

Ref: SJCP/ENV/2024-25

Dates: 06.09.2024

To,
The Environmental Engineer,
AP Pollution Control Board, Regional Office,
3rd Floor, Dr. YSR Paryavaran Bhavan,
Venkata Ramana colony,
Road No.2, Labour Colony,
Kurnool – 518 002

Sub: - Submission of Environmental Statement in Form-V for Cement Plant for the Financial
Year 2023-2024 - reg

Dear Sir,

With reference to the above subject, please find enclosed herewith the Cement Plant
Environmental Statement in Form-V for the financial year ending 31st March 2024 as
required under the Environment Protection Rules 1986.

This is for your kind information and records please.

Thanking you,

Yours faithfully,

For **Sree Jayajothi Cements Private Limited**

B. C. Gurivi Reddy
Sr. Vice President (Works)



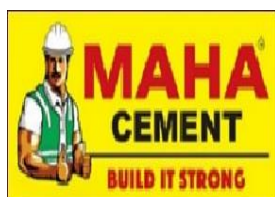
CC To: **The Member Secretary,**
Andhra Pradesh Pollution Control Board,
Dr. YSR Paryavaran Bhavan,
APIIC Colony Road, Gurunanak Colony,
Autonagar, Vijayawada-520007.

CEMENT PLANT

(CLINKER – 2.2 Million TPA & CEMENT – 3.2 Million TPA)

ENVIRONMENTAL STATEMENT (FORM-V)

FINANCIAL YEAR 2023-2024



M/s. SREE JAYAJOTHI CEMENTS PRIVATE LIMITED

(AN ISO 9001:2015, 14001:2015, 50001:2018 & OHSAS 45001:2018

Certified Company)

Sri Nagar, Yanakandla Village, Banaganapalle (Mandal),

Nandyal (District), Andhra Pradesh – 518124

ENVIRONMENTAL STATEMENT FORM – V

(See rule 14)

Environmental Statement for the financial year ending 31st March 2024

PART – A

i) Name and address of the owner/

Occupier of the industry operation:

Sri. Chandra Shekhar Pandey

Director - Operations

M/s. SREE JAYAJOTHI CEMENTS PRIVATE LIMITED

Sri Nagar, Yanakandla Village,

Banaganapalle Mandal, Nandyal District,

Andhra Pradesh – 518 124.

Operation or Process

ii) Industry Category : Red Category

iii) Production capacity of units:

Capacity of Clinker : 2.2 Million TPA

Capacity of Cement : 3.2 Million TPA

iv) Date of last Environment statement submitted: 08.09.2023

(For the year 2022-2023)

PART B

WATER AND RAW MATERIAL CONSUMPTION

Water consumption (m³/day)

Process /Cooling : 491.1 m³/day

Domestic : 72.0 m³/day

Greenbelt : STP Treated waste water utilized for greenbelt

Total water Consumption for 2023-24: 193164 KL

Name of the products	Process water consumption per unit of products (KL/MT)	
	During the previous financial year(2022-2023)	During the current financial year (2023-2024)
Cement	0.078 KL/MT	0.093 KL/MT

2. Raw Material Consumption

Cement Production for 2023-24: 2407376 MT

Clinker Production for 2023-24 : 1785261 MT

S.NO	Name of the Raw Material	Name of the Product	Consumption of Raw Material (tonnes/tonne of product)	
			During the previous financial year 2022-2023	During current financial year 2023-2024
1	Lime stone	Clinker	1.3994	1.3985
2	Additives		0.1206	0.1214
3	EAF Slag		0.0000	0.0001
4	Coal (fuel)		0.112	0.087
5	Alternate Fuel		0.004	0.038
1	Gypsum	Cement	0.0388	0.0364
2	Fly Ash		0.1316	0.1550
3	Slag		0.0951	0.0681
4	Lime stone (Performance Improver))		0.0261	0.0242

PART C

POLLUTION DISCHARGED TO ENVIRONMENT/UNIT OF OUTPUT

(Parameter as specified in the consent issued)

Pollutants	Quantity of pollutants discharged	Concentration of pollutants in discharge	Percentage of variation from prescribed standards with reasons
a)Water	Dry process is adopted for cement manufacturing. There is no process wastewater generation. Domestic wastewater is being treated in Sewage Treatment Plant and utilizing for gardening. Photo Enclosed		
b)Air	Ambient Air quality Monitoring data attached as Annexure-IV		

The value represents arithmetic average of 12 months for financial year 2023-2024

Stack Attached to	Pollutants	Quantity of pollutants discharged (Approx. Kg/Day)	Concentrations of Pollutants in discharge Yearly Average (mg/Nm3)	Percentage of variation from Prescribed Standards
Crusher	PM	312.3	21.2	23 % Less
Raw Mill / Kiln	PM	208.1	16.3	40%Less
	SO2	3.4	1.6	93% Less
	NOx	1049.5	219.73	70 % Less
Coal Mill	PM	111.1	12.8	47% Less
Cooler ESP	PM	17.5	17.7	33 % Less
Cement Mill	PM	192.1	14.8	50 % Less

PART - D

HAZARDOUS WASTE

As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

Hazardous waste	Total quantity	
	During the previous financial year (2022-2023)	During the current financial year (2023-2024)
From process	-	-
Waste oil (in MT)	6.98 MT	0.97 MT
Waste grease (in Kgs)	2 MT	-
From pollution control facilities	-	-
Co-processing of HW in Kiln	7493.72 MT	19562.105

**PART – E
SOLID WASTES**

<u>S. No</u>	Solid Waste	<u>Total Quantity</u>	
		During the Previous financial year (2022-2023)	During the current financial year (2023-2024)
(a)	From Process	Nil	Nil
(b)	From Pollution Control Facilities	Nil	Nil
(c)	1. Quantity recycled or re-utilized within the unit.	Nil	Nil
	2.Sold	Nil	Nil
	3. Disposed	Nil	Nil

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

Waste oil and Waste grease generated from motor gearboxes are being sold to APPCB authorized re-processor agencies through APEMCL portal/ Co-processing in our Cement kiln as Alternative fuel.

PART-G

IMPACT OF THE POLLUTION CONTROL MEASURES ON CONSERVATION OF NATURAL RESOURCES AND CONSEQUENTLY ON THE COST OF PRODUCTION.

Fly ash is being used for manufacturing Portland Pozzolona Cement. Due to use of fly ash, limestone consumption per ton of cement manufacturing is reduced and waste is being utilized. In the year 2023-24, **294188.088** tons of fly ash was utilized for PPC production.

Dust collected in the pollution control system is 100% recycled back into process.

Domestic wastewater is treated in sewage treatment plant and 100% re-used for watering greenbelt & gardens within the plant premises.

PART-H

ADDITIONAL INVESTMENT FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION.

Greenbelt was developed in an area of about 6.0 ha. With 5493.0 number of plantations and spent Rs.55.0 Lakhs for greenbelt maintenance and development during 2023-2024. During financial year 2023-24 it is proposed to developed greenbelt with about 5,000 trees. We have spent Rs.19.0 Lakhs towards Environmental monitoring.

Greenbelt Development Photos are enclosed

PART – I

ANY OTHER PARTICULARS IN RESPECT OF ENVIRONMENTAL PROTECTION AND ABATEMENT OF POLLUTION

1. Continuous emission monitoring system (CEMS) connected to APPCB and CPCB servers.
2. We have installed Hazardous waste Liquid feeding Alternative feeding system.
3. We have installed Hazardous, Nonhazardous and other Solid waste feeding system.
4. CC roads have been laid to control fugitive dust emission. Photo attached as
5. Every Saturday we are conducting water savings and energy savings awareness Programme at our main gate
6. Weather protection covering sheds were provided at all raw materials conveying transfer points to control fugitive dust.
7. Wind shelter fencing of 8 m (24 fts) height is constructed all around the raw materials storage yards.
8. We have provided atomized water sprinklers in coal yard, slag yard for dust suppression
9. Road sweepers & vacuum cleaner is deployed and good housekeeping is being maintained for controlling secondary fugitive dust emissions
10. Concreted in different areas for controlling fugitive dust.
11. Hood coverings provided for all conveyor belts.
12. No effluent is generated and discharged from our cement plant. Generated domestic wastewater is being treated in 300 KLD Sewage Treatment Plant. Treated water is being used for Green Belt Development in and around the plant
13. Maintaining speed-limit of vehicle @20 Km/Hr for controlling fugitive dust.
14. Success in efforts of ensuring accident free working conditions for workers.
15. Rain water harvesting structures are developed in around the plant. All the storm water connected to RWH structures.
16. Power generation of 7.0 MW with Waste Heat Recovery Power plant as part of sustainable development & for reducing carbon emissions.
17. Solar Power Plant was installed with a capacity of 11.2 MW
18. Sree Jayajothi Cements Private Limited has spent about Rs. **97,87,500** towards welfare & community development activities (CSR) in the nearby villages during the financial year 2023 -24

Environmental Campaign & Awareness:

Every year World Environment day is being celebrated in the year 2023 we have celebrated in Plant premises. On the occasion of world environment day, all employees and workers gathered in Plant. The environment pledge was being taken by all for environment conservation and continuous efforts to make a green and healthy environment.

Plantation was done during world environment day program 5th June 2023

Glimpses of World Environment Day – 2023 Celebration







CC ROAD IN CEMENT PLANT AREA



WEATHER PROTECTION COVERING SHEDS

PERCOLATION PIT



AMBIENT AIR QUALITY MONITORING DATA (2023-24):

PM10 ($\mu\text{g}/\text{m}^3$)	Apr'23	May'23	June'23	July'23	Aug'23	Sep-23
Cement Plant Main Gate	64.6	61.9	65.4	63.1	66.9	62.4
Near Colony	55.8	58.2	60.1	56.9	58.4	54.3
Near RO Plant	62.5	56.4	58.2	60.7	63.4	60.3
Near Packing Plant	68.4	71.2	68.3	66.8	69.5	66.8
PM10 ($\mu\text{g}/\text{m}^3$)	Oct'23	Nov'23	Dec'23	Jan'24	Feb'24	Mar'24
Cement Plant Main Gate	64.1	66.3	62.94	64.3	60.4	62.8
Near Colony	51.7	55.4	53.71	57.12	54.6	52.8
Near RO Plant	62.4	60.4	58.32	61.7	63.2	68.3
Near Packing Plant	68.1	71.4	66.72	69.2	67.3	70.4
PM2.5 ($\mu\text{g}/\text{m}^3$)	Apr'23	May'23	June'23	July'23	Aug'23	Sep-23
Cement Plant Main Gate	23.2	22.4	25.5	23.7	25.7	22.8
Near Colony	19.7	21.5	22.9	18.4	21.5	17.4
Near RO Plant	22.4	19.4	21.5	22.5	23.8	24.8
Near Packing Plant	25.7	28.4	26.9	25.6	27.6	26.7

PM2.5 ($\mu\text{g}/\text{m}^3$)	Oct'23	Nov'23	Dec'23	Jan'24	Feb'24	Mar'24
Cement Plant Main Gate	23.9	25.7	23.53	24.1	22.9	23.7
Near Colony	19.5	21.9	19.82	22.16	20.2	18.5
Near RO Plant	22.9	23.7	21.7	23.5	25.4	26.2
Near Packing Plant	28.6	30.3	27.56	29.3	28.1	30.5

SO2 ($\mu\text{g}/\text{m}^3$)	Apr'23	May'23	June'23	July'23	Aug'23	Sep-23
Cement Plant Main Gate	11.4	10.2	9.5	10.9	12.3	11.4
Near Colony	8.1	6.4	7.1	6.7	8.4	7.6
Near RO Plant	10.2	8.6	6.4	7.8	10.4	9.6
Near Packing Plant	13.2	12.5	11.7	12.3	13.2	10.4
SO2 ($\mu\text{g}/\text{m}^3$)	Oct'23	Nov'23	Dec'23	Jan'24	Feb'24	Mar'24
Cement Plant Main Gate	10.7	12.4	10.63	8.4	9.3	11.3
Near Colony	6.2	5.8	6.4	7.25	5.8	6.4
Near RO Plant	8.3	10.6	9.43	11.3	8.4	9.2
Near Packing Plant	12.3	13.7	11.93	12.4	10.9	12.3

Nox ($\mu\text{g}/\text{m}^3$)	Apr'23	May'23	June'23	July'23	Aug'23	Sep-23
Cement Plant Main Gate	23.1	21.8	19.3	22.8	24.8	25.6
Near Colony	19.2	16.3	18.5	16.2	18.7	19.2
Near RO Plant	20.8	18.3	16.3	17.4	22.5	20.7
Near Packing Plant	25.6	23.9	22.6	24.7	26.7	22.6

Nox ($\mu\text{g}/\text{m}^3$)	Oct'23	Nov'23	Dec'23	Jan'24	Feb'24	Mar'24
Cement Plant Main Gate	21.5	23.8	21.95	19.29	20.6	22.6
Near Colony	16.8	15.5	16.96	17.64	15.2	16.8
Near RO Plant	17.2	20.4	18.84	22.4	19.6	21.5
Near Packing Plant	24.5	25.8	23.95	25.6	23.7	25.8

Stack Emission Monitoring Report: (2023-24)

Stack Name	Parameter	Apr'23	May'23	June'23	July'23	Aug'23	Sept'23
Kiln Stack	SPM	16.2	14.8	15.9	17.2	14.4	16.2
	SO ₂	2.7	2.2	2.3	2.1	1.9	1.6
	NO _x	224.6	232.4	225.1	221.6	216.5	208.3
Coal Mill Stack	SPM	12.4	11.5	13.4	10.5	12.8	13.9
Cooler Stack	SPM	18.5	17.4	16.8	18.3	17.2	15.5
Cement Mill Stack	SPM	14.3	13.5	12.3	14.7	16.4	14
Lime Stone Crusher Stack	SPM	21.9	19.4	20.5	22.4	23.8	21.7

Oct'23	Nov'23	Dec'23	Jan'24	Feb'24	Mar'24	Average
15.4	17.1	19.25	16.59	18.12	15.25	16.37
1.2	1.4	1.1	1.2	1.05	1.1	1.65
202.5	211.7	225.7	218.4	223.1	226.9	219.73
11.5	15.6	13.76	14.7	12.4	11.8	12.86
18.1	14.9	16.7	18.9	19.3	21.5	17.76
15.4	12.8	14.25	15.8	13.47	20.75	14.81
18.9	20.4	22.7	24.35	22.81	16.25	21.26

300 KLD Sewage Treatment Plant



Greenbelt Development Photos





Greenbelt Development at Colony

