and reused in the process.

ZCL developed procedure for handling of waste (i.e., both Hazardous and Non Hazardous).

Awards

Greenco Gold rating Award



"GreenPro Award

Apex Gold rating Award

Apex Platinum rating Award

"QCFI Award

Energy management Award

“Mines star rating award

Environment award “Platinum rating Awar
From Apex

Green product: ZCL received certification (GreenPro) for PPC cement from Confederation of Indian Industry.

CSR

1. Promotion of Education:

Support to local village schools by way of donating books and furniture on need basis Merit scholarships to Engg. and MBBS students.Providing Quality education to employees children and near by village children through DAV institution school in colony.

2. **Health and Medical Support:**

Includes organizing Super specialty Health camps at Health for employees and villagers and medical camps in 4 villages , General Health check up and distribution of medicines to the local villagers from Zuari Cement Health Center.

3. **Rural Development & Village Infrastructure:**

Providing Drinking water through RO plants. Providing public toilets, drainage facilities, dust bins and village internal CC / Gravel roads and street lights.

4. **Skill development and Self employment programs:**

Organizing skill development training for women from the villages in the areas of Tailoring and screen printing, Agarbatti manufacturing making them self empowered.

CSR: Skill Development programs:

Since last couple of years skill development programs to the local village women as a part of wor empowerment program, the women were given training in the arrears of tailoring, screen print agarbatti making. The produced made by these women where displayed on specially organi function in colony as well as corporate office, Bangalore.

HEALTH PROGRAMME

1. Rural Health Camps

Under our Health programme, our Health Centre is contributing to serve the society at large. All the nearby villages are regularly getting benefitted from our Health Centre. Apart from this we regularly organize Rural Health camps.

Our Company doctor and nurses are available round the clock at the Health Centre for medical check-up, consultation. Free medicines are provided to villagers. These Health Centre are directly beneficial for the villagers particularly expecting mothers, children, rural girls and old age person.

Through our hospital all the medicines are providing free of cost to nearby community members.

2. Mega Multi-speciality Health camps

Mega Health check-up & consultation camp are regularly being organized for the nearby villages. In the Mega Health camp various multi-speciality doctors from Well known Hospitals from Hyderabad have provided their services to the villagers in the areas of Opthalmology-Eye Camps, Orthopeadic and Heart Speciality

The free health check-up, consultation & free medicines services are provided through this camp.

3.Health Awareness to School Children:

Our Company doctor is also regularly giving Health Awareness training programmes for the school children ranging from seasonal health issues and various age related health issues.

LIVELIHOOD PROGRAMME

Skill Development Training to rural women & girls

Under Skill India Campaign, a model training centre is developed near our unit. Our aim is to provide an opportunity to rural women & girls to enhance their skill through various skill development trainings.

We are continuously providing quality environment to rural women & girls for getting knowledge upgradation & develop own skills.

Through skill development training programmes, now rural women & girls are able to generate income through small sewing & stitching works at village level. The quality computer training facility is also being provided through this centre.
Through various skill training agencies the quality training programmes were organized through the whole year.

CSR Expenditure 2024-2025

S. No	CSR Project/ Activity Identified	Focus Area (Education/health & Medical Support/ Skill development/ Rural Development)	Amount -Lacks
1	Promotion of Education	Education	3800000/-
2	Health & Medical Support	Health & Medical Support	500000/-
3	Rural Development & Infrastructures	Rural Development	2200000/-
		TOTAL	6500000/-