

Ref: SJCPL /ENV/2023-24

Dates: 08.09.2023

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

Sub: - Cement Plant Environmental Statement for the Financial Year 2022-2023 - 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 31<sup>st</sup> March 2023 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)**



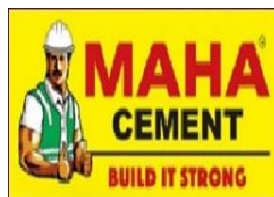
CC To: **The Member Secretary,**  
Andhra Pradesh Pollution Control Board,  
Dr. YSR Paryavaran Bhavan,  
APIIC Colony Road, Gurunanak Colony,  
Autonagar, Vijayawada-520007.

# CEMENT PLANT

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

ENVIRONMENTAL STATEMENT (FORM-V)

FINANCIAL YEAR 2022-2023



**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 31<sup>st</sup> March 2023

## **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: 03.09.2022

(For the year 2021-2022)

## **PART B**

### **WATER AND RAW MATERIAL CONSUMPTION**

Water consumption (m<sup>3</sup>/day)

Process /Cooling : 452.8 m<sup>3</sup>/day

Domestic : 72.0 m<sup>3</sup>/day

Greenbelt : STP Treated waste water utilized for greenbelt

Total water Consumption for 2022-23: 165272 KL

<b>Name of the products</b>	<b>Process water consumption per unit of products (KL/MT)</b>	
	<b>During the previous financial year(2021-2022)</b>	<b>During the current financial year (2022-2023)</b>
Cement	0.065 KL/MT	0.078 KL/MT

## 2. Raw Material Consumption

Cement Production for 2022-23: 2101022 MT

Clinker Production for 2022-23 : 1683872 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 <b>2021-2022</b>	During current financial year <b>2022-2023</b>
1	Lime stone	Clinker	1.3969	<b>1.3994</b>
2	Additives		0.1223	<b>0.1206</b>
3	EAF Slag		0.0008	<b>0.0000</b>
4	Coal (fuel)		0.1039	<b>0.112</b>
5	Alternate Fuel		0.003	<b>0.004</b>
1	Gypsum	Cement	0.0415	<b>0.0388</b>
2	Fly Ash		0.0932	<b>0.1316</b>
3	Slag		0.0804	<b>0.0951</b>
4	Lime stone (Performance Improver))		0.0301	<b>0.0261</b>

**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
<b>a)Water</b>	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.		
<b>b)Air</b>	Ambient Air quality Monitoring data attached as <b>Annexure-IV</b>		

The value represents arithmetic average of 12 months for financial year 2022-2023

Stack Attached to	Pollutants	Quantity of pollutants discharged (Approx. Kg/day)	Concentrations of Pollutants in discharge Yearly Average (mg/Nm <sup>3</sup> )	Percentage of variation from Prescribed Standards
Crusher	PM	5.5	<b>23</b>	23 % Less
Raw Mill / Kiln	PM	15	<b>17.9</b>	40%Less
	SO <sub>2</sub>	150	<b>6.7</b>	93% Less
	NO <sub>x</sub>	320	<b>241.6</b>	70 % Less
Coal Mill	PM	18.2	<b>15.9</b>	47% Less
Cooler ESP	PM	7.3	<b>20.2</b>	33 % Less
Cement Mill	PM	12.5	<b>15.1</b>	50 % Less

**PART - D**

**HAZARDOUS WASTE**

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

<b>Hazardous waste</b>	<b>Total quantity</b>	
	<b>During the previous financial year (2021-2022)</b>	<b>During the current financial year (2022-2023)</b>
From process	-	-
Waste oil (in MT)	2.0 MT	6.98 MT
Waste grease (in Kgs)	-	2 MT
From pollution control facilities	-	-
Co-processing of HW in Kiln	5862.6 MT	7493.72 MT

**PART – E  
SOLID WASTES**

<b>S. No</b>	<b>Solid Waste</b>	<b>Total Quantity</b>	
		<b>During the Previous financial year (2021-2022)</b>	<b>During the current financial year (2022-2023)</b>
(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.

## **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 2022-23, 276417.000 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 5158.00 number of plantations and spent Rs.48.0 Lakhs for greenbelt maintenance and development during 2022-2023. 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.

## 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. CC roads have been laid to control fugitive dust emission. Photo attached as
4. Every Saturday we are conducting water savings and energy savings awareness Programme at our main gate
5. Weather protection covering sheds were provided at all raw materials conveying transfer points to control fugitive dust.
6. Wind shelter fencing of 8 m (24 fts) height is constructed all around the raw materials storage yards.
7. We have provided atomized water sprinklers in coal yard, slag yard for dust suppression
8. Road sweepers & vacuum cleaner is deployed and good housekeeping is being maintained for controlling secondary fugitive dust emissions
9. Concreted in different areas for controlling fugitive dust.
10. Hood coverings provided for all conveyor belts.
11. 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
12. Maintaining speed-limit of vehicle @20 Km/Hr for controlling fugitive dust.
13. Success in efforts of ensuring accident free working conditions for workers.
14. Rain water harvesting structures are developed in around the plant. All the storm water connected to RWH structures.
15. Power generation of 7.0 MW with Waste Heat Recovery Power plant as part of sustainable development & for reducing carbon emissions.
16. Solar Power Plant was installed with a capacity of 11.2 MW
17. Sree Jayajothi Cements Private Limited has spent about Rs. **1,24,95,000.00** towards welfare & community development activities (CSR) in the nearby villages during the financial year 2022 -23



## Environmental Campaign & Awareness:

Every year World Environment day is being celebrated in the year 2022 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 5<sup>th</sup> June 2022

### Glimpses of World Environment Day – 2022 Celebration







Annexure-I



CC ROAD IN CEMENT PLANT AREA

**Annexure-II**



**WEATHER PROTECTION COVERING SHEDS**

**Annexure-III**



**PERCOLATION PIT**

## AMBIENT AIR QUALITY MONITORING DATA (2022-23):

<b>PM10 (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Apr-22</b>	<b>May-22</b>	<b>Jun-22</b>	<b>Jul-22</b>	<b>Aug-22</b>	<b>Sep-22</b>
<b>Cement Plant Main Gate</b>	62.9	68.2	65.5	62.9	64.7	66.8
<b>Near Colony</b>	54.7	56.3	54.1	52.7	50.2	54.7
<b>Near RO Plant</b>	68.2	64.5	61.9	67.8	69.7	67.1
<b>Near Packing Plant</b>	75.6	77.3	72.6	76.29	73.44	71.6
<b>PM10 (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Oct-22</b>	<b>Nov-22</b>	<b>Dec-22</b>	<b>Jan-23</b>	<b>Feb-23</b>	<b>Mar-23</b>
<b>Cement Plant Main Gate</b>	63.1	67.4	64.9	66.7	62.9	60.4
<b>Near Colony</b>	52.9	54.3	56.7	58.2	54.6	51.7
<b>Near RO Plant</b>	60.2	63.1	66.7	62.4	64.8	66.9
<b>Near Packing Plant</b>	69.5	72.4	70.3	74.1	72.4	70.3
<b>PM2.5 (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Apr-22</b>	<b>May-22</b>	<b>Jun-22</b>	<b>Jul-22</b>	<b>Aug-22</b>	<b>Sep-22</b>
<b>Cement Plant Main Gate</b>	24	27.1	25.7	23.4	24.6	26.1
<b>Near Colony</b>	20.2	23.8	22.3	19.5	17.9	21.2
<b>Near RO Plant</b>	26.5	23.8	24.7	26.4	27.6	25.7
<b>Near Packing Plant</b>	30.4	32.9	30.4	32.75	30.25	28.4

<b>PM2.5 (µg/m3)</b>	<b>Oct-22</b>	<b>Nov-22</b>	<b>Dec-22</b>	<b>Jan-23</b>	<b>Feb-23</b>	<b>Mar-23</b>
<b>Cement Plant Main Gate</b>	24.6	25.9	23.7	26.4	21.3	20.6
<b>Near Colony</b>	19.5	20.2	21.6	23.3	19.3	17.6
<b>Near RO Plant</b>	22.9	23.6	25.2	21.9	23.7	24.8
<b>Near Packing Plant</b>	27.1	28.9	27.5	29.2	27.3	26.2

<b>SO2 (µg/m3)</b>	<b>Apr-22</b>	<b>May-22</b>	<b>Jun-22</b>	<b>Jul-22</b>	<b>Aug-22</b>	<b>Sep-22</b>
<b>Cement Plant Main Gate</b>	10.7	11.6	9.6	12.2	11.5	13
<b>Near Colony</b>	7.3	6.4	7.4	9.3	6.5	7.6
<b>Near RO Plant</b>	11.4	9.2	8.4	9.7	10.3	9.6
<b>Near Packing Plant</b>	12.2	10.5	12.1	10.4	12.1	11.3
<b>SO2 (µg/m3)</b>	<b>Oct-22</b>	<b>Nov-22</b>	<b>Dec-22</b>	<b>Jan-23</b>	<b>Feb-23</b>	<b>Mar-23</b>
<b>Cement Plant Main Gate</b>	11.7	12.6	10.5	11.6	9.1	10.7
<b>Near Colony</b>	8.4	9.5	7.4	8.7	6.2	7.6
<b>Near RO Plant</b>	8.5	7.6	9.1	7.5	10.4	9.4
<b>Near Packing Plant</b>	13.5	10.5	12.4	13.2	12.7	11.6

<b>Nox (µg/m3)</b>	<b>Apr-22</b>	<b>May-22</b>	<b>Jun-22</b>	<b>Jul-22</b>	<b>Aug-22</b>	<b>Sep-22</b>
<b>Cement Plant Main Gate</b>	21.2	23.4	21.4	24.6	22.4	25.2
<b>Near Colony</b>	16.4	17.5	18.3	17.2	16.3	18.4
<b>Near RO Plant</b>	23.1	21.5	16.3	19.3	21.6	20.7
<b>Near Packing Plant</b>	26.7	25.1	23.6	22.7	24.7	22.3

<b>Nox (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Oct-22</b>	<b>Nov-22</b>	<b>Dec-22</b>	<b>Jan-23</b>	<b>Feb-23</b>	<b>Mar-23</b>
<b>Cement Plant Main Gate</b>	23.4	25.1	22.3	23.2	19.4	21.5
<b>Near Colony</b>	16.3	18.1	16.8	18.1	16.9	18.3
<b>Near RO Plant</b>	18.4	16.2	18.3	17.6	21.9	19.5
<b>Near Packing Plant</b>	25.1	23.4	25.6	26.4	24.8	22.8