



Zuari Cement
HEIDELBERGCEMENT Group

**M/s. ZUARI CEMENT LIMITED,
Krishna Nagar, Yerraguntla,
Kadapa (Dist)-516 311**



**ENVIRONMENTAL STATEMENT (FORM-V)
FOR THE FINANCIAL YEAR 2018-19**

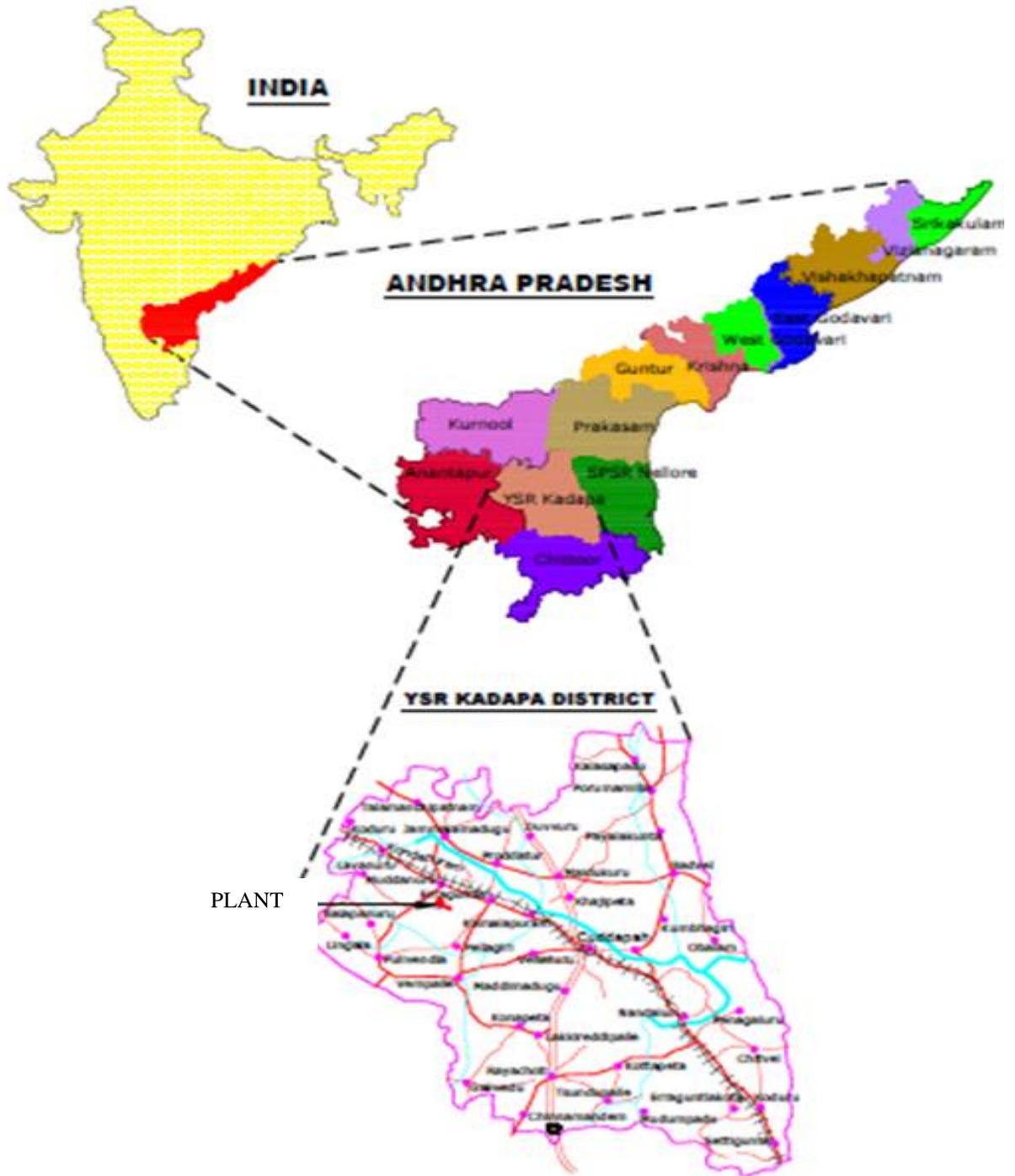
INTRODUCTION:

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,ISO 14001,50001& ISO 45001certified company.

LOCATION:

M/s. Zuari Cement Limited is located at Krishnanagar, Yerraguntla, Kadapa District of Andhra Pradesh. The plant is situated 5km away from Yerraguntla by the side of Yerraguntla - Vempalli road. The plant site falls under the Latitude 14⁰ 35' – 14⁰ 45' of North and Longitude of 78⁰30' – 78⁰35' of East. The project area is rocky in nature. The site comes under arid zone.

LOCATION MAP



FORM - V
(See rule 14)
ENVIRONMENTAL STATEMENT REPORT FOR THE FINANCIAL
YEAR ENDING THE 31ST MARCH, 2019.

FORM V
(See Rule-14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st March17

PART - A

- (I) Name and address of the Owner/ Occupier of the Industry operation Of process : Shri. Sushil Kumar Tiwari
Director –Technical,
Flat No.103, Block-E,
Alakhnanda, Apartment, Sector-56
Gurugram,
Haryana - 122011.
- Works:
Mr. SV Murali Prasad REddy,
Head-Works
Krishnanagar – 516 311
Yerraguntla, Kadapa District, A.P.
- (II) Industry Category : Large
Primary (STC Code)
Secondary (STC Code)
- (III) Production Capacity : Clinker - 4.3 Million Tonne/annum
Cement - 5.4 Million Tonne/annum
- (IV) Year of establishment : 1985 & expansion in 1999 and 2010.
- (V) Date of the last environmental Statement submitted : 22.09.2018.

PART – B

Water & Raw Material Consumption

(I) Water Consumption (m³/Day): 1085

Name of Product	Process water consumption per unit of product output	
	During the Previous financial year 2017-18	During the current financial year 2018-19
Cement	0.14	0.15

(II) RAW MATERIAL CONSUMPTION:

Name of Raw Materials	Consumption of Raw Material per unit of product output	
	During the Previous financial year 2017-18	During the current financial year 2018-19
Lime Stone	1.1181	1.1133
Laterite	0.00012	0.0119
Aluminous laterite	0.0632	0.0538
Cop.Slag	0.0133	0.0123
China clay	Nil	Nil
GCP Dust	Nil	0.0021
Red mud	0.0106	0.0044
Iron Ore	Nil	0.0028
Feld spar	Nil	Nil
Coal & Other Fuels	0.0910 0.0083	0.0863 0.0081
Alternative Fuel- Tyres Chips	0.00035	0.0011
Alternative Fuel- RDF	0.0001	Nil
Alternative Fuel- Biomass(Ricehusk,mango kernels etc)	0.00318	0.0076
Alternative Fuel- Pharma waste	0.0467	0.0024
Fly ash -Wet	0.0840	0.0989
Fly ash -Dry	0.0419	0.0284
Gypsum -Mineral	0.0021	0.0048
Gypsum -Chemical	0.0425	0.0459
Slag	0.0094	0.00092

PART - C

**Pollution discharge to environment/units of output
(Parameter as specified in the consent issued)**

**TREATED SEWAGE WATER ANALYSIS REPORT
FOR FY 2018-19**

Month	Concentrations of pollutants in discharge					
	pH value	Suspended Solids	Chemical Oxygen Demand	Bio-chemical Oxygen Demand	Oil and Grease	Percentage of variation from prescribed standards (with reason)
Prescribed standard						
	5.5-9.0	100	250	30	10	
APR'18	7.92	48	59	16	5	Within the limits
MAY'18	7.89	42	54	14	4	Within the limits
JUN'18	7.72	36	46	12	3	Within the limits
JUL'18	7.82	40	48	14	4	Within the limits
AUG'18	7.54	45	56	15	4	Within the limits
SEP'18	7.48	38	50	13	3	Within the limits
OCT'18	7.24	35	48	11	2	Within the limits
NOV'18	7.38	32	52	13	2	Within the limits
DEC'18	7.46	38	58	15	3	Within the limits
JAN'19	7.52	43	64	17	3	Within the limits
FEB'19	7.63	48	66	18	4	Within the limits
MAR'19	7.56	56	68	22	5	Within the limits

Note: All values are in mg/l except pH – Value

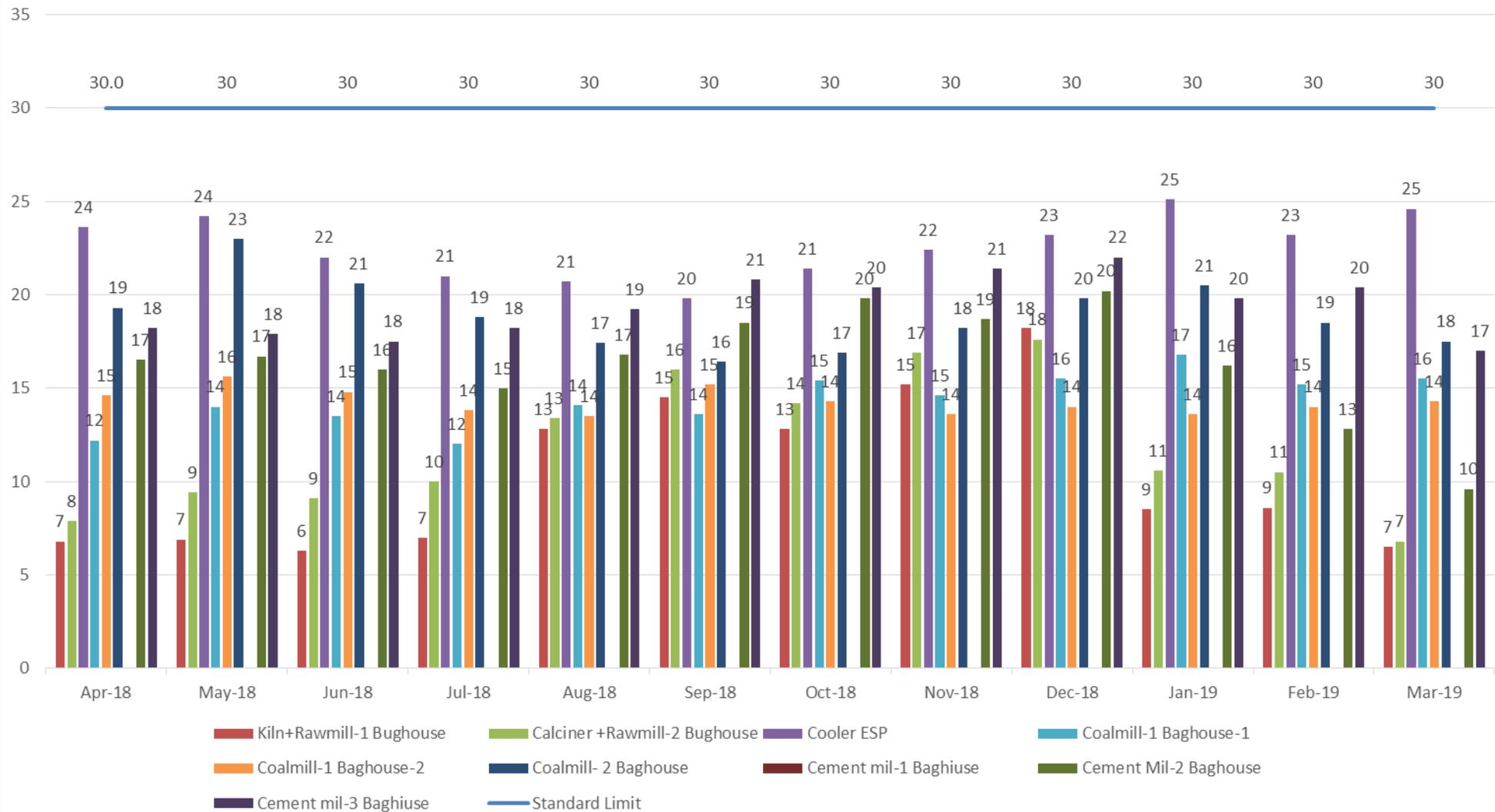
Treated water is used for horticulture / plantation purpose

Stack Emission Results for the year 2018-19
(Particulate Matter in mg/Nm³)
Standard Limit -30mg/Nm³

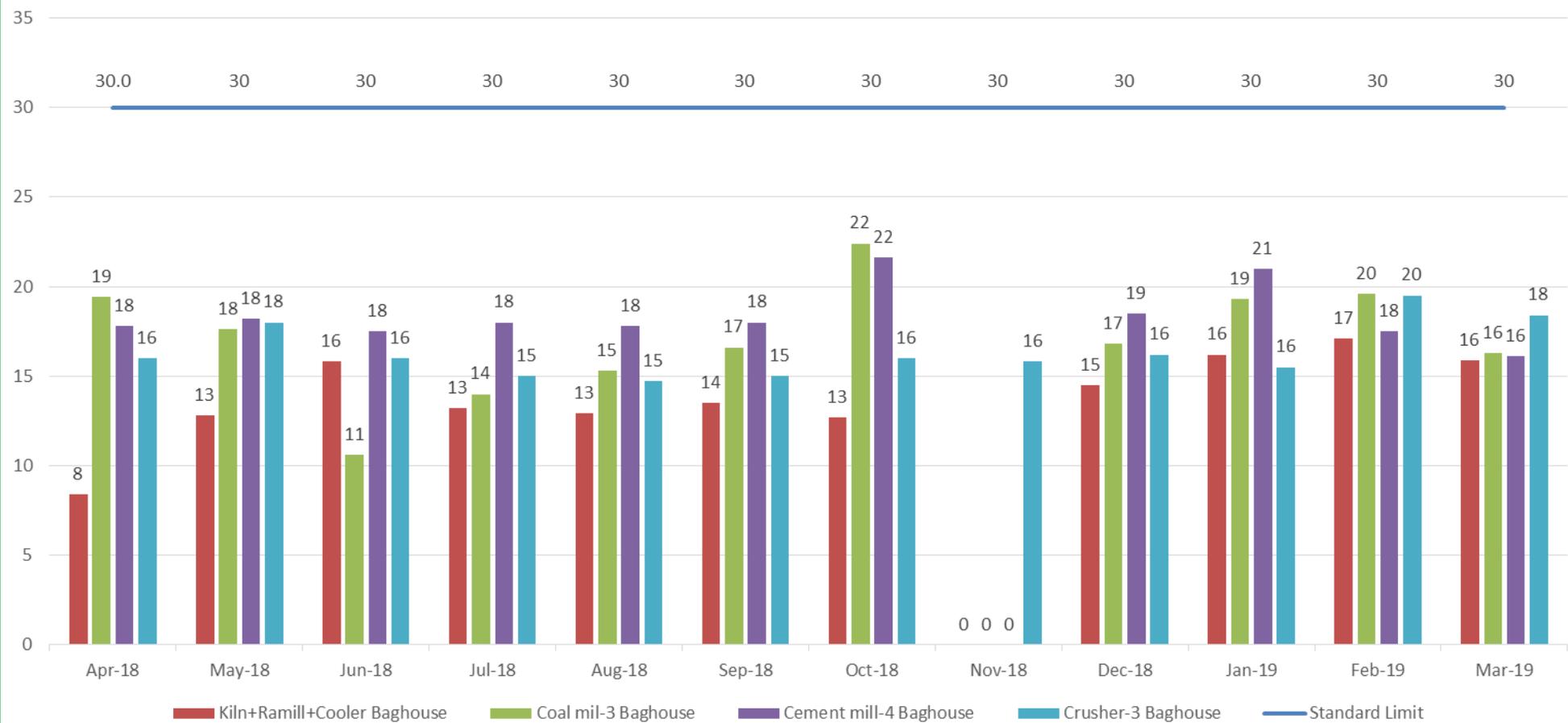
Location	APR' 18	May' 18	JUN '18	JUL '18	AUG '18	SEPT 18	OCT' 18	NOV' 18	DEC' 18	JAN' 19	FEB' 19	MAR' 19	variation from prescribed standards (with reason)
Line-I													
Kiln+Rawmill-1 Baghouse	6.8	6.9	6.3	7.0	12.8	14.5	12.8	15.2	18.2	8.5	8.6	6.5	Within the limits
Calciner +Rawmill-2 Baghouse	7.9	9.4	9.1	10.0	13.4	16.0	14.2	16.9	17.6	10.6	10.5	6.8	Within the limits
Cooler ESP	23.6	24.2	22.0	21.0	20.7	19.8	21.4	22.4	23.2	25.1	23.2	24.6	Within the limits
Coalmill-1 Baghouse-1	12.2	14.0	13.5	12.0	14.1	13.6	15.4	14.6	15.5	16.8	15.2	15.5	Within the limits
Coalmill-1 Baghouse-2	14.6	15.6	14.8	13.8	13.5	15.2	14.3	13.6	14.0	13.6	14.0	14.3	Within the limits
Coalmill-2 Baghouse	19.3	23.0	20.6	18.8	17.4	16.4	16.9	18.2	19.8	20.5	18.5	17.5	Within the limits
Cement mill-1 Baghouse	SD	Within the limits											
Cement mill-2 Baghouse	16.5	16.7	16.0	15.0	16.8	18.5	19.8	18.7	20.2	16.2	12.8	9.6	Within the limits
Cement mill-3 Baghouse	18.2	17.9	17.5	18.2	19.2	20.8	20.4	21.4	22.0	19.8	20.4	17.0	Within the limits
Line-II													
Kin+Rawmill+ Cooler Baghouse	8.4	12.8	15.8	13.2	12.9	13.5	12.7	0.0	14.5	16.2	17.1	15.9	Within the limits
Coal mill -3 Baghouse	19.4	17.6	10.6	14.0	15.3	16.6	22.4	0.0	16.8	19.3	19.6	16.3	Within the limits
Cement Mill-4 Baghouse	17.8	18.2	17.5	18.0	17.8	18.0	21.6	0.0	18.5	21.0	17.5	16.1	Within the limits
Lime Stone Crusher Baghouse	16.0	18.0	16.0	15.0	14.7	15.0	16.0	15.8	16.2	15.5	19.5	18.4	Within the limits

SD –Shut Down

Line-1 Stack Emissions-mg/Nm3

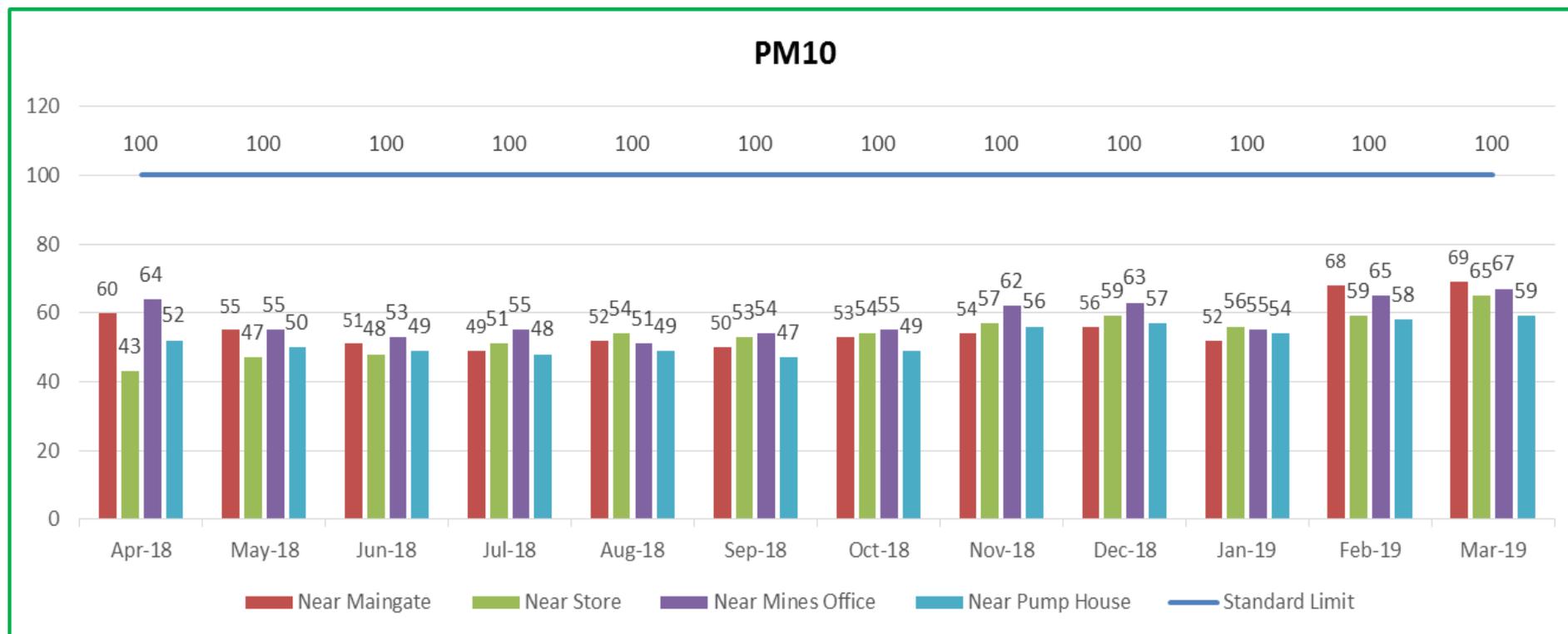


Line-2 Stack Emissions-mg/Nm3

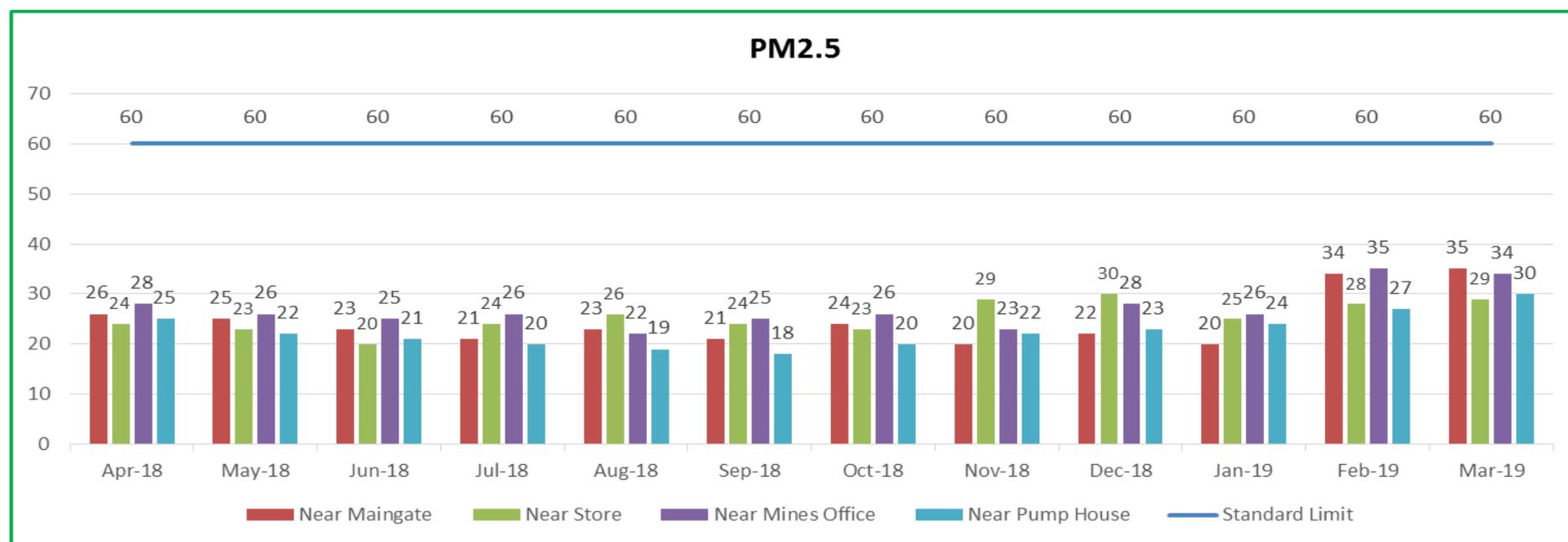


AMBIENT AIR QUALITY RESULTS FOR THE YEAR -2018-19

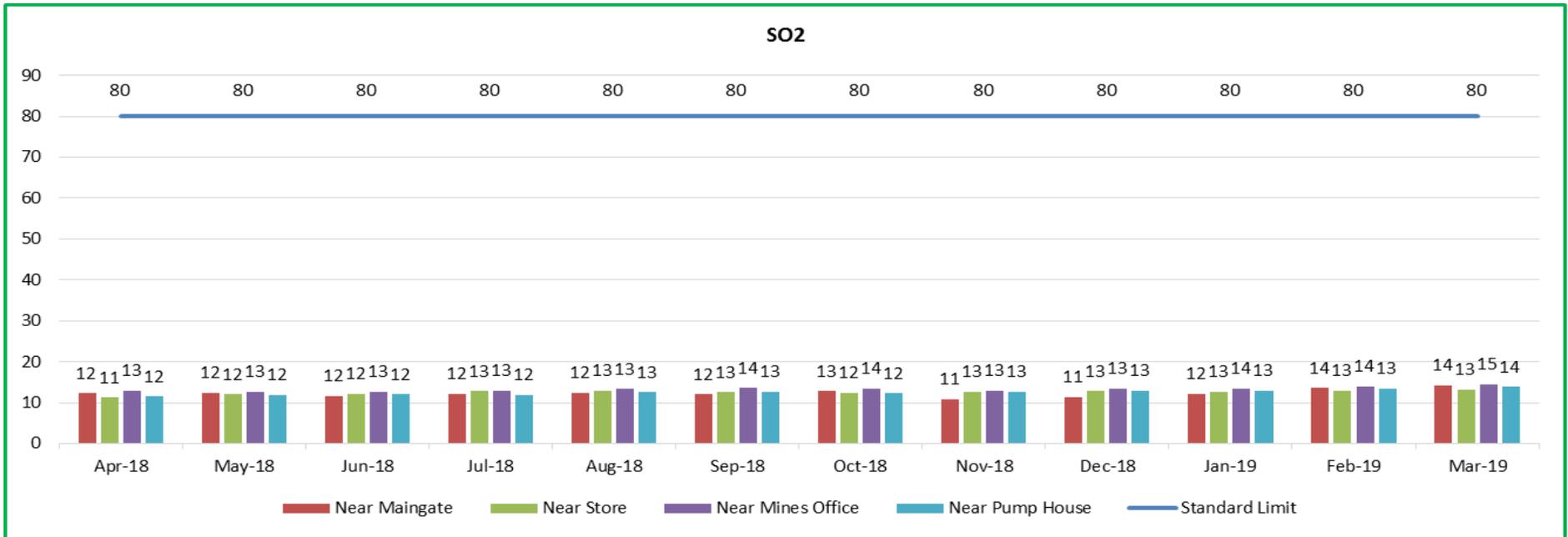
PM10- µg/m3	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
Standard Limit	100	100	100	100	100	100	100	100	100	100	100	100
Near Main gate	60	55	51	49	52	50	53	54	56	52	68	69
Near Store	43	47	48	51	54	53	54	57	59	56	59	65
Near Mines Office	64	55	53	55	51	54	55	62	63	55	65	67
Near Pump House	52	50	49	48	49	47	49	56	57	54	58	59



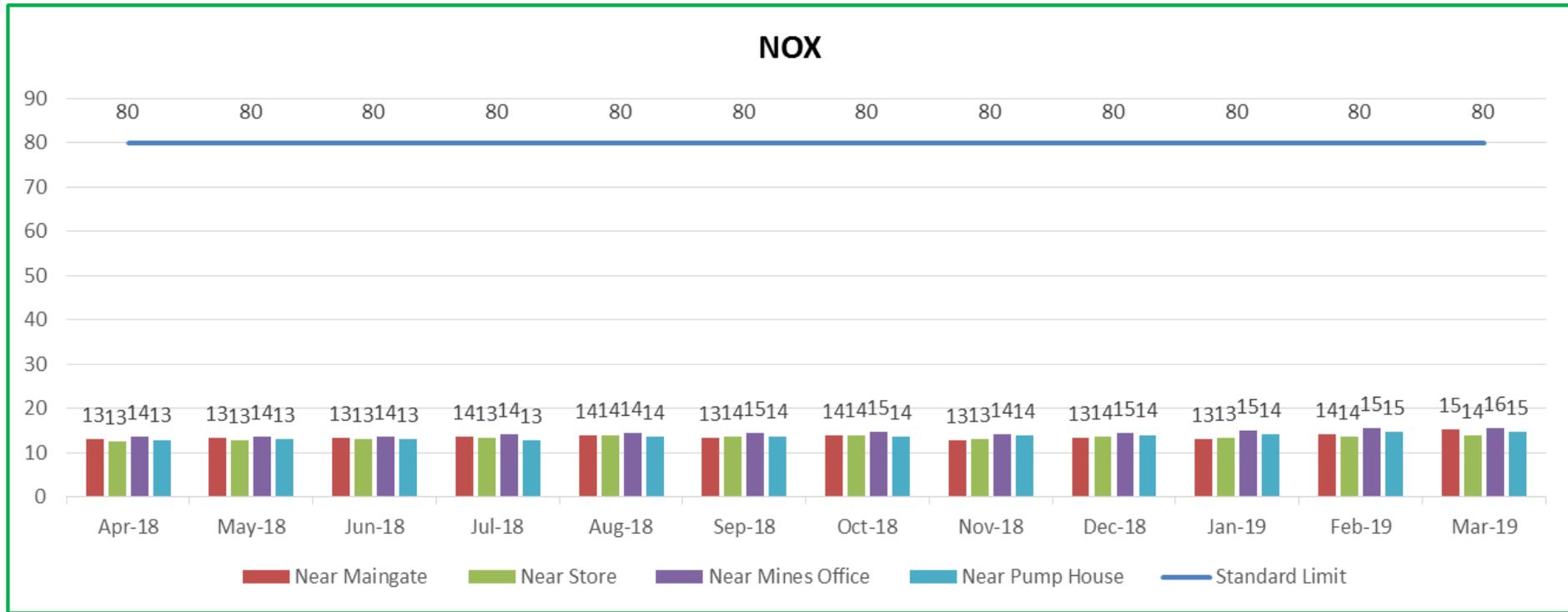
PM2.5 µg/m3	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
Standard Limit	60	60	60	60	60	60	60	60	60	60	60	60
Near Main gate	26	25	23	21	23	21	24	20	22	20	34	35
Near Store	24	23	20	24	26	24	23	29	30	25	28	29
Near Mines Office	28	26	25	26	22	25	26	23	28	26	35	34
Near Pump House	25	22	21	20	19	18	20	22	23	24	27	30



SO2 µg/m3	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
Standard Limit	80	80	80	80	80	80	80	80	80	80	80	80
Near Maingate	12.3	12.4	11.6	12.2	12.4	12	12.8	10.9	11.3	12.2	13.6	14.3
Near Store	11.2	12	12.2	12.8	13	12.5	12.4	12.6	12.8	12.6	12.9	13.1
Near Mines Office	12.9	12.6	12.7	13	13.3	13.6	13.5	13	13.4	13.5	14	14.5
Near Pump House	11.5	11.9	12	11.9	12.5	12.7	12.3	12.7	12.9	13	13.4	13.8



NOX µg/m ³	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
Standard Limit	80	80	80	80	80	80	80	80	80	80	80	80
Near Main gate	13.1	13.4	13.3	13.6	13.8	13.4	13.9	12.8	13.2	13	14.2	15.2
Near Store	12.5	12.8	13	13.2	14	13.6	14	13	13.5	13.4	13.5	13.8
Near Mines Office	13.6	13.5	13.6	14.2	14.4	14.5	14.7	14.2	14.5	15	15.4	15.6
Near Pump House	12.9	13	13.1	12.8	13.6	13.7	13.5	13.8	14	14.2	14.6	14.7



Note: All Ambient Air Quality Parameters are found well within the limit.

AMBIENT NOISE RESULTS FOR THE YEAR -2018-19

	APR' 18	May' 18	JUN '18	JUL '18	AUG '18	SEPT 18	OCT' 18	NOV' 18	DEC' 18	JAN' 19	FEB' 19	MAR' 19
	D	D	D	D	D	D	D	D	D	D	D	D
Plant Boundary- East	69.1	70.2	68.4	66.2	68.4	66.5	62.8	67.2	61.4	62.3	61.8	62.5
Plant Boundary-West	71.3	71	69.2	68.1	69.2	67.3	66.7	68.1	67.3	65.9	66.7	68.1
Plant Boundary-North	68.5	69.7	65.3	64.8	67.3	64.1	65.3	66.8	66.5	64.9	67.2	69.8
Plant Boundary-South	70.4	72	70	69.7	66.7	66.9	67	67.3	69.3	68.7	69.3	70.2
Near Health Centre	57.8	58.3	57.3	56.4	58.8	57.3	56.9	59.6	59.3	58.1	57.6	56.5
Near New Guest House	58.4	59	55.9	54.9	59.3	55.3	58.7	59.1	55.7	56.1	55.5	54.3

	APR' 18	May' 18	JUN '18	JUL '18	AUG '18	SEPT 18	OCT' 18	NOV' 18	DEC' 18	JAN' 19	FEB' 19	MAR' 19
	N	N	N	N	N	N	N	N	N	N	N	N
Plant Boundary- East	58.7	59.6	56.9	57.3	57.9	58.1	59.4	53.5	53.8	54.6	55.6	54.6
Plant Boundary-West	65.4	66.3	58.3	58	60.1	59.5	60.2	62.4	51.9	52.4	53.1	56.2
Plant Boundary-North	60.2	62	55	56.6	59.4	57.3	58.3	61.4	57.3	56.3	54.9	55.1
Plant Boundary-South	59.6	60.1	60.8	59.8	61.3	60.2	61.8	60.1	58.1	57.2	58.3	59.4
Near Health Centre	46	49.4	52	51.7	49.3	49.4	50.3	50.2	49.6	48.4	49.4	48.1
Near New Guest House	45.1	48	49.8	48.5	48.4	48.9	49.6	52.1	50.1	47.3	48	49.6

D-DAY TIME

N-NIGHT TIME

PART - D

HAZARDOUS WASTE

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

Hazardous Waste (*)	Total Quantity (Kg)	
	During Previous financial year 2017-18	During current financial year 2018-19
(a) From Process		
(i) Waste / residue containing oil	2.0 MT	9.28 MT
(ii) Waste Oil	3.93 MT	8.53 MT
(iii) Used Batteries	1.08 MT	NIL
(b) From Pollution Control Facility	NIL	NIL

Note: Waste Oil and Grease Generated from Cement Plant & Lime stone Mines.
Hazardous waste disposed to authorized recyclers approved by CPCB/APPCB.
And also Co - Processed of other industries wastes as Alternate Fuel in our kiln.
Details of Alternate fuels 2018-19 are given below:

Year	Name of the waste Co processed	Hazardous / non Hazardous	Qty of Co processed in Tons
April 2018 to March 2019	Rice Husk	Non Hazardous	14511
	jawar husk	Non Hazardous	881
	Ground nut shell	Non Hazardous	10650
	Coconut waste	Non Hazardous	3455
	Solid RDF	Non Hazardous	NIL
	Tyre carbon powder	Non Hazardous	377
	Spent carbon –Pharma Industry	Hazardous	902
	Liquid pharma waste(Distillation Residue & Organic Spent Solvent)	Hazardous	4431
	Solid pharma waste(Distillation Residue, Organic Spent Solvent)	Hazardous	4221
	Shreaded Tyres	Non Hazardous	4261

PART – E

SOLID WASTE

Name of Product	Total Quantity	
	During the Previous financial year 2017-18	During the current financial year 2018-19
(a) From Process	Nil	Nil
(b) From Pollution Control Facility	Dust collected in the ESP, Bag Houses and Bag Filters are recycled to the Process	
(c) Quantity recycled or Reutilized.	100%	100%

PART - F

Please specify characterization (in terms of composition of quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes:

Hazardous Wastes: Waste Oil and Grease Generated from Cement Plant & Lime stone Mines.
Hazardous waste disposed to authorized recyclers approved by CPCB/APPCB and used batteries are sold to authorized recyclers.

Solid Waste : Sludge at Sewage Treatment Plant is used as manure for Plantation purpose.

PART - G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production:

M/s Zuari Cement Limited is being operated on dry process technology, which is cost effective and environmentally clean technology. The advantage of dry process is also in fuel economy. The stack emissions from the plant are controlled by equipment like ESP and Bag Houses. Bag Filters have been installed at all material transfer points to clean the process and arrest the fugitive emissions. The particulate matter collected in the pollution control equipment is recycled in process and neutralizing the cost of operation of pollution control equipment's and hence no cost impact on the production cost.

To emphasis on conservation of the natural resources & to reduce the disposal problems of the waste, we are using Pharma waste, Refuse Derived Fuel (RDF) & Shredded Tyre Chips and biomass wastes as alternative fuel in our kiln.

M/s Zuari Cement Limited has installed 500kva solar power plant at the plant premises.

PART - H

Additional measures investment proposal for environmental protection including abatement of pollution, prevention of pollution.

- Electrostatic Precipitators are conventionally used for Pollution Control in cement Plants. Zuari has gone a step further and invested enormously to reduce emissions levels by replacing the ESP with BAGHOUSE in Line-1 Kiln section, Pre Calciner Section, Cement Mill – 1 & Cement mill-3.

Replaced L-1 C line ESP by Baghouse



Replaced L-1 K line ESP by Baghouse



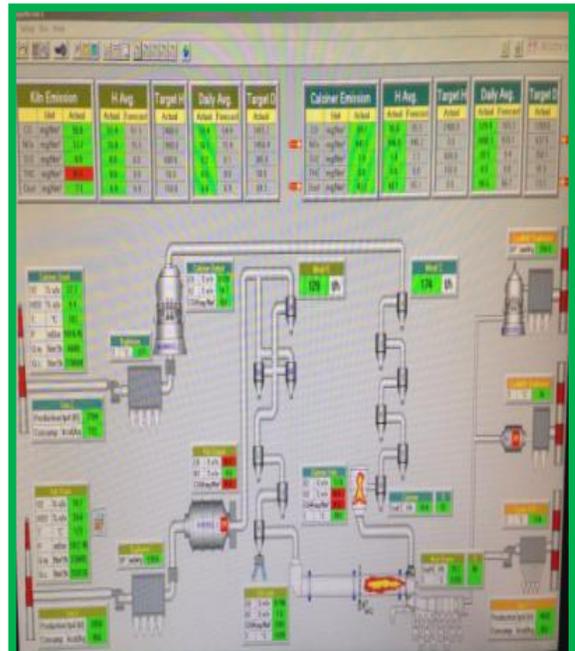
To reduce the fugitive emissions we had installed additional bag filters at clinker belt area.



Coal Shed has been constructed for coal storage to avoid fugitive emissions.



Installed Continues Emission monitoring system for Dust and Gases.



Emission parameters Display at Main gate

Zuari Cement
HEIDELBERGCEMENT GROUP

Data for the Month of:

A. Stack Emission

Sl.No	Stack Attached to	PCEs	Emission - mg/Nm3
1	Miner + Rampway-1	Bag House	6.2
2	Preblender + Rampway-2	Bag House	7.2
3	Grinder	ESP	12.2
4	Coal Mill-1	ESP	12.2
5	Coal Mill-2	Bag House	12.2
6	Coal Mill-3	Bag House	12.2
7	Coal Mill-4	Bag House	12.2
8	Coal Mill-5	Bag House	12.2
9	Coal Mill-6	Bag House	12.2
10	Coal Mill-7	Bag House	12.2
11	Coal Mill-8	Bag House	12.2
12	Coal Mill-9	Bag House	12.2
13	Coal Mill-10	Bag House	12.2
14	Coal Mill-11	Bag House	12.2
15	Coal Mill-12	Bag House	12.2
16	Coal Mill-13	Bag House	12.2
17	Coal Mill-14	Bag House	12.2
18	Coal Mill-15	Bag House	12.2
19	Coal Mill-16	Bag House	12.2
20	Coal Mill-17	Bag House	12.2
21	Coal Mill-18	Bag House	12.2
22	Coal Mill-19	Bag House	12.2
23	Coal Mill-20	Bag House	12.2
24	Coal Mill-21	Bag House	12.2
25	Coal Mill-22	Bag House	12.2
26	Coal Mill-23	Bag House	12.2
27	Coal Mill-24	Bag House	12.2
28	Coal Mill-25	Bag House	12.2
29	Coal Mill-26	Bag House	12.2
30	Coal Mill-27	Bag House	12.2
31	Coal Mill-28	Bag House	12.2
32	Coal Mill-29	Bag House	12.2
33	Coal Mill-30	Bag House	12.2
34	Coal Mill-31	Bag House	12.2
35	Coal Mill-32	Bag House	12.2
36	Coal Mill-33	Bag House	12.2
37	Coal Mill-34	Bag House	12.2
38	Coal Mill-35	Bag House	12.2
39	Coal Mill-36	Bag House	12.2
40	Coal Mill-37	Bag House	12.2
41	Coal Mill-38	Bag House	12.2
42	Coal Mill-39	Bag House	12.2
43	Coal Mill-40	Bag House	12.2
44	Coal Mill-41	Bag House	12.2
45	Coal Mill-42	Bag House	12.2
46	Coal Mill-43	Bag House	12.2
47	Coal Mill-44	Bag House	12.2
48	Coal Mill-45	Bag House	12.2
49	Coal Mill-46	Bag House	12.2
50	Coal Mill-47	Bag House	12.2
51	Coal Mill-48	Bag House	12.2
52	Coal Mill-49	Bag House	12.2
53	Coal Mill-50	Bag House	12.2
54	Coal Mill-51	Bag House	12.2
55	Coal Mill-52	Bag House	12.2
56	Coal Mill-53	Bag House	12.2
57	Coal Mill-54	Bag House	12.2
58	Coal Mill-55	Bag House	12.2
59	Coal Mill-56	Bag House	12.2
60	Coal Mill-57	Bag House	12.2
61	Coal Mill-58	Bag House	12.2
62	Coal Mill-59	Bag House	12.2
63	Coal Mill-60	Bag House	12.2
64	Coal Mill-61	Bag House	12.2
65	Coal Mill-62	Bag House	12.2
66	Coal Mill-63	Bag House	12.2
67	Coal Mill-64	Bag House	12.2
68	Coal Mill-65	Bag House	12.2
69	Coal Mill-66	Bag House	12.2
70	Coal Mill-67	Bag House	12.2
71	Coal Mill-68	Bag House	12.2
72	Coal Mill-69	Bag House	12.2
73	Coal Mill-70	Bag House	12.2
74	Coal Mill-71	Bag House	12.2
75	Coal Mill-72	Bag House	12.2
76	Coal Mill-73	Bag House	12.2
77	Coal Mill-74	Bag House	12.2
78	Coal Mill-75	Bag House	12.2
79	Coal Mill-76	Bag House	12.2
80	Coal Mill-77	Bag House	12.2
81	Coal Mill-78	Bag House	12.2
82	Coal Mill-79	Bag House	12.2
83	Coal Mill-80	Bag House	12.2
84	Coal Mill-81	Bag House	12.2
85	Coal Mill-82	Bag House	12.2
86	Coal Mill-83	Bag House	12.2
87	Coal Mill-84	Bag House	12.2
88	Coal Mill-85	Bag House	12.2
89	Coal Mill-86	Bag House	12.2
90	Coal Mill-87	Bag House	12.2
91	Coal Mill-88	Bag House	12.2
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93	Coal Mill-90	Bag House	12.2
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95	Coal Mill-92	Bag House	12.2
96	Coal Mill-93	Bag House	12.2
97	Coal Mill-94	Bag House	12.2
98	Coal Mill-95	Bag House	12.2
99	Coal Mill-96	Bag House	12.2
100	Coal Mill-97	Bag House	12.2
101	Coal Mill-98	Bag House	12.2
102	Coal Mill-99	Bag House	12.2
103	Coal Mill-100	Bag House	12.2

B. Ambient Air Quality

Pollutants	Location				
	NAAQ STD.	MAIN GATE	STORE	MINES OFFICE	PUMP HOUSE
PM10 (ug/m3)	100	48	40	44	28
PM2.5 (ug/m3)	50	26	24	26	11
SO2 (ug/m3)	80	11.3	10.9	11.6	11
NOx (ug/m3)	80	12.1	11.4	11.5	11.8

C. Discharge Water Quality

Plant maintained Zero Discharge, for cooling water close circuit arrangement, Sewage Treatment Plant installed in colony for treatment of domestic wastewater, treated water used for horticulture purpose.

Parameter	Standard (Max)	Location	
		1	2
pH	5.5-8.0		7.00
Suspended Solids	100 mg/Ltr		30
Chemical Oxygen Demand	250 mg/Ltr		30
Biological Oxygen Demand (BOD)	30 mg/Ltr		22
Oil & Grease	10 mg/Ltr		5

D. Hazardous Wastes (Qty. in Kg)

Type	Opening Stock	Generation	Disposed	Closing Stock
Waste Oil	Nil	Nil	Nil	Nil
Waste Grease	40 barrels	Nil	Nil	40 barrels

Zuari Cement
HEIDELBERGCEMENT GROUP

Monitoring Data for the Month of:

A. Static Information

Mine Lease Area: Production: 7.5MTPA
Lease Duration: up to 2032
Mines Operated Since: 1984

B. Dynamic Parameters

(i) Ambient Air Quality

Pollutants	Ambient Air Quality (Monthly Average)							
	East		West		North		East	
	1	2	1	2	1	2	1	2
PM10 (ug/m3)	47	46	41	27	31	32	41	41
PM2.5 (ug/m3)	24	25	23	21	23	24	24	26
SO2 (ug/m3)	11	11	10	10	11	11	11	12
NOx (ug/m3)	13	13	12	11	11	11	11	11

(ii) Vibration (PPV) 3 mm / sec at a distance of 500 meters from blast site.

(iii) Quality of Discharge Water:- Zero Discharge Water From Mines

1. Total Dissolved Solid (TDS) mg/Ltr	1300
2. BOD for 5 days at 27 mg/Ltr	5
3. pH	6.8
4. Total Suspended Solids (TSS) mg/Ltr	38

(iv) Greenbelt/Plantation

No. of Trees Planted till Date :	53000 nos. Around Plant, Colony & Mines
Calendar Year wise (progressive)	2016 Target is 10,000 nos

To Accurate Accounting of Water Consumption Electromagnetic water meters installed



Sewage treatment Plant for Domestic waste water treatment -250KLD.



All internal roads has been concreted and regular clean haven done by Sweeping machines.



All Raw materials and finished products kept under covered sheds/silos.



Lime stone Shed



Additives Shed



Coal Shed



Gypsum Shed



Flyash Silo



Clinker Silo

Plant has installed state of art technology system for Alternative Fuel Feeding.



Solid Waste Feeding System



Liquid Waste Feeding System

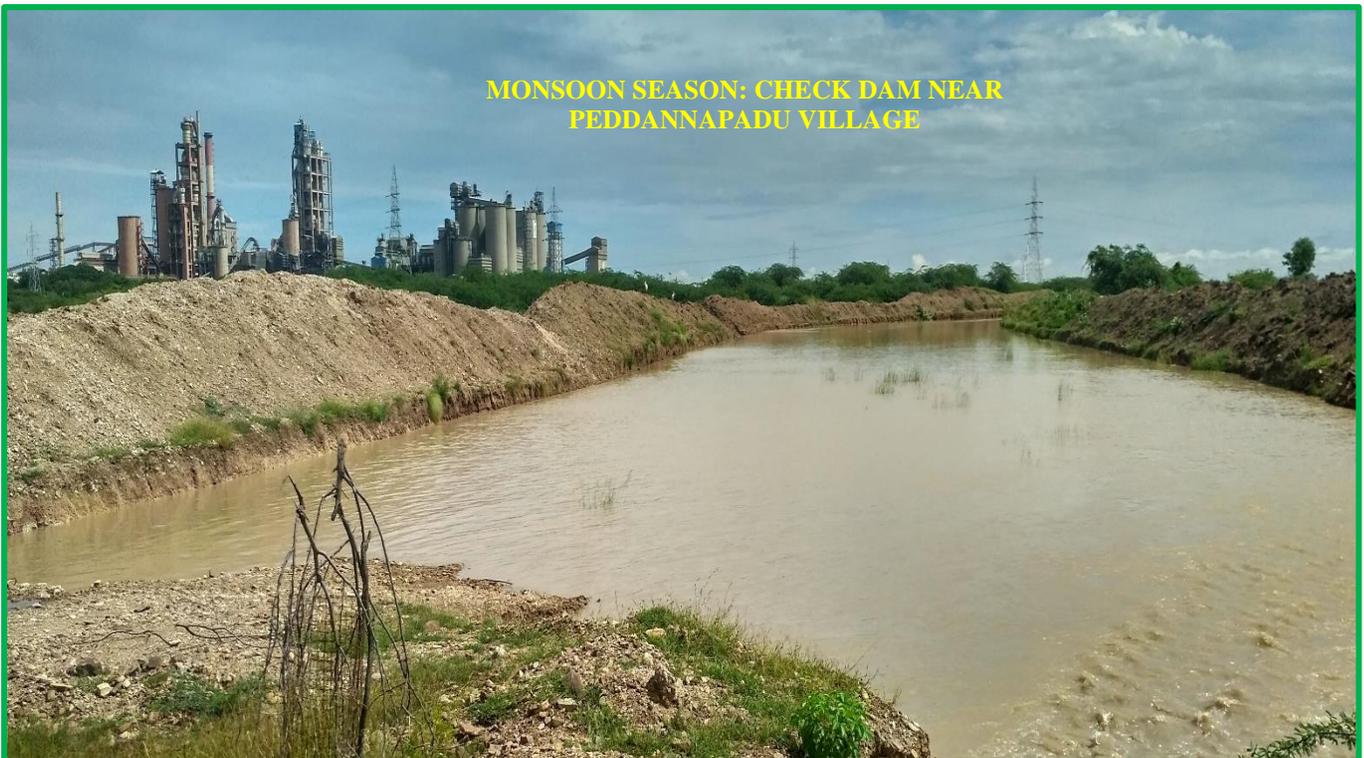
Green Belt Development



Plantation: 2018-19: Plant – 7028Nos & Mines:2850 NOs



Rain water harvesting: Achieved 4.27 times water positive during 2018





PART - I

Any other particulars for 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 in plant 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
- Installed SNCR System for NOX Emission control



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

PROCEDURE FOR HANDLING OF WASTE (HAZARDOUS AND NON HAZARDOUS)

PURPOSE : To establish a system for safe handling and transport of wastes.

SCOPE : Applicable to all Operations.

DISTRIBUTION:

Plant Head
All HOD's
Section Head's

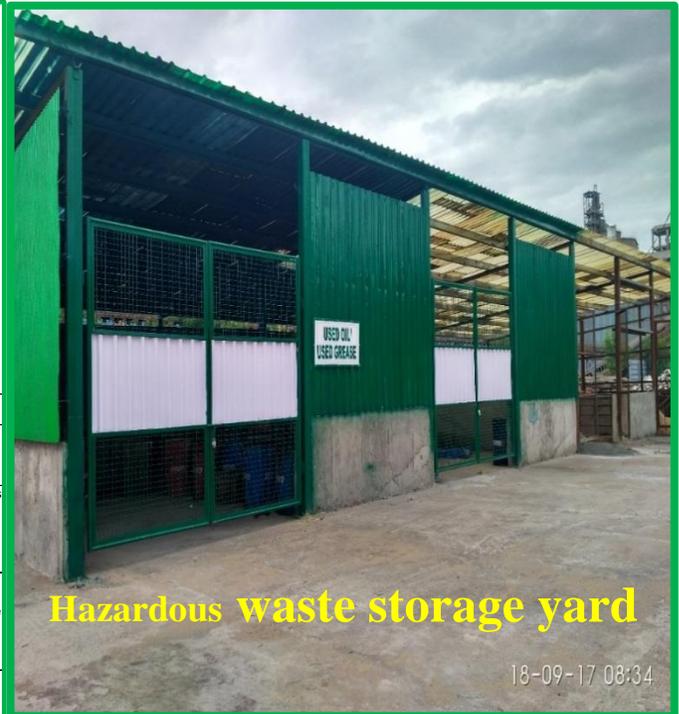
RESPONSIBILITIES:

Sectional In-charges / Executors are responsible for implementation of this procedure in their respective areas

PROCEDURE:

The following solid and liquid wastes are generated in the process of Cement manufacturing process.

SL.NO	TYPE OF WASTE	METHOD OF DISPOSAL	RESPONSIBILITY
1	Over burden	This waste is dumped to backfill at matured excavated area in pit for reclamation and rehabilitation and to make the bund as per the approved mining scheme by Indian Bureau of Mines.	HOD-Mines
2	Tyres	<ul style="list-style-type: none"> Collected at designated place in garage and transferred to scrap yard and stocked in premarked area till their disposal. Scrap Disposal form to be submit to store in charge by concerned dept. 	HOD -Mines /HEEM in charge
3	Structural Steel scrap, Used spares, Electrode Buts, conveyor belts, Hoses and Rubber Parts.	<ul style="list-style-type: none"> Collected at designated place and transferred to scrap yard and stocked in premarked area till their disposal. Scrap Disposal form to be submit to store in charge by concerned dept. 	HOD-Mech /HOD -E&I /HOD -Store
4	Electrical Cable	<ul style="list-style-type: none"> Copper and Aluminium cables are separated and Collected at designated place and transferred to Scrap yard and stocked in 	HOD-E&I



Waste bins and awareness



Awards

Environment award “Greenco Gold rating Award” From CII



Excellent Energy Efficient Plant from CII



“AP Green Award” From AP CM



MEMC Week Award



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: 'Prazna'- Skill Development programs:

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

EDUCATION PROGRAMME

School Support programme

To provide quality education is our major area of focus and concern area at Yerraguntla unit. Through our company school more than 600 students of surrounding villages are getting quality education from pre-primary till 10th std.

Through our institution, we are not only providing quality education but also providing positive environment for all round development of each students. Every year through our institution we are trying to develop topper students.



N. BHARGAVI



D. PRANAVI



S. SANUBAR



K. VYSHNAVI



P. ARUN KUMAR REDDY

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 Ophthalmology-Eye Camps, Orthopedic 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

1. 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.

1. Household Cleaning Items:

Batch Size : 16 Persons

Period : 15 Days

Trainer : Trainer from NIRD Associated Centre, Jammalamadugu

2. Training on making of Women Sanitary napkins:

Batch Size : 16 Persons

Period : 15 Days

Trainer : Naari Women Wellness Organization, Hyderabad

3. Training on Candles making:

Batch Size : 16 Persons

Period : 15 Days

Trainer : from NIRD, Jammalamadugu



INFRASTRUCTURE DEVELOPMENT

Laying of CC Road: 150 meters in villages

Detail & Photo of work



SOCIAL ENGAGEMENT

ACTIVITIES: -

1. Distribution of Buttermilk at Yerraguntla bus stand -

During summer season it is one of the unique practices we have implemented every year with the support of our Ladies club under CSR.

At the nearby town of Yerraguntla at the bus station for 40 days we provided buttermilk for all the passengers to beat the summer heat..

It gives nutrition & water supplement also during summer which helps many people every year.



Painting for 53 oil drums to ygl ps fr road safety

Safety is our prime concern as our other company values. To create awareness & enhance road safety practices we have provided 53 oil drums to Yerraguntla PS for road safety.



మహిళల అభివృద్ధి కొసమే 'ప్రజ్ఞ'



పంపిణీ కార్యక్రమాన్ని ప్రారంభిస్తున్న శివారి

ఎర్రగుంట్ల : జవారి సిమెంట్ పరిశ్రమ కుట్టు పట్టణ లామాలోని మహిళల అభివృద్ధి కొసమే ప్రజ్ఞ అనే కార్యక్రమం నిర్వహిస్తున్నట్లు జవారి డిప్యూటీ కలెక్టర్ ఎన్కె తివారి అన్నారు. ఈ సందర్భంగా ఆయన మాట్లాడుతూ సీఎస్ఆర్ నిధులతో మహిళల అభివృద్ధి కోసం అనేక సేవా కార్యక్రమాలను

నిర్వహిస్తున్నట్లు ఆయన అన్నారు. మంగళవారం జవారి సిమెంట్ కర్మాగారం కాలనీలో మహిళలకు కుట్టు మిషన్లను పంపిణీ చేశారు. సీఎస్ఆర్ నిధులతో మహిళలకు ఉచితంగా కుట్టు మిషన్లలో శిక్షణ కార్యక్రమం నిర్వహించామన్నారు. మహిళలు స్వయంగా ఉపాధి పొందడానికి ఈ శిక్షణ ఎంతో ఉపయోగపడుతున్నాయి. శిక్షణ పొందిన మహిళలకు వారి ఉపాధి కోసం మహిళా కార్యకర్తల యూనిఫామ్ కట్టి వార్యక ఇచ్చామన్నారు. సుమారు 50 మంది మహిళలకు రెండు నెలలు శిక్షణ ఇచ్చారు. అనంతరం ఉచితంగా కుట్టు మిషన్లు పంపిణీ చేశారు. కార్యక్రమంలో జవారి డిప్యూటీ సై నిమిత్ సుందరం, ప్లాంట్ హెడ్ ముంగళవారి చిట్టి, శీవంబరాల ఉమేష్, శిక్షణదారు లక్ష్మి పాల్గొన్నారు.

సాక్షి Wed, 13 March 2019 <https://epaper.sakshi.com/c/37542373>

మహిళలకు ఉచితంగా కుట్టు శిక్షణ



కుట్టుమిషన్ శిక్షణ కేంద్రంలోని మహిళలతో జవారి కలెక్టర్ తివారి

ఎర్రగుంట్ల మార్చి 12, ఎర్రగుంట్ల మండలం లోని జవారి సిమెంట్ కర్మాగారం కుట్టుపట్టణ లామాలో మహిళలకు సీఎస్ఆర్లో భాగంగా ఉచిత కుట్టుమిషన్ శిక్షణ కేంద్రాన్ని జవారి కలెక్టర్ ఎన్కె.తివారి, డిప్యూటీ సై నిమిత్ సుందరం మంగళవారం ప్రారంభించారు. సీఎస్ఆర్ నిధులతో సుమారు 50 మంది మహిళలకు కుట్టుశిక్షణ ఇస్తున్నామని శిక్షణ పొందిన వారికి ఉచితంగా మిషన్లు పంపిణీ చేస్తున్నామని, ఈ సందర్భంగా తివారి,

సుందరం మాట్లాడుతూ జవారి యాజమాన్యం ప్రజ్ఞ కార్యక్రమంలో భాగంగా అనేక కుట్టుమిషన్లలో శిక్షణ పొందిన మహిళలకు కుట్టు మిషన్లు పంపిణీ చేస్తున్నామని, స్వయంగా విద్యార్థుల యూనిఫామ్లకు కుట్టు అవకాశం కల్పిస్తున్నామని, ఈ విధంగా జీవోపాధి కలగనుతుందన్నారు. ఈ కార్యక్రమంలో ప్లాంట్ హెడ్ ముంగళవారి చిట్టి, శీవంబరాల ఉమేష్, శిక్షణదారు లక్ష్మి పాల్గొన్నారు.

ఆంధ్రజ్యోతి Wed, 13 March 2019 <https://epaper.andhragyothy.com/c/37542654>

మజ్జగ చలివేంద్రం ప్రారంభం

ప్రార్థనలకు, మే 21 యుద్ధగుంట్ల మండలంలోని జవారి సిమెంట్ పరిశ్రమ రేడిస్ క్లబ్ అధ్వర్యంలో పట్టణంలోని అగ్రసీ బస్టాండులో ఉచిత మజ్జగ కేంద్రం ప్రారంభం హెచ్ ముంగళవారిచిట్టి ప్రారంభించారు. ఈ సందర్భంగా ఆయన మాట్లాడుతూ జవారి సిమెంట్ సీఎస్ఆర్ నిధులతో గత రెండు సంవత్సరాల నుండి అగ్రసీ బస్టాండు మజ్జగ చలివేంద్రాన్ని సౌమిక వాడ్యతలో భాగంగా నిర్వహిస్తున్నామన్నారు. ఈ కార్యక్రమంలో జవారి అగ్రసీ సిబ్బంది కేరణకులు పాల్గొన్నారు.



మజ్జగ చలివేంద్రాన్ని ప్రారంభిస్తున్న కుట్టి

ఉచిత వైద్య శిబిరం



ఎర్రగుంట్ల, మే 21: జవారి సిమెంట్ కర్మాగారం అధ్వర్యంలో ఆదివారం ఉచిత వైద్యశిబిరం నిర్వహించారు. ప్లాంట్ హెచ్ ముంగళవారి ప్రసాద్చిట్టి ఈ శిబిరాన్ని ప్రారంభించారు. హైదరాబాదు నన్నపైనేకు చెందిన వైద్యులు డాక్టర్ విజయకుమార్చిట్టి, డాక్టర్ ఉమేష్ జవారి వైద్యులు సరసించాచిట్టి, శ్రీవాణి రోగులకు ఉచితంగా వైద్యాన్ని అందించారు. 128 మందికి డికిల్బంబులతోపాటు టీవీ, మగర్, ఈసీటీ, బ్లడ్ మగర్ పరీక్షలు నిర్వహించి మందులను కూడా అందించారు.

సాక్షి Mon, 27 May 2019 <https://epaper.andhragyothy.com/c/37542654>

ఉచిత వైద్య శిబిరం



వైద్య పరీక్షలు చేస్తున్న వైద్యులు
 ఎర్రగుంట్ల : మండల పరిధిలోని వై.కోడూరులో జవారి సిమెంట్ కర్మాగారం అధ్వర్యంలో మంగళవారం ఉచిత వైద్య శిబిరం నిర్వహించినట్లు వైద్యులు సరసించాచిట్టి, శ్రీవాణిలు తెలిపారు. ఈ సందర్భంగా 137 మందికి వైద్య పరీక్షలు నిర్వహించి ఉచితంగా మందులు అందజేశారు.

సాక్షి Wed, 29 May 2019 <https://epaper.sakshi.com/c/39>

CSR Expenditure 2018-19:

S. No.	Name of CSR Activities	Sub Location	Category	Sub Category	Total 2018-19
1	Operating Zuari Cement DAV School	Peddanapadu, Kodur, Thummalapalli, Valasapalli	Education	Providing quality School education to the nearby village children	6,457
2	CSR - Top 5 Scorers 10th Class 10/10 Grade Ygl			Award to the top 5 scorers in 10th class	25
3	Conducting Village Medical Camps in nearby 4 villages & Free Medicine Distribution	Peddanapadu, Thummalapalli, Kodur and Valasapalli	Health	Village Medical camps	74
4	Super Speciality Medical Camps for Employees, Contract Workmen & Nearby Villagers	Krishna Nagar		Super Speciality medical camps	250
5	Free Medicine Distribution through Health Centre	Health Centre		Distribution of Medicines	460
6	Laying of CC Road: 150 meters	Peddanapadu	Rural Development	Infrastructure development	196
7	Laying of CC Road: 150 meters	Kodur			199
8	Laying of CC Road: 150 meters	Thummalapalli			219
9	Laying of CC Road: 150 meters	Valasapalli			199
10	1HP MOTOR PUMP FOR KODUR VILLAGE RO PLANT	Kodur			7
11	Distribution of Butter Milk at Yerraguntla bus stand	Yerraguntla			130
12	Painting for 53 oil drums to ygl ps fr road safety	Yerraguntla			11
13	School building work csr- sri bhagavan dayanidhi	Yerraguntla			300

14	Contribute to ladies club to donate social service	Yerraguntla			15
15	Household Cleaning Items: Batch Size : 16 Persons Period : 15 Days Trainer : Trainer from NIRD Associated Centre, Jammalamadugu	Peddanapadu, Thummalapalli, Kodur and Valasapalli	Skill Development	Self-employment Programs	6
16	Training on making of Women Sanitary napkins: Batch Size : 16 Persons Period : 15 Days Trainer : Naari Women Wellness Organization, Hyderabad	Peddanapadu, Thummalapalli, Kodur and Valasapalli			288
17	Training on Candles making: Batch Size : 16 Persons Period : 15 Days Trainer : from NIRD, Jammalamadugu	Peddanapadu, Thummalapalli, Kodur and Valasapalli			11
18	Training on Tailoring and Distribution of stitching machines Batch Size : 50 women Period : 2 Months Trainer : Mrs Laxmi, Tailor from Yerraguntla	Peddanapadu, Thummalapalli, Kodur and Valasapalli			3
19	Contribution to District Administration for Legal Awareness campaign	Kadapa			500
	Total in KINR				