

Ref: SJCPL /ENV /2024-25

Dates: 06.09.2024

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: - Submission of Environmental Statement Report in Form-V for Waste Heat Recovery  
Power Plant for the Financial Year 2023-2024 - reg


Dear Sir,

With reference to the above subject, please find enclosed herewith the Waste Heat Recovery Power Plant of Sree Jayajothi Cements Private Limited Environmental Statement in Form-V for the financial year ending 31<sup>st</sup> 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**

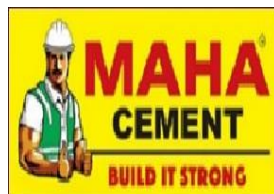
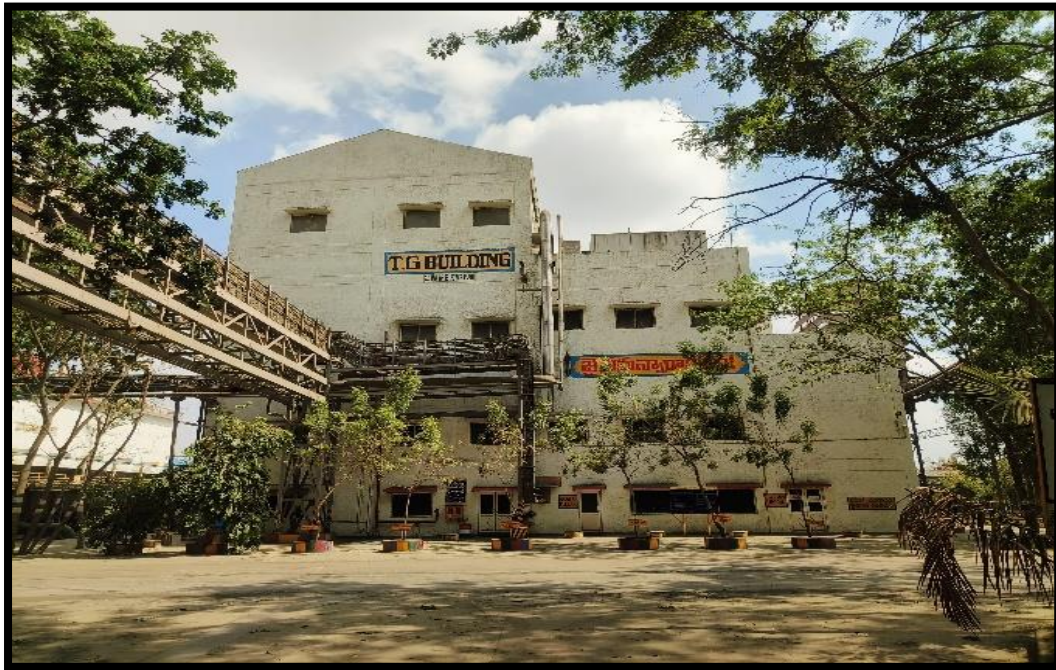
  
**B. C. Gurivi Reddy**  
Sr. Vice President (Works)



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

# WASTE HEAT RECOVERY POWER PLANT (7.5 MW)

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 31<sup>st</sup> 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**

**(WASTE HEAT RECOVER POWER PLANT)**

**Sri Nagar, Yanakandla Village,**

**Banaganapalle Mandal, Nandyal District,**

**Andhra Pradesh – 518 124.**

### **Operation or Process**

ii) Industry Category : Green Category

iii) Production capacity of units : 7.5 MW

iv) Date of last Environment statement submitted: 08.09.2023

(For the year 2022-2023)

## PART B

### WATER AND RAW MATERIAL CONSUMPTION

Water consumption (m<sup>3</sup>/day) as per CFO

Process /Cooling : 1500 m<sup>3</sup>/day

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

Total water Consumption for 2023-24: 2, 33,970 KL

| Name of the products                         | Process water consumption per unit of products<br>(KL/MWH) |  |
|--|--|--|
|  | During the current<br>financial year (2022-2023)           | During the current<br>financial year (2023-2024) |
| Power Generation from<br>waste heat recovery | 5.29 KL/MWH  | 5.63 KL/MWH                                      |

## **2. Raw Material Consumption**

Total generation for 2023-24: **4,15,63,100** Kwh

| S.NO | Name of the Raw Material      | Name of the Product    | Consumption of Raw Material per unit of out put |   |
|------|-------------------------------|------------------------|---|---|
|      |                               |                        | During the current financial year (2022-2023)   | During the current financial year (2023-2024) |
| 1    | Waste heat from exhaust gases | Electricity generation | Not applicable                                  | Not applicable                                |

### **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    | Total waste water Generation for 2023-24 : <b>30679 KL</b><br><br>Treat water is used for Cement process | Attached as <b>Annexure -II</b>          |  |
| b)Air      | Ambient Air quality Monitoring data attached as <b>Annexure-II</b>                                       |  |  |

**Note:** No wastewater is discharged outside of factor premises. Treated wastewater is being utilized for, dust suppression and process utilization within cement plant premises.

### **PART - D**

#### **HAZARDOUS WASTE**

(As specified under 1 [Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008])/Management and handling Amendment Rules 2016)

No hazardous waste was generated from WHR Power plant in 2023-24

**PART – E  
SOLID WASTES**

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**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**

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**PART-G**

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

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**PART-H**

**ADDITIONAL INVESTMENT FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION.**

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**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 5<sup>th</sup> June 2023

### Glimpses of World Environment Day – 2023 Celebration







## 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 <sub>2</sub> | 2.7    | 2.2    | 2.3     | 2.1     | 1.9    | 1.6     |
|                          | NO <sub>x</sub> | 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  | <b>16.37</b>  |
| 1.2    | 1.4    | 1.1    | 1.2    | 1.05   | 1.1    | <b>1.65</b>   |
| 202.5  | 211.7  | 225.7  | 218.4  | 223.1  | 226.9  | <b>219.73</b> |
| 11.5   | 15.6   | 13.76  | 14.7   | 12.4   | 11.8   | <b>12.86</b>  |
| 18.1   | 14.9   | 16.7   | 18.9   | 19.3   | 21.5   | <b>17.76</b>  |
| 15.4   | 12.8   | 14.25  | 15.8   | 13.47  | 20.75  | <b>14.81</b>  |
| 18.9   | 20.4   | 22.7   | 24.35  | 22.81  | 16.25  | <b>21.26</b>  |

**Greenbelt Development Photos**





Greenbelt Development at Colony

