MY HOME GROUP

# Sree Jayajothi Cements Private Limited

MAHA CEMENT
BUILD IT STRONG

Ref: SJCPL /ENV /2023-24/01

Date: 25.11.2023

**To**
**The Director**
Ministry of Environment, Forest and Climate Change,
Integrated Regional Office,
Green House, Gopalareddy Road,
Vijayawada – 520010,
Andhra Pradesh

**Sub: Submission of half yearly Environmental Clearance point wise compliance report For the period April– 2023 to September– 2023 for our Cement Plant – reg**

**Ref:** F.No. J-11011/450/2007-IA-II (I) dated: 24h March 2008

Dear Sir,

We are herewith submitting half yearly Environmental Clearance point wise compliance status reports for the period of April– 2023 to September– 2023 for our Cement plant located at Yanakandla (V), Banaganapalle (M), Nandyal Dist., Andhra Pradesh.

Thanking You,

Yours faithfully,
For **Sree Jayajothi Cements Private Limited**

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

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Fax: +91-40-2311 8000 | Web: www.mahacement.com | Email: corp@myhomegroup.in | CIN: U02695TG2006PTC112441

**Works:** Srinagar, Yanakandla (V), Banaganapalle (M), Nandyal District, Andhra Pradesh, India - 518 124.
Ph: 08515-200 444 / 512 | Fax: 08515-200 507 | Email: corp.sjcpl@jothicements.com

# Sree Jayajothi Cements Private Limited

Yanakandla Village, Nandyal Dist., Andhra Pradesh-518124

Half Yearly EC Compliance Report – [April– 2023 to September– 2023]
Cement Plant: F.No. J-11011/450/2007-IA-II (I) dated: 24h March 2008.

## A. SPECIFIC CONDITIONS:

| S.No. | Specific conditions | Compliance status |
|---|---|---|
| i. | Continuous stack monitoring facilities to monitor gaseous emissions from all the stacks shall be provided and particulate matter shall be controlled within 50mg/Nm3 by installing adequate air pollution control system e.g bag house to raw mill/ Kiln and ESP to clinker cooler. Bag filters shall be provided to crushing plant, Raw mill Hopper, Coal Mill Hopper, Coal Mill, blending silo, Cement mill, Cement Mill silo, Cement Mill hopper etc to control air emissions less than 50mg/Nm3. | Installed Online Continuous Monitoring System (OCEMS) for Stack attached to the Raw mill/Kiln Bag House, Coal Mill baghouse, Cooler ESP and Cement Mill baghouse. All OCEMS are connected to APPCB and CPCB server.<br><br>Enclosed photographs of online monitoring systems as **Annexure-I.**<br><br>Kiln Bag House designed & installed for PM emission below 30 mg/$Nm^3$.<br><br>Adequate air pollution control systems are provided as detailed below and PM emission is being maintained less than 30 mg/$Nm^3$ as per GSR 612 (E) dated 25.08.2014, GSR 497(E) dated :10.05.2016<br><br>Raw mill & Kilns : Pulse Jet Bag House<br>Clinker Coolers : ESP<br>Coal mill & Cement mills : Bag Filters<br>Limestone Crusher : Bag Filters<br><br>Stack Emission manual monitoring data April– 2023 to September– 2023 enclosed as **Annexure-II.** Data being submitted to MoEF & CC, RO, Chennai and APPCB on regular basis. |
| ii. | Secondary fugitive emissions shall be controlled and should be within the prescribed limits & regularly monitored. Guidelines /Code of practice issued by the CPCB in this regard shall be followed. | Cement Concrete (CC) roads are laid and housekeeping is being maintained to control secondary fugitive emissions.<br><br>CPCB Environmental Guidelines for Prevention and Control of Fugitive Emissions from Cement Plants are being followed<br><br>• All transfer points and storage silos are provided with dust collection and extraction systems for effective control of fugitive emissions.<br>• Shed are provided for raw materials storage. Apart from this, Wind shelter fencing of 8 m (24 fts) height is constructed all around the raw materials storage yards.<br>• Also we have provided atomized water sprinklers in coal yard, slag yard for dust suppression.<br>• Dry fog system arranged at Lime Stone stacker to control fugitive dust emissions.<br>• Fly ash handling by closed circuit pneumatic system.<br>• All raw material transfer conveyors are covered with GI sheet.<br><br>• Road sweepers & vacuum cleaner is deployed and good housekeeping is being maintained for controlling secondary fugitive dust emissions. |

| S.No. | Specific conditions | Compliance status |
|---|---|---|
| | | Fugitive dust monitoring is being carried out at 3 locations as per Fugitive Dust Monitoring Guideline on monthly basis through third party M/s. Lawn Enviro Associates, Hyderabad.<br><br>Sampling duration : 4 hrs<br>No. of Locations : 03<br>• Near Coal yard<br>• Near Limestone stock pile<br>• Near Slag storage area.<br><br>Monitoring data enclosed as **Annexure-II.** |
| iii. | The Company shall install adequate dust collection and extraction system to control fugitive dust emissions due to raw material handling (unloading, conveying, transporting, stacking), Vehicular movement, bagging & Packing areas etc. Closed conveyors shall be used for transportation for raw material and silos should be used for the storage of cement, clinker etc. The covered sheds for raw material storage, bag filter at material transfer points, water sprinkling in internal roads etc, shall be provided. Lime stone from lime stone mines shall be transported by closed trucks to cement plant. Water spray system shall be provided all around the coal stockpiles and dust suppression system around the coal conveyor system. | Adequate dust collection and extraction system are provided to control fugitive dust emissions.<br><br>• All transfer points and storage silos are provided with dust collection and extraction systems for effective control of fugitive emissions.<br>• Sheds are constructed for raw materials storage.<br>• Limestone from the mines transported by closed conveyor.<br>• We have provided 8 Mtrs (24 fts) height wind shelter fencing / wind breaking sheeting all four sides for raw materials storage yards. **Annexure-III.**<br>• Wind shelter fencing control fugitive dust emission during handling and cross winds.<br>• All raw material transfer conveyors are covered with GI sheet.<br>• CC roads are laid and regular water sprinkling is carried-out to control secondary fugitive emissions.<br>• Road sweeper is deployed and good housekeeping is being maintained for controlling secondary fugitive dust emissions. Photos enclosed as **Annexure-III.** |
| iv. | Asphalting /Concreting of roads & water spray all around the coal stockpiles shall be carried out to control fugitive emissions. | Concrete road are laid within plant premises to control fugitive emissions.<br><br>Regular water spray is being done around coal stockpile to control fugitive dust emissions. |
| v. | Total water requirement from Srisailem Right Bank Canal (SRBC) shall not exceed 1180$m^3$/day. No ground water shall be used as proposed. All the wastewater shall be recycled / reused in the process, dust suppression, green belt development. Domestic effluent shall be treated in sewage treatment plant (STP). No wastewater shall be discharged outside the factory premises and Zero discharge shall be adopted. | Total Water requirement is met from Srisailem Right Bank Canal (SRBC) and Water consumption is maintained below 1180$m^3$/day. No ground water is extracted.<br><br>Cement manufacturing is dry process. No process wastewater is generated in cement manufacturing. Colony domestic wastewater is treated in STP and is utilized 100% for gardening purpose. |

<table>
<tr><th>S.No.</th><th>Specific conditions</th><th>Compliance status</th></tr>
<tr><td>vi.</td><td>Prior permission for the drawl of 1180 m3/day from Srisailem Right Bank Canal (SRBC) shall be obtained from the concerned Department.</td><td>Permission obtained for the drawl of water from SRBC / GNSS Flood flow Canal from the Irrigation & C.A.D (PW - Reforms) Department, Government of Andhra Pradesh vide G.O.Ms.No.11 dated 22.01.2018 valid for 5 years</td></tr>
<tr><td>vii.</td><td>All the cement dust collected from pollution control devices viz ESP,Bag house, Bag filter etc shall be recycled and reutilized in the process in cement manufacturing. STP sludge will be used as manure for the green belt development. Hazardous waste viz spent oil from gear box & automatic batteries etc shall be properly stored in a designated area and sold to authorized recyclers / re-processors.</td><td>Dust collected from Air Pollution Control Equipment's viz ESP, Bag house, Bag filter etc are being fully recycled and reused in the process in cement manufacturing.<br><br>STP sludge is used as manure for the greenbelt development.<br><br>Hazardous wastes like used oil from gear box and waste batteries are collected, stored in a designated area and sold to authorized recyclers.</td></tr>
<tr><td>viii.</td><td>An effort shall be made to use of high calorific hazardous waste in the cement kiln & necessary provisions should be made accordingly. Efforts shall also be made to use fly ash maximum in maxima Pozzolona Portland Cement, PPC.</td><td>Provision is made for utilization of high calorific hazardous waste in cement kiln. Regular permission for co-processing of HW has been obtained from APPCB.<br><br>9158.95MT of hazardous waste (organic solid waste) utilized in our kiln during the period of April-2023 to September-2023</td></tr>
<tr><td>ix.</td><td>As proposed in EIA/EMP, green belt shall be developed in at least 133 acres (33%) out of total 400 acres land available to control fugitive emissions in consultation with the local DFO as per the CPCB guidelines.</td><td>Greenbelt is developed in about 2.0 acres from April-2023 to Sept-2023 in and around cement plant premises. Year wise green belt details given below. Total 44% greenbelt has been developed from the total area.
<table>
<tr><th>Year</th><th>No's of Saplings</th><th>Area covered in Acres</th></tr>
<tr><td>2010-11</td><td>2500</td><td>8.5</td></tr>
<tr><td>2011-12</td><td>2500</td><td>8.5</td></tr>
<tr><td>2012-13</td><td>4000</td><td>13.3</td></tr>
<tr><td>2013-14</td><td>4000</td><td>13.3</td></tr>
<tr><td>2014-15</td><td>11800</td><td>24.5</td></tr>
<tr><td>2015-16</td><td>15000</td><td>35</td></tr>
<tr><td>2016-17</td><td>8787</td><td>24</td></tr>
<tr><td>2017-18</td><td>3871</td><td>10</td></tr>
<tr><td>2018-19</td><td>6023</td><td>09</td></tr>
</table></td></tr>
</table>

| S.No. | Specific conditions | Compliance status |
|---|---|---|
| | | 2019-20 \| 5359 \| 06<br>2020-21 \| 4168 \| 05<br>2021-22 \| 4193 \| 04<br>2022-23 \| 2665 \| 03<br>2023-24 up to Sep-23 \| 1250 \| 2.0<br>Total \| 70496 \| 163.0 |
| x. | Recommendation of the State Forest Department regarding impact of proposed plant on surrounding reserve forests viz. Ramathirtham R.F (9.2 Km), Ramathirtam Ext .R.F(7.1 Km), Rangepuram Block -A R.F (9.0 Km), Rangapara, Block -B R.F (8.5 Km) and Ramavaram R.F(9.0 Km) shall be obtained & implemented. Further, Conservation Plan for the conservation of wild fauna in consultation with State Forest Department shall be prepared and implemented. | Complying all the EC and CTO conditions and compliance reports being submitted on half yearly basis. |
| xi. | All the recommendations of the CREP guidelines for Cement Plants shall be strictly followed. | Recommendations made in the CREP are implemented. Compliance of the CREP recommendations enclosed as **Annexure-V.** |

## B. GENERAL CONDITIONS:-

| S.No. | General conditions | Compliance status |
|---|---|---|
| i. | The project authorities must strictly adhere to the stipulations made by APPCB and the State Govt. | Obtained CFO from APPCB under the Air & Water Act, Consent Order No :365874/APPCB/KNL/KNL/CTO&HWA/HO/2022 - Dated: 20/12/2022 valid up to 31.12.2027 |
| ii. | No further expansion or modifications in the plant shall be carried out without prior approval of the MoEF & CC. | Environmental Clearance for expansion of clinker production from 1.8 MTPA to 2.2 MTPA obtained vide J-11011/21/2014-IA-II (I) dated: 28th April 2015. |
| iii. | The gaseous & particulate matter emissions from various units shall conform to the standards prescribed by the A.P Pollution Control Board. At no time the particulate emissions from the Cement Plant shall exceed 50mg/Nm3. Continuous monitoring for particulate emissions shall be carried out as per the recommendations of the CREP guidelines & data shall be submitted to the APPCB and CPCB regularly. Interlocking facility shall be provided in the pollution control equipment | Installed necessary APC equipment like High Efficiency Bag filters and ESP to control and keep the Particulate Matter Emission below 30 mg/$Nm^3$.<br><br>Necessary action has been taken to reduce the PM emission level below 30 mg/Nm3<br><br>Installed online Continuous Monitoring System (CEMS) for Stack attached to the Raw mill/Kiln Bag House, Coal Mill baghouse, Cooler ESP and Cement Mill baghouse. All CEMS are connected to APPCB and CPCB server. |

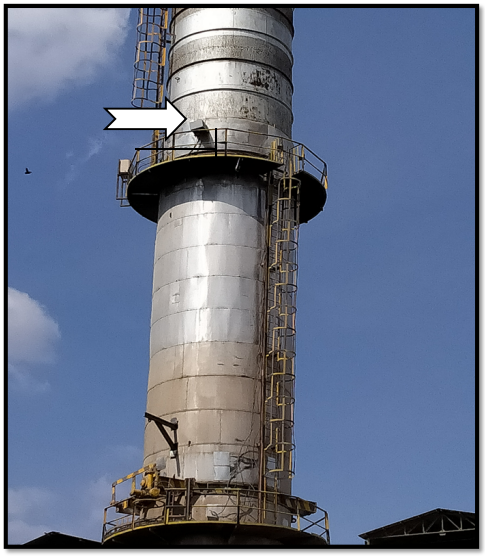
| S.No. | General conditions | Compliance status |
|---|---|---|
| | so that in the event of the pollution control equipment not working, the respective unit(s) shall be shutdown automatically. | The monitored data is uploading to the APPCB, CPCB and MoEF, RO regularly.<br><br>Interlocking facility is provided in the Pollution Control Equipment so that in the event of the Pollution Control Equipment not working, the respective unit(s) will be shutdown automatically. |
| iv. | At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentrations of PM10, PM2.5, SO2 & NOx are anticipated in consultation with SPCB. Data on ambient air quality & stack emissions shall be regularly submitted to this Ministry including its Regional Office at Chennai and SPCB/CPCB once in six months. | Four number of manual Ambient air quality monitoring stations has been established in the downwind direction as well as where maximum ground level concentration pf PM10, PM2.5, SO2 & NOx are anticipated in consultation with SPCB. Ambient Air Quality Monitoring is being carried out on monthly basis through third party M/s. Lawn Enviro Associates, Hyd.<br><br>No. of AAQ monitoring Location: 04<br><br>**Near factory main Gate**<br>**Near Colony**<br>**Near RO Plant**<br>**Near Packing Plant**<br><br>AAQ monitoring data for period April-2023 to September-2023<br><br>Enclosed as **Annexure-II.**<br><br>Four continuous ambient air quality monitoring stations (CAAQMS) installed and connected to CPCB & APPCB server.<br><br>Data on ambient air quality and stack emissions are being submitted to the Ministry including the Regional Office once in six months & APPCB monthly basis. |
| v. | Industrial wastewater shall be properly collected treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May, 1933 and 31st December, 1993 or as amended from time to time .The treated wastewater shall be utilized for plantation purpose. | Cement manufacturing is dry process. No process wastewater is generated in cement manufacturing. Colony domestic wastewater is treated in STP and is utilized 100% for gardening purpose. |
| vi. | The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods. Silencer enclosures etc. On all sources of noise generation .The ambient noise levels shall conform to the standards prescribed under Environmental (Protection Act 1935 Rules 1980 viz 75 dBA( day time ) and 70 dBA night time. | The Noise levels are being monitored at various working locations and is always below 85 dB (A). To control high noise levels acoustic enclosure are provided at various locations. Ambient noise levels are well within the prescribed standards under EPA.<br>The ambient noise at boundary of cement plant are being maintained below 75 dBA (day time) and 70 dBA night time.<br><br>Noise monitoring data enclosed as **Annexure-II**. |

| S.No. | General conditions | Compliance status |
|---|---|---|
| vii. | Proper Housekeeping & Adequate occupational health programmes must be taken up. Occupational Health Surveillance Programme shall be done on a regular basis & records maintained .The Programme must include lung function & sputum analysis test once in six months. | Proper Housekeeping & adequate occupational health programmes are being taken up. Three manual floor sweeping machine are being used for housekeeping.<br><br>Truck mounted vacuum cleaner, road sweepers and hand operated flipper machines were deployed and good housekeeping is being maintained.<br><br>Occupational Health Surveillance Programme is being conducted on a regular basis & records maintained. The Programme includes lung function & sputum analysis test. |
| viii. | Proper rainwater harvesting measures shall be adopted & mine pit water shall be used for the various activities at the site. | Rain Water Harvesting & recharge structures constructed in & around the cement plant premises.<br>All the storm water drains are connected to Rain Water Harvesting and recharge structures.<br>Photographs enclosed as **Annexure-IV.** |
| ix. | The company shall undertake eco - development measures including community welfare measures in the project. | Need based assessment have been carried out in nearby villages and as per the study action plan is being executed.<br>2010-2014 CSR : Rs. 57.50 Lakhs<br>2014-2015 CSR : Rs. 84.00 Lakhs<br>2015-2016 CSR : RS. 65.00 Lakhs<br>2016-2017 CSR ; RS. 91.07 Lakhs<br>2017-2018 CSR : Rs. 27.49 Lakhs<br>2018-2019 CSR : Rs. 62.54 Lakhs<br>2019-2020 CSR : Rs. 72.80 Lakhs<br>2020-2021 CSR : RS 323.12 Lakhs<br>2021-2022 CSR : RS 113.24 Lakhs<br>2022-2023 CSR RS 124.95 Lakhs<br><br>Some of the CSR carried out are as below.<br><br>1.Contribution for formation of internal CC roads with side drains and culverts in the villages of Yanakandla, Venkatapuram, Hussainapuram & Erragudi<br>2.Contributed towards CM Relief fund for COVID-19<br>3. Distribution of Essential Commodities in Surrounding villages of Banaganapalle Mandal.<br>4. Distributed to Collector, Kurnool for procuring Sanitizers, hand Gloves' & PPE Kits<br>5. Anganwadi Kendram Yanakandla. |
| x. | The project proponent shall also comply with all the environmental protection measures and safeguard recommended in the EIA/EMP report. | Being Complied |
| xi. | A separate environmental management cell with suitable qualified personnel should be set-up under the control of a senior Executive, who will report directly to the Head of Organization. | A separate environmental management cell with suitable qualified person has been set-up under the control of a senior Executive, who is reporting directly to the Head of Organization. |

| S.No. | General conditions | Compliance status |
|---|---|---|
| xii. | Adequate funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the MoEFCC as well as the State Government. An implementation schedule for implement all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Chennai. The funds so provided shall not be diverted for any other purposes. | The funds earmarked for environmental protection is not diverted for any other purposes.<br><br>Capital Expenditure - Rs. 150.5 Lakhs spent for environmental protection measures.<br><br>Recurring Expenditure - Rs.72.3 Lakhs for environmental protection measures for 2022-23 |
| xiii. | The regional office of the Ministry at Bangalore CPCB/APSCB shall monitor stipulated conditions .A six months compliance report and monitoring data along with statistical interpretations should be submitted to them regularly | A six monthly compliance report is being submitted to the Ministry at Chennai regularly. Last six months half yearly EC compliance report for the period Oct -22 to Mar-23 submitted on 25.05.2023 to eccompliance-ap@gov.in as per MoEF Notification no. SO 5845(E) |
| xiv. | The Project Authorities should inform to the Regional office well ministry office the date of Final Closure and final approval of Project authority by the concern authority and the data of commencement and land development work | Final Closure and final approval of Project authority by the concern authority and the data of commencement and land development work was informed to the RO and Moef |
| xv. | Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work. | EC dt 28.04.2015 accorded for expansion of clinker production by modernization in existing cement plant.<br><br>Plant commissioned after modernization in Sept 2015. |

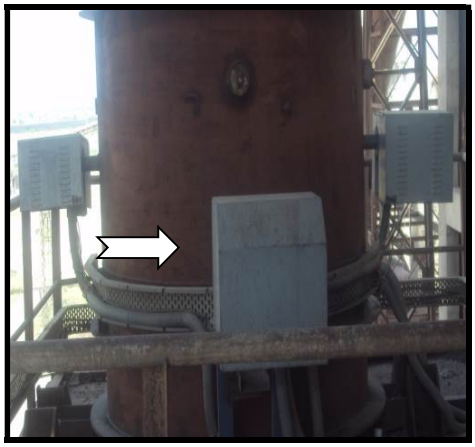
**Annexure – I**

## Photos of Continuous Emission Monitoring Systems

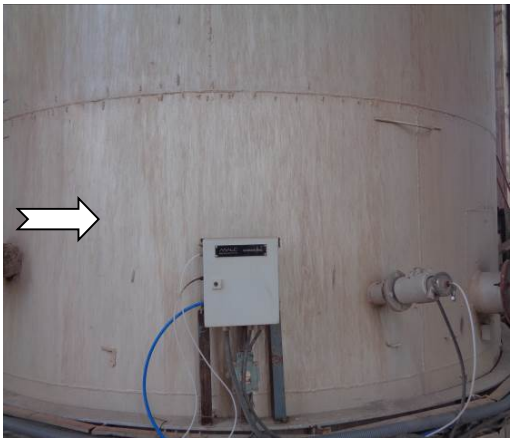


**Cooler Stack**

**Coal Mill Stack**



**Cement Mill Stack**



**Kiln Stack**

**Annexure –II**

## Stack emission monitoring data (PM in mg/Nm$^3$)

| 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 |
| | SO2 | 2.7 | 2.2 | 2.3 | 2.1 | 1.9 | 1.6 |
| | NOx | 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 | 14.0 |
| Lime Stone Crusher Stack | SPM | 21.9 | 19.4 | 20.5 | 22.4 | 23.8 | 21.7 |

## Ambient Air Quality Monitoring Data

| PM10 (µg/m³) | Apr'23 | May'23 | June'23 | July'23 | Aug'23 | Sept'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 |

| PM2.5 (µg/m³) | Apr'23 | May'23 | June'23 | July'23 | Aug'23 | Sept'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 |

| SO2 (µg/m³) | Apr'23 | May'23 | June'23 | July'23 | Aug'23 | Sept'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 |

| Nox (µg/m³) | Apr'23 | May'23 | June'23 | July'23 | Aug'23 | Sept'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 |

## Noise Monitoring Data (Ldn)

| Location | Apr'23 | May'23 | June'23 | July'23 | Aug'23 | Sept'23 |
|---|---|---|---|---|---|---|
| **Near Packing plant** | 62.3 | 64.8 | 66.1 | 65.3 | 63.4 | 65.9 |
| **Near Cement Plant** | 64.9 | 65.5 | 67.4 | 64.1 | 62.7 | 61.7 |
| **Near CCR** | 53.2 | 56.2 | 57.6 | 56.9 | 57.8 | 54.4 |
| **Near Time Office** | 58.8 | 61.4 | 58.3 | 59.8 | 58.2 | 57.6 |
| **Near Main Gate** | 60.7 | 53.7 | 62.2 | 60.40 | 61.9 | 60.1 |
| **Near Temple** | 52.3 | 69.8 | 55.6 | 53.2 | 52.6 | 53.4 |
| **Near Raw Mill Area** | 67.6 | 58.4 | 71.7 | 69.7 | 68.5 | 67.4 |
| **Near Stores** | 61.4 | 58.4 | 61.8 | 58.6 | 59.8 | 56.6 |
| **Near Sub Station** | 59.9 | 60.9 | 62.2 | 61.9 | 60.2 | 59.7 |
| **Near Dispensary** | 56.6 | 55.8 | 53.9 | 54.8 | 56.7 | 55.8 |

## Fugitive Dust Monitoring Data (μg/m3)

| Location | Apr'23 | May'23 | June'23 | July'23 | Aug'23 | Sept'23 |
|---|---|---|---|---|---|---|
| **Near Coal Yard** | 1538 | 1648 | 1531 | 1420 | 1597 | 1516 |
| **Near Limestone Stock Pile** | 1257 | 1340 | 1425 | 1311 | 1460 | 1405 |
| **Near Slag Storage Area** | 835 | 964 | 812 | 736 | 878 | 962 |

## Annexure –III


**Road Sweeping Machine**

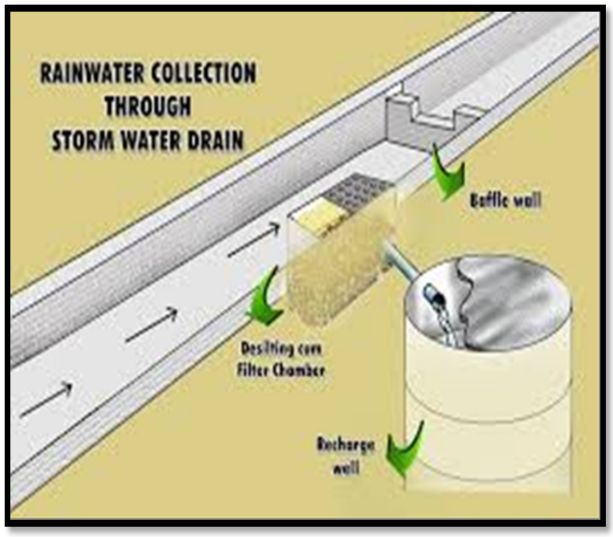

**Vacuum Cleaner**

**Floor Sweeping Machin**

## WIND SHELTER FENCING

**Annexure –III**

## Annexure –IV




**Rain Water Harvesting Structure**

**Annexure –V**

## Compliance Report on Corporate Responsibility for Environmental Protection (CREP)

| S. No | Condition | Compliance Status |
|---|---|---|
| 1 | Cement Plants, which are not complying with notified standards, shall do the following to meet the standards;<br>Augmentation of existing Air Pollution Control Devices - by July 2003<br>Replacement of existing Air Pollution Control Devices - by July 2004 | Complying with the new emission standards for PM, SO2 & NOx notified by MoEFCC as per G.S.R 612 (E) dated 25.08.2014 |
| 2 | Cement Plants located in critically polluted or urban areas (including 5 km distance outside urban boundary) will meet 100 mg/ Nm3 limit or particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm3. | Not applicable – Our cement plant is not located in critically polluted or urban areas |
| 3 | The new cement kilns to be accorded NOC/Environmental Clearance w.e.f 01.04.2003 will meet the limit of 50 mg/Nm3 for particulate matter emissions. | Kiln emission is control through high efficient pulsejet bag house to meet the standard of PM < 30 mg/$Nm^3$. |
| 4 | CPCB will evolve load based standards by December 2003. | -- |
| 5 | CPCB and NCBM will evolve SO2 and NOx emission standards by June 2004. | Complying with the new emission standards for SO2 & NOx notified by MoEFCC as per G.S.R 612 (E) dated 25.08.2014, GSR 497(E) dated :10.05.2016 |

| S. No | Condition | Compliance Status |
|---|---|---|
| 6 | The Cement industries will control fugitive emissions from all the raw material and products storage and transfer points by December 2003. However, the feasibility for the control of fugitive emissions from limestone and coal storage areas will be decided by the National Task Force (NTF). The NTF shall submit its recommendations within three months. | CPCB Environmental Guidelines for Prevention and Control of Fugitive Emissions from Cement Plants are being followed<br>• All transfer points and storage silos are provided with dust collection and extraction systems for effective control of fugitive emissions.<br>• The dust collected from the pollution control equipment is being recycled back into the process.<br>• Clinker is being stored in clinker storage tank of capacity 50,000 tonnes to control fugitive emissions.<br>• Gypsum and additives are being stored in covered storage sheds with storage capacity of 5000 tonnes.<br>• Fly ash is being stored in silos with total capacity of about 5000 tonnes and pneumatic system for fly ash handling.<br>• Cement is being stored in silos with total capacity of about 60,000 tonnes<br>• All raw material transfer conveyor are covered with GI sheet.<br>• Truck mounted vacuum cleaner and road sweeper are deployed and good housekeeping is being maintain for controlling secondary fugitive dust emissions. |
| 7 | CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum cokes as fuel in cement kiln by July 2003. | ------ |
| 8 | After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operations/ sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring systems (CMS) by December 2003. | Continuous online emission monitoring equipment installed for 4 major stacks Online data is connected to CPCB & APPCB servers.<br>1. Kilns Bag house stack;<br>2. Clinker Cooler ESP stack;<br>3. Coal mill bag house stack; and<br>4. Cement mill bag house stack. |
| 9 | Tripping in kiln ESP to be minimized by July 2003 as per the recommendations of NTF. | Pulsejet Bag house is provided for all Kiln. No tripping is envisaged |
| 10 | Industries will submit the target date to enhance the utilization of waste material by April, 2003. | Fly ash, gypsum and slag are being utilised in cement manufacturing process. Waste material utilized October-2022 to March-2023.<br>Fly ash -159597.360<br>gypsum -47159.629<br>G.Slag -111692.196 |
| 11 | NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003. | 7493.72 MT of hazardous waste (organic solid waste) utilized in our kiln during the period of April-2022 to March-2023 |

| S. No | Condition | Compliance Status |
|---|---|---|
| 12 | Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003. | We have installed and commissioned 7.5 MW WHRB power plant. Utilizing hot gases generated from kiln and Cooler. |

## Greenbelt Details

Greenbelt is developed in about 2.0 acres from April-2023 to Sept-2023 in and around cement plant premises. Year wise green belt details given below. Total 44% greenbelt has been developed from the total area.

| Year | No's of Saplings | Area covered in Acres |
|---|---|---|
| 2010-11 | 2500 | 8.5 |
| 2011-12 | 2500 | 8.5 |
| 2012-13 | 4000 | 13.3 |
| 2013-14 | 4000 | 13.3 |
| 2014-15 | 11800 | 24.5 |
| 2015-16 | 15000 | 35 |
| 2016-17 | 8787 | 24 |
| 2017-18 | 3871 | 10 |
| 2018-19 | 6023 | 09 |
| 2019-20 | 5359 | 06 |
| 2020-21 | 4168 | 05 |
| 2021-22 | 4193 | 04 |
| 2022-23 | 2665 | 03 |
| 2023-24 up to Sep-23 | 1250 | 2.0 |
| **Total** | **70496** | **163.0** |