



## **Penna Cement Industries Limited.**

**Ref: PCIL/RO-MOEF/01/2020**

**Date: 15.05.2020**

**To  
The Regional Office  
Ministry of Environment, Forests and Climate Change,  
1<sup>st</sup> & 2<sup>nd</sup> Floor, HEPC Building,  
No.34, Cathedral Garden Road,  
Nungambakkam CHENNAI - 600034**

**Sub: Submission of six monthly report for the Period :Sep -19 to Mar -20 of 4.6  
MTPA Cement Plant located at Boyareddy palli Village, Yadiki Tehsil,  
Anantapur District, Andhra Pradesh State**

**Ref : Environmental Clearance issued by MoEFCC vide letter No. F.No: J -  
11011/351/20016-IA -II (I) dated 28th March,2018**

Dear Sir,

With reference to the above cited subject, we are herewith submitting the six monthly compliance report for the period **September-2019 to March -2020 of 4.6 MTPA** of our above subject cement plant.

Thanking you,  
For **M/s. Penna Cement Industries Limited**

  
**(T. Harinath Reddy)  
Plant Head**

**Encl: as above**

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**WORKS : Boyareddypalli (Village), Kamalapadu (Post), Yadiki (Mandal), Ananthapur Dist., A.P. 515 408**  
**Phone : 08558 - 285158, Fax : 08558 - 285150. [www.pennacement.com](http://www.pennacement.com)**  
**HEAD OFFICE : Lakshmi Nivas 705, Road # 3, Banjara Hills, Hyderabad, Telangana., India. Pin Code : 500 034**  
**Phone : 040 - 44565100 / 400, Fax : 040 - 44565145 / 44565222 / 44565310, [www.pennacement.com](http://www.pennacement.com)**  
**CIN NO. - U26942AP1991PLC013359**

## COMPLIANCE REPORT OF F.No. J.-11011/351/2016-IA-II(I) Dated:28th March,2018

### A. SPECIFIC CONDITIONS:

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| i.   | The PP shall comply with stack emission norms 25 mg/Nm <sup>3</sup> of particulate matter                                                                                                                                                                                                                                                                                                                                                                           |
|      | <b>Stack emissions are maintained well within stipulated values. The industry installed online CEMs for all major stacks and the same connected to CPCB server and APPCB servers.</b>                                                                                                                                                                                                                                                                               |
| ii.  | Green belt, in addition to 16 Ha of green belt already prescribed in earlier EC, over an area of 4.0 Ha shall be developed( total 20 Ha) with native and broad-leaved tree species inter alia, covering all along the boundary of the plant.                                                                                                                                                                                                                        |
|      | <b>Green belt already developed 18 Ha and remaining 2 Ha is under progress.</b>                                                                                                                                                                                                                                                                                                                                                                                     |
| iii. | Ground water drawl shall not be exceeded 700 M3/day and balance shall met through rainwater harvesting.                                                                                                                                                                                                                                                                                                                                                             |
|      | <b>Ground water drawl are within the limits over and the above quantity of water taking from rain water harvesting (mine pit).</b>                                                                                                                                                                                                                                                                                                                                  |
| iv.  | An amount of Rs 20 Crores proposals towards Enterprise Social Commitment(ESC) shall be utilised as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of expansion and estimated on the basis of Scheduled Rates.                                                                                                                                                                                           |
|      | <b>We have spent Rs:59.86 Lakhs as on March-2020 for Construction of Water Tanks, Laying of Road in villages, diabetic awareness programmes. balance amount will be spent in future. In addition, we are providing free education for children, free medical facility for surrounding village people. We have established a Cement Science Degree college in the year 2019. We are taking 30 students per year and providing free education along with stipend.</b> |
| v.   | The Capital cost Rs:120 Crores and annual recurring cost Rs: 4.5 crores towards the environmental protection measures shall be provided separately. The funds so provided shall not be diverted for any other purpose.                                                                                                                                                                                                                                              |
|      | <b>We have invested Rs137.35 Crores on pollution control equipments in the plant. Annual recurring cost 4.5 crores towards environmental protection provided separately and this fund is not diverting to other purpose. We have expended 3,53212/-in the year 2019-20 for replacement of bagfilters bags replacement.</b>                                                                                                                                          |



**B. GENERAL CONDITIONS:**

**1 The Project proponent shall (Air Quality Monitoring)**

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. | Install 24 X 7 continuous emission monitoring system at process stacks to monitor stack emissions with respect to standards prescribed in Environment(Protection) rules 1986 (GSR No:612(E) dated 25thAugust,2014 and subsequent amendment dated 9th May,2016 and 10th May,2016: S.O.3305(E) dated 7th December 2015 as amended from time to time and connected to SPCB and CPCB online and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act,1986 or NABL accredited laboratories. |
| b. | <b>Installed 24 X5 continuous emission monitors balance 3 nos to be installed. CEMs are calibrated regularly within time with NABL recognised laboratory. The same CEMs are connected to CPCB and APPCB servers.</b><br>Monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act,1986 or NABL accredited laboratories.                                                                                                                                                                    |
|    | <b>Monitoring fugitive dust emissions in plant premises regularly with NABL recognised laboratory and emission level is within stipulated values.</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |
| c. | Install system carryout Continuous Ambient Air Quality monitoring for parameters relevant to pollutants released as per National Ambient Air Quality Standards issued by the Ministry Vide GSR.No:826(E) dated 16th November,2009(as amendedfrom time to time) within and outside the plant area at least at four locations one within and three outsidethe plant area at an angle 120o each, covering upwind and downwind direction.                                                                                                                                               |
|    | <b>We have installed 2 ambient air quality monitoring stations and the same AAQMS are connected to CPCB server &amp; SPCB server.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| d. | Submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring of air quality / fugitive emission to Regional Office of MoEF & CC, Zonal office of CPCB and Regional of SPCB along with sixmonthly monitoring report.                                                                                                                                                                                                                                                                                                 |
|    | <b>We are submitting monthly summary report of CEMS,AAQMS and manual stack monitoring of air quality and fugitive dust emissions to RO,Zonal Office and SPCB regularly.</b>                                                                                                                                                                                                                                                                                                                                                                                                         |

**2 The project proponent shall ( Water Qauality Monitoring)**

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. | Install 24 X 7 continuous effluent monitoring system at process stacks to monitor stack emissions with respect to standards prescribed in Environment(Protection) rules 1986 (GSR No:612(E) dated 25thAugust,2014 and subsequent amendment dated 9th May,2016 and 10th May,2016: S.O.3305(E) dated 7th December 2015 as amended from time to time and connected to SPCB and CPCB online and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act,1986 or NABL accredited laboratories. |
|    | <b>Installed 24 X5 continuous emission monitors balance 2 nos to be installed. CEMs are calibrated regularly within time with NABL recognised laboratory.</b>                                                                                                                                                                                                                                                                                                                                                                                                                       |





|    |                                                                                                                                                                                                                                                                                                      |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| b. | Monitor regularly ground water quality at least twice in a year(pre and post monsoon) at sufficient numbers of Piezometers/sampling wells in the plant and adjacement areas through labs recognised under Environment (Protection) Act,1986 and NABL accredited laboratories; and                    |
|    | <b>We have installed one online peizomter and procured one manuval peizomer. We have monitoring every month water table lavel, we have monitoring ground water quality as per above.</b>                                                                                                             |
| c. | Submit monthly summary report of continuous effluent monitoring and results manual effluent testing for calibration of CEMS and manual monitoring of ground water quality to Regional Office of MoEf &CC, Zonal Office of CPCB and Regional office of SPCB along with six-monthly monitoring report. |
|    | <b>Submitting monthly summary reports of continuous effluent monitoring and manuval effluent testing for calibration of CEM with groud water quality reports along with six monthly report to Regional Office of MoEf &amp;CC, Zonal Office of CPCB and Regional office of SPCB</b>                  |

### 3 The project proponet shal I(Air Pollution Control)

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. | Provide appropriate Air Polltition Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.                                                                                                                                                                                                                                                     |
|    | <b>Provided in the Line-1, Kiln &amp; Raw mill :RABH, Clinker Cooler: ESP, Coal Mill : Bag filter, Slag VRM: Bag filter, Cement Mill: Bag filter, 42 Nos of Nusence dust bagfilters and in the Line-2 Kiln &amp; Raw mill :Bagfilter, Clinker Cooler: ESP, Coal Mill : Bag filter and 38 Nos of Nusence dust bagfilters installed along with intercking system.</b>                                                                                                            |
| b. | Provide leakage detection and mechnised bag cleaning facilities for better maintenance of bags.                                                                                                                                                                                                                                                                                                                                                                                |
|    | <b>Provided pulsejet cleaning system bagfilter in Kiln&amp; Raw mill and coal mill sections , Provided ESP for clinker cooler with mechanised cleaning systems. All nusence bag filters are provided with pulsejet cleaning system.</b>                                                                                                                                                                                                                                        |
| c. | Provide pollution control system in the cement plant as per the CREP Guidelines of CPCB.                                                                                                                                                                                                                                                                                                                                                                                       |
|    | <b>The industry is following CREP guideline of CPCB. Provided in the Line-1, Kiln &amp; Raw mill :RABH, Clinker Cooler: ESP, Coal Mill : Bag filter, Slag VRM: Bag filter, Cement Mill: Bag filter, 42 Nos of Nusence dust bagfilters and in the Line-2 Kiln &amp; Raw mill :Bagfilter, Clinker Cooler: ESP, Coal Mill : Bag filter and 38 Nos of Nusence dust bagfilters installed along with intercking system. Both lines are Provided with Waste heat recovery plants.</b> |





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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| d. | Provide sufficient number of mobile or stationary vacuum cleaners to clean plant roads, shop floors, roofs regularly.                                                                                                                                                                                |
|    | <b>Provided two sweeping machines in the plant for the cleaning of roads, shop floors in plant and colony roads.</b>                                                                                                                                                                                 |
| e. | Recycle and reuse lime fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after agglomeration.                                                                                                                             |
|    | All the materials collected by                                                                                                                                                                                                                                                                       |
| f. | Ensure covered transportation and conveying of ore, coal and other raw materials to prevent spillage and dust generation: Use closed bulkers for carrying fly ash.                                                                                                                                   |
|    | <b>All the raw materials transporting through covered belt conveyors along with the transfer points having nussence dust bag filters. All the trucks inward raw materials and outwards cement trucks are fully covered with tarpoleins. Fly ash and loose cement was carrying with tankers only.</b> |
| g. | Provide wind shelter fence and chemical spraying on raw material stock piles.                                                                                                                                                                                                                        |
|    | <b>Provided water spray guns in the raw materials yards.</b>                                                                                                                                                                                                                                         |
| h. | Provide Low Nox burners as primary measures and SCR/NSCR technologies as secondary measure to control NOX emissions. Have separate truck parking area and monitor vehicular emissions at regular intervals.                                                                                          |
|    | <b>Provided low NoX Burners and low NoX Pre-heater systems in both Lines. Monitoring vehicles emissions at regular intervals in the truck parking area.</b>                                                                                                                                          |

4 The project proponent shall (Water Pollution Control)

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. | Adhere to zero liquid discharge.                                                                                                                                                                                                         |
|    | <b>No Waste water generated in the process and zero discharge from the plant.</b>                                                                                                                                                        |
| b. | Provide Sewage Treatment Plant for domestic waste water: and                                                                                                                                                                             |
|    | <b>We have provided 250 KLD Sewage Treatment Plant for domestic water and treated water was consuming for Green belt development through drip irrigation and little quantity of treated water using for cooling tower make up water.</b> |
| c. | Provide garland drains and collection pits for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.                                                                |
|    | <b>Provided garland drains in the plant and collection pits at each stock files.</b>                                                                                                                                                     |



5 The project proponent shall (Water Conservation)

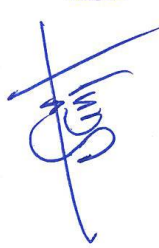
|    |                                                                                                                                                                                                                                                                                                                     |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. | Practice rainwater harvesting to maximum possible extent.                                                                                                                                                                                                                                                           |
|    | <b>We have provided rain harvesting pits 16 Nos with rooftaps in the surrounding of the plant and around colony area. We have constructed two check dams in the surrounding area Chintalayapalli and Kundanakota near by plant, de silted old reservoir in the SE corner of the plant with capacity of 0.2 TMC.</b> |
| b. | Provide water meters at the inlet to all unit processes in the cement plant: and                                                                                                                                                                                                                                    |
|    | <b>Provided water meters at the inlet of Coal mill (VRM), Raw mill, Coole, Slag Mill and cement mill. Provided water meter at central water sump of inlet.</b>                                                                                                                                                      |
| c. | Make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.                                                                                                                                                          |
|    | <b>STP treated water some water consumed for cooling tower make up water. Water treatment plant water consuming for dust suppression on roads.</b>                                                                                                                                                                  |

6 The PP shall ( Energy Conservation)

|    |                                                                                                                                                                                                |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. | Provide waste heat recovery system for kiln and cooler.                                                                                                                                        |
|    | <b>Complied, Provided waste 2 nos of waste heat recovery systems for both kilns With capacity of 10 MWW and 15 MW Total is 25 MW. Line-2.</b>                                                  |
| b. | Make efforts to achieve Power consumption less than 65 units/tonne for PPC and 85 units/tonne for OPC production and thermal energy consumption of 670 Kcal/Kg of clinker.                     |
|    | <b>Power consumption on PPC 77.20 Units/tonne, 95.20 units/tonne OPC and specific thermal energy consumption 747 Kcal/Kg clinker. We are making efforts trying to reach the above targets.</b> |
| c. | Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around the project area and maintain the regularly.              |
|    | <b>Provided solar fence for colony and Temple areas.</b>                                                                                                                                       |
| d. | Provide the project proponent for LED lights in their offices and residential areas.                                                                                                           |
|    | <b>Complied. Provided 90 % of LED lights in the offices and residential areas.</b>                                                                                                             |
| e. | Maximize utilisation of fly ash, slag and sweetner in cement blend as per BIS standards: and.                                                                                                  |
|    | <b>We have consumed during the year 2019-20 Fly ash: 161050 MT, Slag: 30913 MT in cement blending as per BIS standards.</b>                                                                    |



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| f. | Maximize utilisation of alternate fuels and co-processing achieve bet practice norms.                                                                                                                                                                                                                |
|    | <b>There is no provision for utilisation of alternate fuels. We have consuming alternate raw materials like Iron Scrubbing material/ESP dust slag from steel industries, Red mud from aluminium industry, Fly ash from Thermal Power Plants.</b>                                                     |
| 7  | Efforts shall be made to reduce impact of the transport of raw materials and end products on the surrounding environment including aricultural land by the use of covered conveyor belts/ Railways as a mode of transport.                                                                           |
|    | <b>We are procuring raw materials and transported through 70% by rail and clinker and cement despatches are 80% by rail. All trucks of raw materials and cement despatches through trucks are fully covered tarpolines. All conveyor are covered with GI sheet to protect dust emissions.</b>        |
| 8  | Used refractories shall be recycled as far as possible.                                                                                                                                                                                                                                              |
|    | <b>Complied. We have 100 % recycling used refractory in the cement manufacturing.</b>                                                                                                                                                                                                                |
| 9  | The PP shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.                                                                                                                             |
|    | <b>We will be appointed a consultant to study on the GHG emission inventory and to be submit the report within span of 4 to 5 months time.</b>                                                                                                                                                       |
| 10 | Emergency preparedness plan based on Hazard identification and risk assessment (HIRA) and disaster management plan shall be implemented.                                                                                                                                                             |
|    | <b>Complied. We have prepared Emergency preparedness plan in 2015 and we have implemented the same.</b>                                                                                                                                                                                              |
| 11 | The PP shall carry our heat stress analysis for the workmen who work in high temperature work zone and provide personal protection equipment (PPE) as per the norms of factory act.                                                                                                                  |
|    | <b>Provided PPE for who are working in hot temperatures, Heat stress analysis for the workmen who work in the high temperature zone to be conducted.</b>                                                                                                                                             |
| 12 | The PP shall adhere to the corporate environmental policy and system of the reporting of any infringements/ non-compliance of EC conditions at least once a year to the board of directors and the copy of the board resolution shall be submitted to the MoEF & CC as a part of six-monthly report. |
|    | <b>PCIL is adhering to the Corporate Environmental Policy . Internal Audits are conducted once in a year to check non-compliance of EC conditions and reporting the same to the Board of Directors</b>                                                                                               |
| 13 | All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.                                                                                                                                                |
|    | <b>The industry is following CREP recommendations</b>                                                                                                                                                                                                                                                |






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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14 | A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall be report directly to the head of the Organisation.                                                                                                                                                                         | <b>The industry is formed Environmental Management Cell Headed by Unit head and the members are General Manager Mines, General Manager Production &amp; quality control and other sinior Executives are monitoring Environmental protection measures. The Environmental cell head directly reported to the Director Technical.</b> |
| 15 | Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobileSTP, safe drinking water, medical health care, creche etc. The housing may be in form of temporary structures to be removed after the completion of the project. | <b>Complied</b>                                                                                                                                                                                                                                                                                                                    |
| 16 | The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.                                                                                                                                                                                                             | <b>We are following stipulations whatever made by APPCB and State Government</b>                                                                                                                                                                                                                                                   |
| 17 | No further expansion or modifications in the plant shall be carried out without prior approval of Ministry of Environment, Forest and Climate Change (MoEF&CC)                                                                                                                                                                                   | <b>There is no expansion of the plant, if any proposal comes, we will seek prior approval from Ministry.</b>                                                                                                                                                                                                                       |
| 18 | The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other Waste (Management & Transboundty Movement) Rules, 2016.                                                                                                                                                                                              | <b>We have provided a system for utilising waste oils and disposed in the kiln alon with the fuel. Grease is mixed in the raw fuels and consumed in the kiln firing.</b>                                                                                                                                                           |
| 19 | The storage of NH3 and other hazardous chemicals at the site shall be as per the provisions of Manufacture, Storage and import of Hazardous Chemical Rules, 1989 as amended from time to time.                                                                                                                                                   | <b>It is not applicable for us.</b>                                                                                                                                                                                                                                                                                                |
| 20 | The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dB(A) during the day time and 70 dB(A) during the night time.                                                                                                                                                                                  | <b>Noise levels are controlling in the mills by providing the enclosures with GI sheets and the noise are within the standards in and around the plant.</b>                                                                                                                                                                        |



|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| 21 | Occupational health surveillance of the workers shall be done on regular basis and records maintained as per the Factories Act.                                                                                                                                                                                                                                                                                                                                                                                                               |
|    | <b>Complied. We are conducting Occupational surveillance of the workers doing regularly and records are maintained as per factories act.</b>                                                                                                                                                                                                                                                                                                                                                                                                  |
| 22 | The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.                                                                                                                                                                                                                                                                                                                                                                                                      |
|    | <b>We are complying environmental protection measures and safe guards recommended in the EIS/EMP.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 23 | Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motar houses, Cement bagging plants.                                                                                                                                                                                                                                                                                                                                                                                                     |
|    | <b>Provided ventilation systems in all tunnels, cement baggage plant and motar houses.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 24 | Sufficient number of colour coded waste collection bins shall be constructed at shop floors in each shop to systematically segregate and store waste materials generated at the shop floors (other than Process waste) in designated coloured bins for value addition by promoting reuse of such wastes and for good housekeeping.                                                                                                                                                                                                            |
|    | <b>Provided colour coded dust bins for the collection of Waste materials generated in the shop floors of the plant.</b>                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 25 | <b>The project proponent shall (post -EC monitoring):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| a. | Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of Government.                                                                                                                                                                                                                                                                                                                                                                                                   |
|    | <b>Clearnace letter sent to all local bodies and relevent of Government.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| b. | Put on the clearance letter on the web site of the company for access to the public.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    | <b>The clearance letter displayed at main entrance gate.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| c. | Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also seen at web site of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . |



*[Handwritten signature]*

|    |                                                                                                                                                                                                                                                                                                       |
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| a. | We have advertised in two news papers on is Telugu (Sakshi) on 17.04.2018 another one is in English (The New Indian Express) on 17.04.2018 and the same was informed to Regional Office wide letter no :PCIL-W:AVP:JD MoEF:2018/87 dated 25.04.2018 along with published in the news papers enclosed. |
| d. | Up load the status pdf compliance of the stipulated environment clearance conditions,including results of monitored data on their website and update the same periodically.                                                                                                                           |
|    | <b>We are up loading compliance of the stipulated environment clearance conditions along with monitored data updating the same periodically.</b>                                                                                                                                                      |
| e. | Monitor the creteria pollutants level namely: PM10, SO2, NOX (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the web site of the company.               |
|    | <b>Maonitored pollutants are displayed at main gate to the public</b>                                                                                                                                                                                                                                 |
| f. | Submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data(both in hard copies as well a by email) to the Regional Office of MoEF &CC, The respective of Zonal Office of CPCB and the SPCB.                            |
|    | <b>We are submitting six monthly reports on the status of the compliance stipulated environment clearance conditions along with monitored data had copies as well as by email to the RO,Zonal Office of CPCB and SPCB regularly.</b>                                                                  |
| g. | Submit the environmental statement for each financial year in Form -V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules,1986, as amended subsequently and put on the website of the company.                                                      |
|    | <b>Complied. Submitting Form -V within time to the State Pollution Control board regularly .</b>                                                                                                                                                                                                      |
| h. | 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 date of commencing the land development work.                                                                                                    |
|    | <b>The industry is commenced on 20.05.2018, date of completion15.08.2019 and taking trial runs from 25.08.2019.</b>                                                                                                                                                                                   |
| 26 | The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.                                                                                                                                                                               |
|    | <b>We will be obey the Board orders</b>                                                                                                                                                                                                                                                               |






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| 27 | The ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions.                                                                                                                                                                                                                                           |
|    | <b>We will be obey the Board orders</b>                                                                                                                                                                                                                                                                                                                                                               |
| 28 | The PP shall abide by all the commitments and recommendations made in the EIA/EMP report and that during their presentation to the EAC, The commitment made by the project proponent to the issue raised during the public hearing shall be implemented by the proponent.                                                                                                                             |
|    | <b>We are implementing the commitments and issues raised during the public hearing, We are following the recommendations made in the EIA/EMP during the presentation to the EAC.</b>                                                                                                                                                                                                                  |
| 29 | The above conditions shall be enforced, inter alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the environment (Protection) Act, 1986, Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016 and the public liability insurance Act, 1991 along with their amendments and rules. |
|    | <b>We shall follow the above rules and amendments within time.</b>                                                                                                                                                                                                                                                                                                                                    |
| 30 | This Environmental Clearance is issued in suppression of the J-11011/351/2006-IA-II (I) dated 18 th May 2007.                                                                                                                                                                                                                                                                                         |
|    | <b>We will be obey the Board orders</b>                                                                                                                                                                                                                                                                                                                                                               |
| 31 | Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.                                                                                                                                                                                                              |
|    | <b>No appeals received against this EC with in the Period of 30 days</b>                                                                                                                                                                                                                                                                                                                              |




**CHARTER ON CORPORATE RESPONSIBILITY FOR ENVIRONMENT PROTECTION (CREP)**

**PENNA CEMENT INDUSTRIES LIMITED**

**Boyareddy palli (V), Kamalapadu (PO), Yadiki (M), Anantapur (Dist), Andhra Pradesh**

1. Cement Plants, which are not complying with notified standards, shall do the following to meet the standards; Augmentation of existing Air Pollution Control Devices - by July 2003  
Replacement of existing Air Pollution Control Devices - by July 2004.

**Compliance Status:** Cement industry is already meeting emission standards below 30mg/Nm3.,

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.

**Compliance Status:** Emission level is maintained below 30mg/Nm3.,

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.

**Compliance Status:** Cement Kiln is already meeting the emission standards below 30mg/Nm3.,

4. CPCB will evolve load based standards by December 2003.

**Compliance Status:** We are maintaining the Standards.

5. CPCB and NCBM will evolve SO2 and NOx emission standards by June 2004.

**Compliance Status:** Cement industry is already maintaining the New Standards

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.

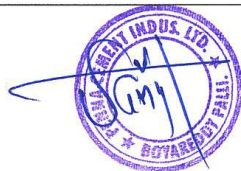
**Compliance Status:** All the material transfer points are equipped with 43 Nos. of bag filters. Raw materials are stored in covered areas. All the roads are concreted to prevent fugitive dust emission. Green belt is developed in 28.50Ha., & further development is under progress.

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

**Compliance Status:** Obtained permission for usage of Pet coke from SPCB through vide letter no: APPCB/KNL/ATP/97/HO/CFO/2019 dated 27.03.2019 and Pet coke is using in the kiln as a fuel.



|                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |
| <b>Compliance Status:</b> Continuous emission monitoring system is installed at Raw Mill/Kiln, Cooler, Coal Mill, Cement Mill & Slag VRM. We have also installed 2 ambient air stations (AAQMS). Line-II Continuous emission monitoring system is to be installed and the equipment is received waiting for installation engineer.           |
| 9. Tripping in kiln ESP to be minimized by July 2003 as per the recommendations of NTF.                                                                                                                                                                                                                                                      |
| <b>Compliance Status:</b> We have minimized the tripping of Kiln ESP as per the recommendation of NTF.                                                                                                                                                                                                                                       |
| 10. Industries will submit the target date to enhance the utilization of waste material by April, 2003.                                                                                                                                                                                                                                      |
| <b>Compliance Status:</b> All the particulate matter collected through APCEs' is automatically recycled in the respective process. Moreover, we are using fly ash, slag & red mud, wet scrubber materials which are waste generated from Thermal Plants, Steel Plants & Alumina Refineries respectively.                                     |
| 11. NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.                                                                                                                                                                                                                                              |
| <b>Compliance Status:</b> Not Applicable                                                                                                                                                                                                                                                                                                     |
| 12. Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003. * Non complying units shall given bank guarantee to respective SPCBs.                                                                                                                                        |
| <b>Compliance Status:</b> In line -I 10MW Waste Heat Recovery plant is installed by utilizing Preheater & Cooler exhaust gases and Line-II 15 MW Waste Heat Recovery plant is under progress.                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                              |







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**TEST REPORT**

**STACK GAS QUALITY DATA**

**Client** : Penna Cement Industries Ltd,  
**Project** : Cement Plant (Boyareddypalli Works),  
**Location** : Boyareddypalli (V), Yadiki (M), Anantapur (Dist), A.P.,  
**Month** : February-2020.

| S. No | Parameters                                    | Cement Silo-I | Cement Silo-II | Cement Silo-III                                  | Cement Silo-IV                                   |
|-------|-----------------------------------------------|---------------|----------------|--------------------------------------------------|--------------------------------------------------|
| 1.    | Date                                          | 24.02.2020    | 24.02.2020     | Monitoring was not carried out due to shut down. | Monitoring was not carried out due to shut down. |
| 2.    | Time                                          | 11.20 AM      | 12.10 PM       |                                                  |                                                  |
| 3.    | Temp °C (Ambient)                             | 34            | 36             |                                                  |                                                  |
| 4.    | Temp °C (Stack)                               | 68            | 62             |                                                  |                                                  |
| 5.    | Pollution Control Equipment                   | Bag Filter    | Bag Filter     |                                                  |                                                  |
| 6.    | Stack Diameter (m)                            | 0.65          | 0.65           |                                                  |                                                  |
| 7.    | Stack Height (m)                              | 51            | 51             |                                                  |                                                  |
| 8.    | Velocity (m/sec)                              | 9.68          | 9.21           |                                                  |                                                  |
| 9.    | Discharge (m <sup>3</sup> /hr.)               | 11,557        | 10,996         |                                                  |                                                  |
| 10.   | <b>Particulate Matter (mg/Nm<sup>3</sup>)</b> | <b>9.01</b>   | <b>14.47</b>   |                                                  |                                                  |

*[Handwritten Signature]*



*[Handwritten Signature]*  
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**TEST REPORT**

**STACK GAS QUALITY DATA**

**Client : Penna Cement Industries Ltd,**  
**Project : Cement Plant (Boyareddypalli Works),**  
**Location : Boyareddypalli (V), Yadiki (M), Anantapur (Dist), A.P.,**  
**Month : February-2020.**

| S.No | Parameters                                    | Packer-I     | Packer-II    | Packer-III   | Packer-IV    |
|------|-----------------------------------------------|--------------|--------------|--------------|--------------|
| 1.   | Date                                          | 22.02.2020   | 22.02.2020   | 22.02.2020   | 22.02.2020   |
| 2.   | Time                                          | 9.30 AM      | 10.10 AM     | 10.40 AM     | 11.30 AM     |
| 3.   | Temp °C (Ambient)                             | 32           | 32           | 34           | 34           |
| 4.   | Temp °C (Stack)                               | 54           | 64           | 53           | 58           |
| 5.   | Pollution Control Equipment                   | Bag Filter   | Bag Filter   | Bag Filter   | Bag Filter   |
| 6.   | Stack Diameter (m)                            | 0.90         | 0.90         | 0.90         | 0.90         |
| 7.   | Stack Height (m)                              | 25.18        | 25.18        | 25.18        | 25.18        |
| 8.   | Velocity (m/sec)                              | 15.20        | 15.28        | 13.56        | 12.53        |
| 9.   | Discharge (m <sup>3</sup> /hr)                | 34,793       | 34,762       | 31,079       | 28,681       |
| 10.  | <b>Particulate Matter (mg/Nm<sup>3</sup>)</b> | <b>10.26</b> | <b>15.03</b> | <b>14.12</b> | <b>12.57</b> |

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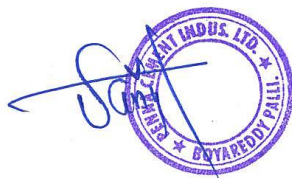
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**TEST REPORT**

**STACK GAS QUALITY DATA**

**Client : Penna Cement Industries Ltd,**  
**Project : Cement Plant (Boyareddypalli Works),**  
**Location : Boyareddypalli (V), Yadiki (M), Anantapur (Dist.), A.P.,**  
**Month : February-2020.**

| S. No | Parameters                                        | Cement Mill -<br>Ball Mill | Crusher      |
|-------|---------------------------------------------------|----------------------------|--------------|
| 1.    | Date                                              | 22.02.2020                 | 23.02.2020   |
| 2.    | Time                                              | 2:10 PM                    | 10:10 AM     |
| 3.    | Temp °C (Ambient)                                 | 38                         | 32           |
| 4.    | Temp °C (Stack)                                   | 78                         | 65           |
| 5.    | Pollution Control<br>Equipment                    | Bag House                  | Bag House    |
| 6.    | Stack Diameter<br>(m)                             | 1.7                        | 1.0          |
| 7.    | Stack Height (m)                                  | 33                         | 20           |
| 8.    | Velocity (m/sec)                                  | 10.75                      | 10.97        |
| 9.    | Discharge (m <sup>3</sup> /hr)                    | 87,796                     | 31,001       |
| 10.   | <b>Particulate<br/>Matter (mg/Nm<sup>3</sup>)</b> | <b>19.81</b>               | <b>10.71</b> |







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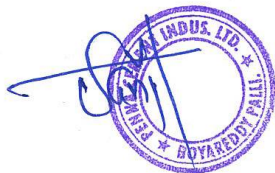
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**TEST REPORT**

**STACK GAS QUALITY DATA**

**Client : Penna Cement Industries Ltd,**  
**Project : Cement Plant (Boyareddypalli Works),**  
**Location : Boyareddypalli (V), Yadiki (M), Anantapur (Dist.), A.P.,**  
**Month : February-2020.**

| S. No | Parameters                                    | Cooler       | Coal Mill    |
|-------|-----------------------------------------------|--------------|--------------|
| 1.    | Date                                          | 21.02.2020   | 21.02.2020   |
| 2.    | Time                                          | 11.20 AM     | 02:40 PM     |
| 3.    | Temp °C (Ambient)                             | 34           | 38           |
| 4.    | Temp °C (Stack)                               | 158          | 62           |
| 5.    | Pollution Control Equipment                   | ESP          | Bag House    |
| 6.    | Stack Diameter (m)                            | 3.5          | 1.7          |
| 7.    | Stack Height (m)                              | 38           | 47           |
| 8.    | Velocity (m/sec)                              | 12.88        | 13.35        |
| 9.    | Discharge (m <sup>3</sup> /hr)                | 4,45,886     | 1,09,031     |
| 10.   | <b>Particulate Matter (mg/Nm<sup>3</sup>)</b> | <b>25.44</b> | <b>12.93</b> |



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**TEST REPORT**

**STACK GAS QUALITY DATA**

**Client : Penna Cement Industries Ltd,**  
**Project : Cement Plant (Boyareddypalli Works),**  
**Location: Boyareddypalli (V), Yadiki (M), Anantapur (Dist), A.P.,**  
**Month : February-2020.**

| S.No | Parameters                     | Kiln       |
|------|--------------------------------|------------|
| 1.   | Date                           | 21.02.2020 |
| 2.   | Time                           | 09:40 AM   |
| 3.   | Temp °C (Ambient)              | 32         |
| 4.   | Temp °C (Stack)                | 118        |
| 5.   | Pollution Control Equipment    | Bag House  |
| 6.   | Stack Diameter (m)             | 4.75       |
| 7.   | Stack Height (m)               | 120        |
| 8.   | Velocity (m/sec)               | 11.65      |
| 9.   | Discharge (m <sup>3</sup> /hr) | 7,42,822   |

|    |                                                              |                    |              |
|----|--------------------------------------------------------------|--------------------|--------------|
| 1. | PM (Particulate Matter) Concentration                        | mg/Nm <sup>3</sup> | <b>11.39</b> |
|    | <b>CPCB Standards for Cement Plant, (Particulate Matter)</b> | mg/Nm <sup>3</sup> | <b>30</b>    |
| 2. | Sulphur-dioxide Concentration                                | mg/Nm <sup>3</sup> | <b>12</b>    |
|    | <b>CPCB Standards for Cement Plant, (Sulphur-dioxide)</b>    | mg/Nm <sup>3</sup> | <b>100</b>   |
| 3. | Oxides of Nitrogen Concentration                             | mg/Nm <sup>3</sup> | <b>312</b>   |
|    | <b>CPCB Standards for Cement Plant, (Oxides of Nitrogen)</b> | mg/Nm <sup>3</sup> | <b>600</b>   |

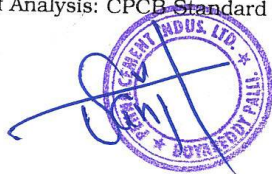
NABL Certificate No.: TC- 5233

NABET Certificate No.: NABET/EIA/1619/SA064

Make of the Instrument: Vayubodhan Upkaran Private Limited

Model & S.No: VSS1; 414-DTK-08

Method of Analysis: CPCB Standard Method



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**TEST REPORT**

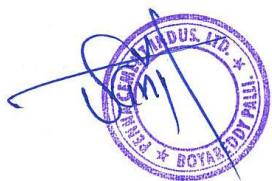
**NOISE LEVEL MONITORING IN dB (A) AT CEMENT PLANT**

**Client** : Penna Cement Industries Ltd,  
**Project** : Cement Plant (Boyareddypalli Works),  
**Location** : Boyareddypalli (V), Yadiki (M), Anantapur Dist., A.P.,  
**Month** : February-2020,  
**Date of Sampling**: 26/02/2020.

| CODE                                                 | LOCATION                     | NOISE LEVEL IN dB(A) |                      |
|------------------------------------------------------|------------------------------|----------------------|----------------------|
| N-1                                                  | East Side of the Plant Site  | 73.4                 | 63.4                 |
| N-2                                                  | West Side of the Plant Site  | 68.6                 | 58.8                 |
| N-3                                                  | North Side of the Plant Site | 71.5                 | 64.3                 |
| N-4                                                  | South Side of the Plant Site | 70.2                 | 56.7                 |
| <b>AMBIENT AIR QUALITY STANDARDS<br/>w.r.t NOISE</b> |                              | <b>DAY TIME-75</b>   | <b>NIGHT TIME-70</b> |

**NOISE LEVEL MONITORING IN dB (A)**

| CODE | LOCATION | Spot Noise Level dB (A) |
|------|----------|-------------------------|
| N-5  | DG Set   | 86                      |



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### TEST REPORT

**Client** : Penna Cement Industries Ltd,  
**Project** : Cement Plant (Boyareddypalli Works),  
**Location** : Boyareddypalli (V), Yadiki (M), Anantapur Dist., A.P.  
**Month** : February-2020.

### STACK GAS QUALITY MONITORING REPORT

**Location** : D.G. set - 1250 KVA  
**Date of sampling** : 25.02.2020.  
**Time of sampling** : 02:30 PM  
**Ambient Temperature** : 38 °C  
**Diameter (Chimney)** : 0.41 m  
**Noise Level** : 84.2 dB (A)

### FLUE GAS PARTICULARS

|                                  |                     |       |
|----------------------------------|---------------------|-------|
| Flue gas Temperature             | Deg. C              | 78    |
| Flue gas velocity (Avg)          | M/sec               | 11.4  |
| Flue gas discharge               | Nm <sup>3</sup> /hr | 5,415 |
| Oxygen concentration in Flue gas | %                   | 6.8   |

### POLLUTANT CONCENTRATIONS

| PARAMETERS                          | UNITS              | CONCENTRATION | EMISSION STANDARDS |
|-------------------------------------|--------------------|---------------|--------------------|
| Particulate matter                  | mg/Nm <sup>3</sup> | 12            | 115                |
| Sulphur Dioxide, SO <sub>2</sub>    | ppm                | --            | ---                |
| Oxides of Nitrogen, NO <sub>x</sub> | ppm                | --            | ---                |
| Nitrous Oxide, NO                   | ppm                | --            | ---                |
| Nitrogen Dioxide, NO <sub>2</sub>   | ppm                | --            | ---                |
| Carbon Monoxide, CO                 | mg/Nm <sup>3</sup> | --            | ---                |



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**TEST REPORT**

**AMBIENT AIR QUALITY REPORT**

**Client** : Penna Cement Industries Ltd,  
**Project** : Cement Plant (Boyareddypalli Works),  
**Location** : Boyareddypalli (V), Yadiki (M), Anantapur (Dist), A.P.,  
**Month** : February-2020,  
**Date of Sampling**: 21.02.2020 to 24.02.2020.

| S. No                                                                                                                 | LOCATION                                 | PM <sub>10</sub>                  | PM <sub>2.5</sub>                | SO <sub>2</sub>                  | NO <sub>2</sub>                  | CO                                              |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------------------------------------------------|
| 1                                                                                                                     | Near Plant Gate                          | 82                                | 46                               | 16.8                             | 18.4                             | <1                                              |
| 2                                                                                                                     | Colony Area                              | 64                                | 32                               | 11.6                             | 12.5                             | <1                                              |
| 3                                                                                                                     | Old Canteen-South west of the plant      | 78                                | 42                               | 14.2                             | 16.2                             | <1                                              |
| 4                                                                                                                     | AP TRANSCO point-South side of the plant | 62                                | 34                               | 12.4                             | 14.7                             | <1                                              |
| <b>NAAQ Standards for Industrial, Residential, Rural and Other areas<br/>(24 hourly standard in µg/m<sup>3</sup>)</b> |                                          | <b>100<br/>(µg/m<sup>3</sup>)</b> | <b>60<br/>(µg/m<sup>3</sup>)</b> | <b>80<br/>(µg/m<sup>3</sup>)</b> | <b>80<br/>(µg/m<sup>3</sup>)</b> | <b>02<br/>(8 hourly)<br/>(mg/m<sup>3</sup>)</b> |

Make of the Instrument for PM<sub>10</sub>: Aero Vironment Engineers Inc.  
Model & S.No: RDS 9000/091125, 9000/091126 & 9000/091128  
Make of the Instrument for PM<sub>2.5</sub>: Envirotech Instruments (P) Ltd.  
Model & S.No: APM 550, 142-DTA-2010 & 164-DTA-2010  
Method of Analysis for PM<sub>10</sub> & PM<sub>2.5</sub>: Gravimetric Method  
Method of Analysis for SO<sub>2</sub>: Improved West & Geake Method  
Method of Analysis for NO<sub>2</sub>: Jacob & Hocheiser Method  
Duration: Sample was collected on 24 hourly basis



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**TEST REPORT**

**WATER QUALITY DATA**

**Client** : Penna Cement Industries Ltd,  
**Project** : Cement Plant (Boyareddypalli Works),  
**Location** : Boyareddypalli (V), Yadiki (M), Anantapur (Dist), A.P.,  
**Month** : February-2020.  
**Date of Sampling** : 26.02.2020.

**STP WATER QUALITY REPORT**

| S. No | Parameters                             | Results       |               | GSR 422 (E)<br>General Standards for<br>Discharge of Effluents<br>Inland Surface Water |
|-------|----------------------------------------|---------------|---------------|----------------------------------------------------------------------------------------|
|       |                                        | STP Inlet     | STP Outlet    |                                                                                        |
| 1     | Colour (Hazen Units)                   | Grey          | 10            | See Note                                                                               |
| 2     | Odour                                  | Dis-Agreeable | Dis-Agreeable | See Note                                                                               |
| 3     | PH                                     | 6.80          | 7.05          | 5.5- 9.0                                                                               |
| 4     | Oil & Grease, mg/l                     | 4             | 1             | 10                                                                                     |
| 5     | Total Suspended Solids, mg/l           | 720           | 350           | 100                                                                                    |
| 6     | Total volatile suspended Solids, mg/l  | 360           | 145           | ---                                                                                    |
| 7     | Total Dissolved Solids, at 105 °C mg/l | 970           | 925           | 2100                                                                                   |
| 8     | BOD for 3days at 27 °C, mg/l           | 109           | 4             | 30                                                                                     |
| 9     | COD mg/l                               | 260           | 24            | 250                                                                                    |
| 10    | Chloride as Cl, mg/l                   | 254           | 185           | 1000                                                                                   |
| 11    | Fluoride as F, mg/l                    | 1.05          | 0.92          | 2.0                                                                                    |
| 12    | Dissolved Phosphate, mg/l              | 2.4           | 1.2           | 5.0                                                                                    |
| 13    | Percent Sodium,                        | 50.7          | 41.9          | ---                                                                                    |
| 14    | Sulphide as S, mg/l                    | 0.6           | 0.25          | 2.0                                                                                    |
| 15    | Boron as B, mg/l                       | 0.13          | 0.12          | 2.0                                                                                    |
| 16    | Residual Sodium Carbonate              | 32            | 48            | ---                                                                                    |
| 17    | Sulphates as So <sub>4</sub> , mg/l    | 78            | 80            | 1000                                                                                   |
| 18    | Iron as Fe, mg/l                       | 0.35          | 0.15          | 3.0                                                                                    |

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable



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