

JK Cement WORKS

MUDDAPUR

(Unit J.K. Cement Ltd.)

CIN : L17229UP1994PLC017199

Phone +91-8350-289000
Fax +91-8350-289001
E-mail : factory.muddapur@jkcement.com

Works P.O. Muddapur - 587 122
Dist. Bagalkot (Karnataka) India

No. JKCW / ENV. /E.C. / (PLANT)/11/12

Date- 15-11-2017

The Scientist-F
Ministry of Environment & Forest
Govt. of India, Indira Paryavaran Bhavan
Aliganj, New Delhi- 110 003

Sub: Half Yearly Environmental Clearance Compliance report for the period from April-2017 to September-2017 for JK Cement Works, Village- Muddapur, Taluka- Mudhol, District- Bagalkot (Karnataka)

Ref: MoEF Letter F. No. J-11011 / 489 / 2006-1A.II (I) / dtd. 14-09-2007, MoEF Letter No. F.No. J-11011/263/2009-IA II (I) dated 21-06-2010, MoEF letter no. J-11011/263/2009-IA II (I) dated 26-09-2012 and MoEF office memorandum dated 06 April 2011

Dear Sir,

With reference to your above cited environmental clearance letter of our Cement Plant, We are sending here with enclosed point wise compliance report for the period from **April-2017 to September-2017** for our JK Cement Works (Cement Plant -2.20 MTPA Clinker & 2.50 MTPA OPC and Captive Power Plant 2 x 25 MW, expanded Cement Grinding Unit i.e. Slag cement (2.50 MTPA to 3.5 MTPA) and manufacturing of cement based adhesive without increasing the production capacity at Village Muddapur, Taluka Mudhol, District Bagalkot, Karnataka for your kind information and record please.

Thanking you

Yours faithfully
For J.K. Cement Works

RBM RBM Tripathi
(Unit Head)

Encl. - Compliance report for both existing and expanded capacity, Compliance report of tile fixer adhesive, Socio-economic development report & six monthly manual AAQ monitoring, stack, fugitive emission, treated effluent monitoring, noise monitoring, continuous emission monitoring and CAAQM report

CC:

- 1- The Addl. Principal Chief Conservator of Forest (C) , Ministry of Environment & Forest, Regional Office (South Zone), 4th floor, E&F Wings, Kendriya Sadan, 17th Main Road, IIInd Block, Koramangala, Bangalore
- 2- Chairman, Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, New Delhi
- 3- Scientist 'D' & Incharge, Central Pollution Control Board, 1st & 2nd Floors, Nisarga Bhavan , A-Block, Thimmaiah , Main Road, 7th D Cross, Shivanagar, Opp. Pushpanjali Theatre, Bengaluru
- 4- Member Secretary, Karnataka Pollution Control Board, Church Street, Bangalore
- 5- The Environmental officer, Karnataka State Pollution Control Board, Sector no.07, by pass road, Navanagar Bagalkot – 587102



Registered & Corporate Office .

Kamla Tower, Kanpur - 208 001 (U.P.)
Ph. : 0512-2371478-81 Fax : 0512-2399854
E-mail : ho.grey@jkcement.com
Website : www.jkcement.com

Central Marketing Office

4th Floor, Krsna Chambers, Plot no. 11, Galaxy Garden,
North Main Road, Koregaon Park, Pune - 411001
Ph. : 020 -41350000 Fax : 020 - 41350099
E-mail : cmo.south@jkcement.com

J.K. Cement Works, Village- Lokapur, Taluka-Mudhol, District- Bagalkot, Karnataka
Ref: - MoEF Letter F. No. J-11011 / 489 / 2006-1A.II (I) / dtd. 14th September 2007
Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

Name of Project: **M/s J.K. Cement Works, Muddapur (Karnataka)**

EC to Cement Plant (2.20 MTPA) Clinker & 2.50 MTPA OPC and Captive Power Plant (2 x 25 MW) at Village- Lokapur, Mudhol, District Bagalkot, Karnataka

| | | |
|------|---|---|
| i. | Electrostatic precipitator (ESP) to cooler, Bag House to Raw mill, Bag filter to coal kiln burner and pre calciner shall be provided. On line gas analyzer for O ₂ , CO, emission at kiln inlet and power House out let and on line dust monitor to kiln and cooler shall be provided. A closed clinker system shall be adopted to control fugitive emission. Water sprinkler shall be done in raw material stock yard and cement bag loading areas. | Complied. Electrostatic precipitator (ESP) to cooler, Bag House to Raw mill, Bag filter to coal kiln burner and pre calciner have been provided. On line gas analyzer for O ₂ , CO, emission at kiln inlet and on line dust monitor to kiln and cooler have been provided. A closed clinker system has been adopted to control fugitive emission. Water sprinkler is done in raw material stock yard and cement bag loading areas. |
| ii. | The total water requirement from Ghatprabha River source shall not exceed 1046.4 m ³ /day. The treated waste water shall be recycled and reused in the process and or for dust suppression, green belt development and other plant related activities etc. The Effluent generated by CPP will also be used in the cement manufacturing process. No process waste water shall be discharged outside the factory premises and zero discharge shall be adopted. Domestic effluent treated in sewage treatment plant (STP) shall be used for green belt development within the plant and colony areas. | Complied. We are not abstracting water more than 1046.4 m ³ /day from Ghatprabha River. Dry manufacturing process has been adopted for cement manufacturing so no waste water is generated in cement plant. The treated waste water, generated in CPP, is being used for dust suppression, green belt development, other plant related activities /process. So, no process waste water is being discharged outside the factory premises and zero discharge is being adopted. Domestic effluent treated in sewage treatment plant (STP) is used for green belt development within the plant and colony areas. |
| iii. | The fly ash and bottom ash generated from the power plant shall be used in the process itself for manufacturing PPC. All the cement dust collected from the pollution control devices shall be recycled and reuse in the process and used for cement manufacturing. The fly ash utilization shall be as per the provision stipulated in the fly ash notification of September, 1999 and | Complied, The fly ash and bottom ash generated from the power plant is being used in the process itself for manufacturing PPC. All the cement dust collected from the pollution control devices is recycled and reused in the process and used for cement manufacturing. The fly ash utilization is as per the provision stipulated in the fly ash |

J.K. Cement Works, Village- Lokapur, Taluka-Mudhol, District- Bagalkot, Karnataka
Ref: - MoEF Letter F. No. J-11011 / 489 / 2006-1A.II (I) / dtd. 14th September 2007
Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|----------------------------|---|---|
| | amended in august, 2003. STP sludge shall be used as manure for green belt development. Used oil shall be sold to authorized recycler / re processor only. | notification of September, 1999 and amended in august, 2003. STP sludge is used as manure for green belt development. Used oil is sold to authorized recycler / re processor only. |
| iv. | High calorific hazardous waste shall be utilized in the cement plant. | Complying. We have obtained the permission from KSPCB for co-processing the plastic waste, municipal solid waste and ETP sludge of BASF, Mangalore (Karnataka). BASF's ETP sludge will be co-processed in kiln from April-2015. Oil soaked cotton waste is disposed in kiln. |
| v. | As proposed in EIA / EMP, green belt shall be developed in 80 ha. (30%) out of total 256.3 Acres. As per the CPCB Guidelines to mitigate the effect of air emission in consultation with local DFO. | As a part of green belt development, We have received a certificate from forest department via. Letter no. B2.GFL/Mines/2007-08/597 dated 30-08-2007 regarding availability of local Flora and Fauna in Mudhol Taluka. We have planted a number of plants in and around cement plant and colony. We have covered almost 33% area of total land area from plantation. |
| General Condition : | | |
| i. | The project authorities shall adhere to the stipulation made by Karnataka State Pollution Control Board and State Government. | Agreed |
| ii. | No further Expansion or modification of the plant shall be carried out without prior approval of Ministry or rules made there under. | Agreed. We have obtained environmental clearance for expansion of Cement Grinding Unit (2.50 MTPA to 3.5 MTPA) via. MoEF Letter No. F.No. J-11011/263/2009-IA II (I) dated 21-06-2010 and also obtained permission for manufacturing the cement based adhesive without increasing the production capacity from MoEF via F. No. J 11011/263/2009- IA II (I) dated 26 September 2012. |

J.K. Cement Works, Village- Lokapur, Taluka-Mudhol, District- Bagalkot, Karnataka
Ref: - MoEF Letter F. No. J-11011 / 489 / 2006-1A.II (I) / dtd. 14th September 2007
Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|------|---|--|
| iii. | The gaseous and particulate matter emission from various units shall conform to the standards prescribed by the KSPCB. Interlocking facilities shall be provided in the pollution control so that in the event of the pollution control equipment not working, the respective unit(s) is shutdown automatically. | Complying, we have provided online monitoring instruments at major stacks and the gaseous and particulate matter emissions from various units are within the standard prescribed by the KSPCB/CPCB/MoEF. Interlocking facilities have been provided in pollution control equipment. |
| iv. | One Ambient Air Quality Monitoring station shall be installed in down wind direction. Ambient air quality including Ambient Noise Level shall not exceed the standard stipulated under EPA or by the state authorities. Monitoring of Ambient air quality and stack emission shall be carried out regularly in consultation with KSPCB and report submitted to the KSPCB quarterly and to the Ministry Regional Office at Bangalore Half Yearly. | Complied, we have installed total 4 Nos. of monitoring station in cement plant. Ambient air quality including ambient Noise level is not exceeding the standard stipulated under EPA or by the state authorities. Monitoring of Ambient air quality and stack emission is being carried out regularly in consultation with KSPCB and report is being submitted to the KSPCB monthly/quarterly and to the Ministry Regional Office at Bangalore Half Yearly. |
| v. | The Company shall install adequate dust collection and extraction system to control fugitive dust handling (Unloading, conveying, transporting, and stacking) vehicular movement, bagging and packing areas etc. Asphalting / concreting of roads and water spray all around the stock yard and loading / unloading areas shall be carried out to control fugitive emission. Covered sheds for storage of raw materials and fully covered conveyors for transportation of materials shall be provided besides coal, cement, fly ash and clinker shall be stored in silos. | Complied, we have installed adequate dust collection and extraction system to control fugitive dust handling (Unloading, conveying, transporting, and stacking) vehicular movement, bagging and packing areas etc. Asphalting / concreting of roads and water spray all around the stock yard and loading / unloading areas is being carried out to control fugitive emission. Covered sheds for storage of raw materials and fully covered conveyors for transportation of materials have been provided besides coal, cement, fly ash and clinker is stored in silos. |
| vi. | Prior permission from the State Ground water Board, Central Ground Water Authority (SGWB / CGWA) regarding drawl of ground water shall be obtained. | Ground water abstract permission has been obtained from Central / State ground water Authority via. letter No. 21-4 SWR/ CGWA/ 2008/ 1568 dtd. 11.12.2008 and It was valid upto 28-11-2010 so it had been renewed via letter no. 21- 4 (70) / SWR /CGWA / 2008 - 1489 dated 10/10/2011 by CGWA. |

J.K. Cement Works, Village- Lokapur, Taluka-Mudhol, District- Bagalkot, Karnataka
Ref: - MoEF Letter F. No. J-11011 / 489 / 2006-1A.II (I) / dtd. 14th September 2007
Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|-------|---|---|
| vii. | The company must harvest the rain water from the roof tops and storm water drains recharge the ground water and use the same water for the various activities of the project to conserve fresh water. | Complying, We are harvesting the rain water from roof tops. Storm water drains are recharging the ground water in colony and cement plant. |
| viii. | The company shall undertake eco-development measures including community welfare measures in the project areas. | Complying, We are undertaking eco-development measures like energy saving, hazardous wastes, Manufacturing of PPC/Slag cement and other wastes disposing etc. including community welfare measures. |
| ix. | 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, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environments (Protection) Act, 1986 Rules 1989 viz 75 dBA (Day Time) and 70 dBA at (Night Time). | Complying, The overall noise levels in and around the plant area is well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels are well within the standard prescribed under Environments (Protection) Act, 1986 Rules 1989 viz 75 dBA (Day Time) and 70 dBA at (Night Time). |
| x. | All recommendations made in the Corporate Responsibilities for Protection (CREP) for cement plants shall be implemented. | Complying, Recommendations made in the charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants are being implemented. |
| xi. | Proper housekeeping and adequate occupational health program shall be taken up. | Complying, Proper housekeeping and adequate occupational health programmes are being taken up. Blood Donation camp was arranged on 28th Feb. 2015. |
| xii. | A separate Environmental Management cell to carry out various management and monitoring function shall be set up under control of Sr. Executive. | Complied, A separate Environmental Management cell to carry out various management and monitoring function has been set up under control of Sr. Executive. |
| xiii. | Rs. 8.70 crores earmarked for environmental pollution measures shall be suitable used to implement the condition stipulated by the Ministry of Environment and Forest as well as the State Government. The fund so provided shall not be diverted for any other | Complied, As a part of environmental pollution control measures, we have invested above earmarked amount. The fund so provided has not been diverted for any other purpose. |

J.K. Cement Works, Village- Lokapur, Taluka-Mudhol, District- Bagalkot, Karnataka
Ref: - MoEF Letter F. No. J-11011 / 489 / 2006-1A.II (I) / dtd. 14th September 2007
Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

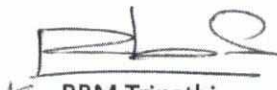
| | | |
|------|---|---|
| | purpose. | |
| xiv. | The Regional of this Ministry at Bangalore / CPCB / KSPCB shall monitor the stipulated condition. A six monthly compliance report and monitor data along with statistical interpretation shall be submitted to them regularly. | Agreed, A six monthly compliance report and monitor data along with statistical interpretation is being submitted to The Regional of this Ministry at Bangalore / CPCB / KSPCB regularly. |
| xv. | The project authorities shall inform the Regional office as well as the Ministry, the date of financial closure and final approval of the project by concerned authorities and the date of commencing the land development work. | Complied, Project has been completed. We had informed the Regional office as well as the Ministry, the date of financial closure and final approval of the project by concerned authorities and the date of commencing the land development work. |
| xvi. | The project proponent shall inform the public that the project has been accorded environmental clearance by Ministry and copies of the clearance letter are available with the Karnataka Pollution Control Board / committee and may be seen at website of the Ministry of Environment and Forests at http://www.envfor.nic.in . This should be advertised within seven days from the date of issues of clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the regional office at Bangalore. | Complied, we had informed the public that the project has been accorded environmental clearance by Ministry and copies of the clearance letter are available with the Karnataka Pollution Control Board / committee and may be seen at website of the Ministry of Environment and Forests at http://www.envfor.nic.in . This had been advertised within seven days from the date of issues of clearance letter in two local newspapers that are widely circulated in the region of which one was in the vernacular language of the locality concerned and a copy of the same has been forwarded to the regional office at Bangalore. |
| 6.0 | The Ministry or any other competent authority may stipulate any further condition(s) on receiving reports from the project authorities. The above conditions shall be monitored by the Regional offices of this Ministry located of Bangalore. | We are agreeing. |
| 7.0 | The Ministry may revoke or suspend the clearance if implementation of any of the above condition is not satisfactory. | We are agreeing. |
| 8.0 | Any other condition or alteration in the above conditions shall to be implemented by the project authorities in a time bound | Complying |

J.K. Cement Works, Village- Lokapur, Taluka-Mudhol, District- Bagalkot, Karnataka
Ref: - MoEF Letter F. No. J-11011 / 489 / 2006-1A.II (I) / dtd. 14th September 2007
Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|-----|--|------------------|
| | manner. | |
| 9.0 | The above conditions shall be enforced, inter-alia under the provisions of The Water (Prevention and control of pollution) Act, 1974, the Air Act. 1981, The Environment Protection Act 1986 and The Public Liability Insurance Act, 1991 along with their amendments and rules. | We are agreeing. |

Thanking you,

Yours Faithfully
J.K. Cement Works, Muddapur (Karnataka)


RBM Tripathi
(Unit Head)

Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

Name of Project: **J.K. Cement Works (Unit: J.K. Cement Ltd.), Muddapur (Karnataka)**

EC to expansion of Cement Grinding Unit (2.50 MTPA to 3.5 MTPA) at Village Muddapur, Taluka Mudhol, District Bagalkot, Karnataka

A. SPECIFIC CONDITIONS:

| S.N. | CONDITION | REPLY |
|------|---|--|
| i) | All other necessary statutory clearances from the concerned departments including No Objection Certificate from the Karnataka State Pollution Control Board (KSPCB) shall be obtained prior to commencement of construction and / or operation. | Complied, We have obtained all other necessary statutory clearances from concerned departments including No Objection Certificate from the Karnataka State Pollution Control Board (KSPCB) prior to commencement of construction and / or operation. We are renewing consent to operate from Karnataka Pollution Control Board every year. |
| ii) | Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Govt. shall be ensured and regular reports submitted to the Ministry and its regional Office at Bangalore. | Complying, We are ensuring that we are complying with all the specific and general conditions stipulated for the existing plant by the Central/State Govt. and six monthly compliance reports are being submitted to the Ministry and its Regional office at Bangalore. |
| iii) | Adequate pollution control measures viz. bag filters shall be provided to control emissions from various sources within 50 mg/Nm ³ . At no time, particulate emissions from the grinding unit shall exceed 50 mg/Nm ³ . Interlocking facility shall be provided in the pollution control equipments so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically. | Complied, Adequate pollution control measures viz. bag filters have been provided to control emission from various sources within 50 mg/Nm ³ and at no time, particulate emissions from the grinding unit is being exceeded 30 mg/Nm ³ and interlocking facility has been provided in the pollution control equipment. |
| iv) | Cement grinding shall be carried out in closed circuit and shall have highly efficient reverse pulse jet type bag filters. | Complied, Cement grinding is being carried out in closed circuit and highly efficient pulse jet type bag filters have been installed. |
| v) | Ambient air quality monitoring stations (AAQMS) shall be set up as per statutory requirement in consultation with the Karnataka Pollution Control Board (KSPCB). Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the State authorities. Monitoring of ambient air quality shall be carried out regularly in consultation with KSPCB and must not exceed the standards stipulated under EPA or by the State Authorities. Monitoring reports | Complied, Ambient air quality monitoring stations (AAQMS) have been set up in consultation with the Karnataka Pollution Control Board (KSPCB). Ambient air quality including ambient noise levels is not exceeding the standards stipulated under EPA or by the State authorities. Ambient air quality is being carried out regularly in consultation with KSPCB and results are not exceeding the NAAQM standards, 2009. Ambient air, stack and fugitive emission monitoring reports are being submitted to |

Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|-------|--|---|
| | for ambient air, stack and fugitive emissions shall be submitted to the Ministry's regional Office at Bangalore, Central Pollution Control Board (CPCB) and KSPCB half-yearly. The instrument used for ambient air quality monitoring shall be calibrated time to time. | Ministry's regional Office at Bangalore, Central Pollution Control Board (CPCB) and KSPCB half-yearly. The Instruments, used for ambient air quality/stack/noise/fugitive monitoring are being calibrated time to time. |
| vi) | The company shall install adequate dust collection and extraction system to control fugitive dust emissions at loading/unloading points and all the transfer points. Dust extraction system with bag filters at raw material handling areas shall be provided, collected in bag filters and recycled back to the process. Storage of raw material shall be in closed roof sheds. Water sprinkling arrangement shall be made in the raw material stock yard and cement bag loading areas. | Complied, We have installed adequate dust collection and extraction system to control fugitive dust emissions at loading/unloading points and all the transfer points. The dust, collected in bag filters is recycled back to the process. Raw material is being stored in closed roof sheds. We are sprinkling the water in raw material stock yard and cement bag loading areas through water tankers. We have two no. dust sweeping machines also to sweep the dust from paved floors. |
| vii) | Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed. Transportation of raw materials shall be covered means. | Complying, Secondary fugitive emissions have been controlled and it is well within the prescribed limits and regularly monitored. CPCB guidelines regarding control of fugitive emission is being followed. Raw materials are being transported through covered means. |
| viii) | Total ground water requirement shall not exceed 200 m ³ /day. No waste water shall be generated from the cement grinding unit. | Complying, ground water is not abstracting more than 200 m ³ /day. No waste water is being generated from the cement grinding unit. |
| ix) | All the solid waste viz. fly ash and dust etc. should be properly recycled and reutilized in the process itself. | Complying, All the solid waste viz. fly ash and dust etc. is being properly recycled and reutilized in the process itself. 100% fly ash, generated in Captive power plant, is used in the process. |
| x) | As proposed, green belt shall be developed in at least 34.5 ha of land area to land area to mitigate the impact of fugitive emissions in and around the expansion project as per the CPCB guidelines in consultation with the local DFO. | Complying, we have covered almost 33% area of total land area from greenbelt to mitigate the impact of fugitive emissions. We are continuously developing the green belt in and surrounding the area as per the CPCB guidelines in consultation with the local DFO. |
| xi) | Proper housekeeping and adequate occupational health programmes shall be taken up. | Complying, Proper housekeeping and adequate occupational health programmes are being taken up time to time. Our plant has been certified with ISO 14001, ISO 9001 and OHSAS 18001 also. |
| xii) | All the recommendations made in the charter on Corporate Responsibility for Environment | Complying, Recommendations made in the Charter on Corporate Responsibility for |

Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|------------------------------|--|--|
| | Protection (CREP) for the cement plants shall be implemented. | Environment Protection (CREP) for the cement plants are being implemented. |
| xiii) | Rainwater harvesting measures shall be adopted. The company must also harvest the rainwater from the roof tops and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water. | Complied, Rainwater harvesting measures in cement plant and residential colony have been adopted. We are harvesting the rainwater from the roof tops and storm water drains also to recharge the ground water. |
| xiv) | At least 5% of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program should be ensured accordingly in a time bound manner. | Complying, item-wise details along with time bound action plan has been prepared and submitted to the Ministry's Regional Office at Bangalore. |
| xv) | The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. | The project has been completed but during project, all facilities had been provided to labour. |
| B. GENERAL CONDITION: | | |
| i) | The project authorities must strictly adhere to the stipulations made by the Karnataka State Pollution Control Board and the State Government. | Agreed, We are adhering to the stipulations made by the Karnataka State Pollution Control Board and the State Government. |
| ii) | No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. | Agreed, No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. |
| iii) | The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th may, 1993 and standard prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. | Agreed, The gaseous emissions from various process units are well within the load/mass based standards notified by this Ministry on 19th may, 1993 and standard prescribed from time to time. |
| iv) | At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO ₂ and NO _x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be | Complied, We have established four (AAQMS) monitoring stations and monitored data of ambient air quality and stack emission are being regularly submitted to the Ministry including its regional Office at Bangalore and the SPCB/CPCB once in six Months. Six monthly report of ambient air quality, fugitive |

Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|-------|--|--|
| | regularly submitted to this Ministry including its regional Office at Bangalore and the SPCB/CPCB once in six Months. | and stack emission has been enclosed as per Annexure- 1 |
| v) | Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose. | Complying, No waste water is generated from cement plant and the waste water, generated in captive power plant, is collected and treated properly and treated waste water is being used in dust suppression and gardening. |
| 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, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime). | Complying, The noise levels in and around plant are well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels are also within the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime) as per Annexure- 2 |
| Vii) | Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factory Act. | Complying, Occupational health surveillance of the workers is being done on a regular basis and records are being maintained as per the Factory Act. |
| viii) | The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table. | Complied, Surface water harvesting structures has been developed to harvest the rain water for utilization in the lean season besides recharging the ground water table |
| ix) | The Project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programme, educational programmes, drinking water supply and health care etc. | Complying, We are also complying with all environmental protection measures and safeguards recommended in the EIA/EMP report. Socio-economic development activities for the period April-2017 to September-2017 are as per Annexure-3. |
| X) | As proposed, Rs 431 lakhs and Rs. 117.95 lakhs shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the regional Office of the Ministry at Bangalore. The funds so provided shall not be diverted | Complied. We are spending more than recurring cost/annum for environment pollution control measures. An implementation schedule for implementing all the conditions stipulated herein has been submitted to the regional Office of the Ministry at Bangalore. |

Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|-------|--|---|
| | for any other purpose. | |
| xi) | A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent. | Complied, A copy of clearance letter had been sent by us to concern recommended by MoEF, No suggestions and representation received. The clearance letter has been put on the web site of the company. |
| xii) | The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the regional Office of the MoEF at Bangalore, The respective Zonal Office of CPCB and the CECB. The criteria pollutant levels namely; PM ₁₀ , SO ₂ , NO _x (ambient for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain. | Complying, Status of compliance of the stipulated environment clearance conditions and results of monitored data are being uploaded on company website and it is updated periodically. It is simultaneously being sent to the regional Office of the MoEF at Bangalore, The respective Zonal Office of CPCB and the CECB. The pollutants levels namely; PM ₁₀ , SO ₂ , NO _x are being displayed at a convenient location near the main gate of the company in the public domain. |
| xiii) | The project proponent shall also 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 as by e-mail) to the Regional Office of this Ministry at Bangalore/CPCB/SPCB shall monitor the stipulated conditions. | Complying, we are also submitting 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 as by e-mail) to the Regional Office of this Ministry at Bangalore/CPCB/SPCB and concerned authority monitor the stipulated conditions. |
| xiv) | The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (protection) Rules, 19086, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective regional Office of the MoEF at Bangalore by e mail. | Complying, The environmental statement for each financial year ending 31 st March in Form-V is being submitted by us to the concerned State Pollution Control Board and is also sent to the respective regional Office of the MoEF at Bangalore by e mail. |
| xv) | The Project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and | Complied, we had informed the public that the project has been accorded environmental clearance by the Ministry and copies of the |

Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|------|--|---|
| | copies of the clearance letter are available with the SPCB and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in . This shall be advertised 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 of the locality concerned and a copy of the same should be forwarded to the regional office at Bangalore. | clearance letter are available with the SPCB and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in . This had been advertised within seven days from the date of issue of the clearance letter, in two local newspapers that are widely circulated in the region of which one was in the vernacular language of the locality concerned and a copy of the same had been forwarded to the regional office at Bangalore. |
| xvi) | 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. | Complied, we had informed 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. |

We hope, you will find our reply in order.

With best regards,

Yours faithfully
For J.K. Cement Works, Muddapur (Karnataka)


RBM Tripathi
(Unit Head)

J.K. Cement Works, Village- Lokapur, Taluka-Mudhol, District- Bagalkot, Karnataka

Ref: - MoEF Letter F. No. J-11011/263/2009-IA II (I) dated 26-09-2012

Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

Name of Project: M/s J.K. Cement Works, Muddapur (Karnataka)

EC to expansion of Cement Grinding Unit (2.50 MTPA to 3.5 MTPA) at Village Muddapur, Taluka-Mudhol, District Bagalkot, Karnataka by M/s Jaykaycem Limited. Reg Change in product mix to manufacture cement based adhesive without increasing the production capacity.

Conditions are following.

| S.N. | Conditions | Reply |
|------|---|---|
| i. | The overall capacity of the plant shall remain 3.5 MTPA. | Agreed and complying. |
| ii. | There shall be no increase in the water consumption and land requirement. | Agreed, we are not consuming more than permitted water consumption and land requirement has not been increased. |
| iii. | The company shall with all the conditions stipulated vide Ministry's letter of even number dated 21 st June, 2010. | Complying. Report is being sent to regulatory authority. |
| iv. | In case of change in the scope of the project, fresh proposal for environmental clearance shall be submitted to the Ministry. | Noted and agreed. |

Subject- Stipulation of additional conditions in respect of Mega projects already granted environmental clearance

Reference- MoEF office memorandum dated 06 April 2011

| | | |
|----|---|---|
| i | Continuous monitoring of stack emissions as well as ambient air quality (as per notified standards) shall be carried out and continuous records maintained. Based on the monitored data, necessary corrective measures as may be required from time to time shall be taken to ensure that the levels are within permissible limits. The results of monitoring shall also be submitted to the respective Regional Office of MoEF regularly. Besides, the results of monitoring will also put on the website of the company in the public domain. | Complied. Continuous monitoring systems for main stacks emissions and ambient air have been installed and continuous records maintained. All the monitored data are well within the standard. We are submitting monthly report to Regional Office of MoEF and Regional office of KSPCB. Online data is uploading at CPCB website also and monitoring reports along with compliance report are uploaded at website of the company. |
| ii | The six monthly monitoring report as well as the monitored data on various parameters as stipulated in the environmental clearance conditions shall be put on the website of the company and | Complied. The six monthly monitoring report as well as the monitored data on various parameters as stipulated in the environmental clearance conditions is put on the website of the company and also |

J.K. Cement Works, Village- Lokapur, Taluka-Mudhol, District- Bagalkot, Karnataka
Ref: - MoEF Letter F. No. J-11011/263/2009-IA II (I) dated 26-09-2012
Environmental Clearance Compliance Report for the period from April, 2017 to September, 2017

| | | |
|---------|---|--|
| | also regularly updated. The monitored data shall also be submitted to respective State Pollution Control Board/UTPCCs and the Regional Office of MoEF. | regularly updated. The monitored data is also submitted to respective State Pollution Control Board/UTPCCs and the Regional Office of MoEF. |
| ii i | The ambient air quality data as well as the stack emission data will also be displayed in public domain at some prominent place near the main gate of the company and updated in real time. | Complied. The ambient air quality data as well as the stack emission data is displayed in public domain near the main gate of the company and updated in real time |

Thanking you,

Yours Faithfully
J.K. Cement Works, Muddapur (Karnataka)


RBM Tripathi
(Unit Head)

| J.K. Cement WORKS, MUDDAPUR (KARNATAKA) | | | | | | | | | | | | | | | | | | | |
|--|---------|-----------|------|-----------------|-----|-----|-----|-----------------|------|------|------|------------------|------|------|------|-------------------|------|------|------|
| CEMENT PLANT & 2X25 CPP MW | | | | | | | | | | | | | | | | | | | |
| HALF YEARLY AAQM REPORT (SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5}), FOR THE MONTH OF APRIL-2017 TO SEPTEMBER-2017 | | | | | | | | | | | | | | | | | | | |
| (ALL VALUES IN MICROGRAMS / CUBIC METER) | | | | | | | | | | | | | | | | | | | |
| Month | Sl. No. | Date | Week | SO ₂ | | | | NO ₂ | | | | PM ₁₀ | | | | PM _{2.5} | | | |
| | | | | Locations | | | | Locations | | | | Locations | | | | Locations | | | |
| | | | | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D |
| A P R I L | 1 | 4.4.2017 | 1st | 7.6 | 7.2 | 7.1 | 7.4 | 8.1 | 7.6 | 7.0 | 7.9 | 58.2 | 57.5 | 57.3 | 57.5 | 20.1 | 31.0 | 22.4 | 21.9 |
| | 2 | 6.4.2017 | | 7.4 | 7.3 | 7.2 | 7.2 | 7.8 | 7.7 | 7.6 | 7.7 | 59.0 | 57.9 | 57.4 | 57.6 | 17.8 | 30.7 | 15.8 | 19.7 |
| | 3 | 10.4.2017 | 2nd | 6.6 | 7.1 | 7.0 | 7.2 | 7.0 | 7.8 | 7.9 | 7.6 | 58.1 | 58.1 | 57.8 | 58.8 | 58.3 | 29.2 | 25.0 | 47.5 |
| | 4 | 13.4.2017 | | 7.4 | 7.3 | 7.2 | 7.4 | 8.0 | 7.5 | 7.5 | 7.7 | 57.7 | 57.4 | 56.4 | 58.1 | 58.3 | 66.7 | 37.5 | 60.0 |
| | 5 | 15.4.2017 | 3rd | 7.2 | 7.4 | 7.5 | 7.5 | 7.6 | 8.0 | 7.6 | 7.8 | 56.9 | 57.5 | 57.6 | 57.2 | 16.7 | 87.5 | 41.7 | 30.8 |
| | 6 | 18.4.2017 | | 7.5 | 7.5 | 7.1 | 7.2 | 7.9 | 8.1 | 8.0 | 7.5 | 56.4 | 57.7 | 57.4 | 56.7 | 37.5 | 75.0 | 45.8 | 35.0 |
| | 7 | 22.4.2017 | 4th | 7.1 | 7.6 | 7.2 | 7.3 | 7.5 | 8.0 | 7.6 | 7.6 | 57.8 | 58.0 | 58.7 | 57.2 | 29.2 | 37.5 | 54.2 | 29.2 |
| | 8 | 25.4.2017 | | 7.3 | 7.4 | 7.0 | 7.6 | 7.6 | 7.8 | 7.7 | 8.0 | 58.9 | 57.9 | 58.7 | 56.2 | 45.8 | 45.8 | 45.8 | 52.1 |
| | 9 | 30.4.2017 | | 7.2 | 7.3 | 7.1 | 7.5 | 7.6 | 7.6 | 7.5 | 8.2 | 58.2 | 58.9 | 58.5 | 57.0 | 50.0 | 54.2 | 29.2 | 45.8 |
| M A Y | 1 | 1.5.2017 | 1st | 6.5 | 7.2 | 6.8 | 6.7 | 7.5 | 8.3 | 7.8 | 7.8 | 59.4 | 58.7 | 57.2 | 57.9 | 39.1 | 24.2 | 23.0 | 48.9 |
| | 2 | 4.5.2017 | | 7.5 | 6.5 | 7.5 | 7.5 | 8.2 | 7.5 | 8.5 | 8.5 | 56.7 | 57.4 | 56.6 | 57.4 | 16.7 | 33.3 | 29.2 | 41.7 |
| | 3 | 8.5.2017 | 2nd | 6.8 | 7.5 | 6.5 | 6.7 | 7.8 | 8.5 | 7.5 | 8.5 | 81.7 | 81.1 | 80.3 | 81.0 | 20.8 | 25.0 | 20.8 | 25.0 |
| | 4 | 11.5.2017 | | 7.5 | 7.0 | 6.5 | 6.7 | 8.5 | 8.5 | 7.8 | 7.5 | 77.8 | 75.3 | 74.1 | 79.9 | 16.7 | 33.3 | 29.2 | 36.7 |
| | 5 | 15.5.2017 | 3rd | 7.8 | 6.5 | 7.5 | 7.5 | 8.5 | 7.5 | 8.2 | 8.3 | 48.6 | 46.2 | 42.7 | 47.4 | 24.2 | 37.5 | 25.0 | 33.3 |
| | 6 | 18.5.2017 | | 6.5 | 7.5 | 6.5 | 6.8 | 7.8 | 8.2 | 7.5 | 8.5 | 66.7 | 64.8 | 69.2 | 65.1 | 33.3 | 29.2 | 29.2 | 37.5 |
| | 7 | 22.5.2017 | 4th | 7.0 | 7.2 | 7.2 | 5.7 | 8.2 | 8.5 | 8.2 | 7.5 | 84.2 | 87.2 | 86.0 | 83.4 | 20.8 | 25.0 | 20.8 | 33.3 |
| | 8 | 25.5.2017 | | 6.5 | 6.5 | 7.3 | 6.5 | 7.3 | 8.5 | 8.5 | 8.0 | 66.3 | 61.8 | 63.8 | 65.1 | 33.3 | 29.2 | 33.3 | 40.8 |
| | 9 | 29.5.2017 | | 5.5 | 5.5 | 5.5 | 5.5 | 7.5 | 6.5 | 6.5 | 7.5 | 70.7 | 60.9 | 64.2 | 64.5 | 29.2 | 33.3 | 25.0 | 25.0 |
| J U N E | 1 | 1.6.2017 | 1st | 6.5 | 6.5 | 7.5 | 6.5 | 7.7 | 7.5 | 8.5 | 7.5 | 60.4 | 64.2 | 62.7 | 58.6 | 37.5 | 37.5 | 16.7 | 48.9 |
| | 2 | 5.6.2017 | | 6.7 | 7.5 | 6.7 | 7.5 | 8.7 | 8.5 | 8.0 | 8.2 | 57.7 | 58.6 | 58.6 | 62.9 | 10.4 | 41.7 | 20.8 | 41.7 |
| | 3 | 8.6.2017 | 2nd | 7.5 | 8.5 | 7.5 | 7.8 | 9.0 | 9.8 | 9.5 | 8.2 | 61.3 | 69.0 | 60.2 | 56.0 | 16.7 | 29.2 | 25.0 | 25.0 |
| | 4 | 12.6.2017 | | 7.0 | 7.5 | 8.0 | 6.5 | 8.5 | 8.5 | 9.5 | 7.8 | 45.5 | 62.4 | 57.8 | 50.4 | 25.0 | 45.8 | 37.5 | 36.7 |
| | 5 | 15.6.2017 | 3rd | 8.2 | 7.0 | 7.8 | 7.5 | 9.2 | 8.3 | 8.5 | 8.5 | 57.0 | 59.3 | 50.7 | 53.3 | 29.2 | 33.3 | 25.0 | 33.3 |
| | 6 | 19.6.2017 | | 6.5 | 7.3 | 7.5 | 7.3 | 7.5 | 9.3 | 8.7 | 8.7 | 58.3 | 57.7 | 58.0 | 50.2 | 16.7 | 25.0 | 33.3 | 37.5 |
| | 7 | 22.6.2017 | 4th | 7.5 | 7.5 | 8.5 | 7.5 | 9.3 | 8.5 | 9.5 | 9.5 | 53.4 | 48.9 | 61.7 | 62.3 | 12.5 | 25.0 | 37.5 | 33.3 |
| | 8 | 26.6.2017 | | 7.8 | 6.5 | 7.2 | 6.7 | 8.2 | 7.8 | 8.2 | 8.0 | 61.3 | 53.4 | 67.2 | 56.8 | 16.7 | 37.5 | 25.0 | 40.8 |
| | 9 | 29.6.2017 | | 8.5 | 8.5 | 8.0 | 8.5 | 10.5 | 10.5 | 11.8 | 11.5 | 58.1 | 60.1 | 59.6 | 58.3 | 20.8 | 33.3 | 37.5 | 25.0 |
| J U L Y | 1 | 3.7.2017 | 1st | 8.7 | 6.5 | 7.0 | 6.5 | 4.8 | 7.5 | 9.5 | 8.2 | 45.1 | 62.3 | 54.5 | 57.1 | 33.3 | 20.0 | 33.3 | 41.7 |
| | 2 | 6.7.2017 | | 9.3 | 5.5 | 7.5 | 7.5 | 3.0 | 6.0 | 8.0 | 8.2 | 40.5 | 55.3 | 49.8 | 53.2 | 12.5 | 25.0 | 37.5 | 16.7 |
| | 3 | 10.7.2017 | 2nd | 10.5 | 6.5 | 6.7 | 6.7 | 4.5 | 7.5 | 8.2 | 8.2 | 30.1 | 46.3 | 44.8 | 48.0 | 8.3 | 33.3 | 41.7 | 33.3 |
| | 4 | 13.7.2017 | | 6.5 | 5.7 | 6.5 | 6.0 | 3.8 | 7.5 | 9.5 | 7.5 | 24.9 | 52.6 | 51.5 | 40.0 | 37.5 | 20.8 | 45.8 | 20.8 |
| | 5 | 17.7.2017 | 3rd | 2.7 | 6.7 | 5.5 | 6.7 | 2.0 | 7.8 | 8.5 | 7.0 | 40.3 | 48.8 | 59.1 | 53.3 | 29.2 | 25.0 | 33.3 | 12.5 |
| | 6 | 20.7.2017 | | 5.7 | 6.8 | 7.5 | 8.2 | 6.5 | 8.8 | 8.3 | 9.3 | 50.9 | 61.1 | 46.9 | 55.3 | 25.0 | 20.8 | 20.8 | 16.7 |
| | 7 | 24.7.2017 | 4th | 6.2 | 7.5 | 6.5 | 6.5 | 7.5 | 9.5 | 7.5 | 7.5 | 52.5 | 55.6 | 56.7 | 47.2 | 45.8 | 29.2 | 16.7 | 37.5 |
| | 8 | 27.7.2017 | | 1.8 | 7.5 | 7.0 | 7.2 | 5.0 | 8.2 | 8.5 | 9.0 | 48.1 | 56.8 | 54.0 | 45.2 | 25.0 | 33.3 | 25.0 | 25.0 |
| | 9 | 31.7.2017 | | 0.5 | 5.5 | 6.5 | 5.5 | 3.5 | 6.0 | 8.3 | 7.5 | 39.2 | 65.4 | 50.2 | 57.9 | 25.0 | 37.5 | 20.8 | 20.8 |
| A U G U S T | 1 | 2.8.2017 | 1st | 1.7 | 6.0 | 5.5 | 5.3 | 4.2 | 7.0 | 6.5 | 6.3 | 33.8 | 46.2 | 62.0 | 41.6 | 12.5 | 16.7 | 29.2 | 25.0 |
| | 2 | 5.8.2017 | | 0.8 | 5.8 | 6.5 | 6.5 | 4.5 | 6.5 | 7.5 | 7.5 | 41.5 | 57.8 | 56.6 | 59.5 | 8.3 | 25.0 | 16.7 | 20.8 |
| | 3 | 9.8.2017 | 2nd | 1.0 | 6.0 | 5.5 | 6.0 | 3.3 | 7.3 | 6.5 | 7.0 | 31.4 | 48.6 | 48.7 | 56.6 | 16.7 | 29.2 | 20.8 | 20.8 |
| | 4 | 12.8.2017 | | 1.2 | 6.5 | 6.5 | 6.2 | 4.2 | 7.2 | 7.0 | 7.5 | 36.4 | 52.1 | 50.2 | 50.0 | 16.7 | 16.7 | 29.2 | 20.8 |
| | 5 | 16.8.2017 | 3rd | 2.0 | 6.7 | 5.8 | 5.8 | 4.0 | 7.8 | 6.5 | 6.5 | 43.9 | 49.2 | 66.1 | 57.8 | 12.5 | 37.5 | 12.5 | 20.8 |
| | 6 | 19.8.2017 | | 2.1 | 5.5 | 6.0 | 5.5 | 3.3 | 6.5 | 7.0 | 6.2 | 57.9 | 41.3 | 57.3 | 45.6 | 16.7 | 20.8 | 16.7 | 20.8 |
| | 7 | 23.8.2017 | 4th | 1.2 | 6.0 | 6.5 | 6.0 | 4.2 | 7.0 | 7.5 | 7.0 | 31.8 | 49.7 | 44.8 | 49.9 | 20.8 | 29.2 | 12.5 | 25.0 |
| | 8 | 26.8.2017 | | 0.8 | 6.5 | 6.3 | 6.7 | 4.0 | 7.2 | 7.0 | 7.2 | 19.3 | 43.2 | 45.3 | 40.5 | 12.5 | 16.7 | 16.7 | 29.2 |
| | 9 | 30.8.2017 | | 0.5 | 5.5 | 4.3 | 5.0 | 2.5 | 6.0 | 6.0 | 7.5 | 37.3 | 40.5 | 55.3 | 52.1 | 16.7 | 16.7 | 29.2 | 20.8 |
| S E P T E M B E R | 1 | 2.9.2017 | 1st | 1.7 | 2.2 | 6.5 | 5.5 | 5.0 | 6.0 | 7.5 | 7.5 | 43.3 | 47.2 | 51.9 | 46.1 | 12.5 | 12.5 | 16.7 | 16.7 |
| | 2 | 6.9.2017 | | 1.3 | 3.5 | 5.5 | 4.5 | 6.3 | 4.5 | 6.7 | 5.5 | 36.8 | 39.0 | 44.2 | 35.9 | 16.7 | 16.7 | 20.8 | 37.5 |
| | 3 | 9.9.2017 | 2nd | 1.8 | 5.5 | 4.2 | 2.5 | 7.2 | 6.7 | 5.5 | 3.0 | 46.0 | 29.1 | 37.9 | 24.3 | 16.7 | 24.2 | 37.5 | 20.8 |
| | 4 | 13.9.2017 | | 2.2 | 2.7 | 3.8 | 3.7 | 9.7 | 4.3 | 5.2 | 3.7 | 40.1 | 27.1 | 29.7 | 27.9 | 12.4 | 20.0 | 37.5 | 25.0 |
| | 5 | 16.9.2017 | 3rd | 1.8 | 2.3 | 2.8 | 2.5 | 4.5 | 3.5 | 4.3 | 3.5 | 17.9 | 24.3 | 28.7 | 22.7 | 4.1 | 33.3 | 29.2 | 33.3 |
| | 6 | 20.9.2017 | | 1.5 | 3.5 | 3.8 | 5.2 | 2.8 | 4.5 | 6.7 | 7.5 | 19.1 | 29.1 | 35.5 | 30.6 | 8.3 | 24.2 | 20.8 | 37.5 |
| | 7 | 23.9.2017 | 4th | 2.2 | 6.8 | 5.2 | 6.5 | 7.5 | 7.2 | 6.0 | 7.5 | 40.2 | 54.9 | 40.2 | 41.6 | 16.5 | 20.8 | 29.2 | 16.7 |
| | 8 | 27.9.2017 | | 6.8 | 2.5 | 2.3 | 2.5 | 9.2 | 4.5 | 5.0 | 3.5 | 42.8 | 17.3 | 20.2 | 24.0 | 24.8 | 20.8 | 16.7 | 36.7 |
| | 9 | 30.9.2017 | | 1.0 | 1.5 | 5.5 | 6.5 | 1.5 | 3.5 | 6.5 | 9.0 | 12.9 | 48.6 | 40.8 | 49.0 | 28.9 | 37.5 | 37.5 | 37.5 |
| Half Avg. | | | | 5.1 | 6.2 | 6.4 | 6.4 | 6.4 | 7.4 | 7.6 | 7.5 | 49.1 | 53.7 | 54.3 | 52.6 | 23.5 | 31.5 | 29.9 | 31.1 |
| Half Min. | | | | 0.5 | 1.5 | 2.3 | 2.5 | 1.5 | 3.5 | 4.3 | 3.0 | 12.9 | 17.3 | 20.2 | 22.7 | 4.1 | 12.5 | 16.7 | 12.5 |
| Half Max. | | | | 10.5 | 8.5 | 8.5 | 8.5 | 10.5 | 10.5 | 11.8 | 11.5 | 84.2 | 87.2 | 86.0 | 83.4 | 58.3 | 87.5 | 60.0 | 60.0 |


 Vinay Patil
 Monitored by


 Dr. Saurabh Kumar
 Mgr. (C.E.)

J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit: J.K. Cement Ltd.)

Half Yearly Noise monitoring report of Cement & Power Plant for the month of April-2017 to September-2017

| Sl. No. | Location Name | Month | | | | | | | | | | | | Half Yearly | | | |
|---------|------------------------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|
| | | Apr-17 | | May-17 | | Jun-17 | | Jul-17 | | Aug-17 | | Sep-17 | | Avg. | | Minimum | |
| | | Day (dB) Leq | Night (dB) Leq | Day (dB) Leq | Night (dB) Leq | Day (dB) Leq | Night (dB) Leq | Day (dB) Leq | Night (dB) Leq | Day (dB) Leq | Night (dB) Leq | Day (dB) Leq | Night (dB) Leq | Day (dB) Leq | Night (dB) Leq | Day (dB) Leq | Night (dB) Leq |
| 1 | Boundary side | 44.7 | 36.8 | 46.2 | 37.2 | 50.4 | 42.6 | 52.5 | 44.6 | 50.8 | 43.6 | 48.6 | 40.5 | 48.9 | 40.9 | 44.7 | 36.8 |
| 2 | Administrative Building | 45.8 | 33.5 | 44.3 | 34.6 | 42.6 | 31.5 | 40.8 | 30.2 | 42.6 | 31.5 | 40.5 | 30.7 | 42.8 | 32.0 | 40.5 | 30.2 |
| 3 | Lime Stone Crusher | 49.56 | 42.8 | 49.9 | 41.5 | 54.6 | 44.7 | 52.4 | 41.2 | 51.9 | 40.2 | 52.3 | 42.5 | 51.8 | 42.2 | 49.6 | 40.2 |
| 4 | Kiln/ Cooler Office | 56.8 | 44.1 | 56.8 | 45.2 | 56.8 | 45.6 | 55.7 | 44.8 | 53.7 | 42.6 | 52.7 | 40.4 | 55.4 | 43.8 | 52.7 | 40.4 |
| 5 | Power Plant | 55.1 | 42.5 | 55.1 | 43.1 | 52.2 | 40.5 | 51.7 | 41.6 | 52.4 | 40.5 | 50.2 | 39.8 | 52.8 | 41.3 | 50.2 | 39.8 |
| 6 | Despatch weigh bridge | 47.9 | 38.5 | 45.65 | 39.2 | 54.6 | 45.7 | 53.4 | 43.7 | 50.9 | 42.4 | 51.6 | 46.8 | 50.7 | 42.7 | 45.7 | 38.5 |
| 7 | Near QC Lab. | 45.8 | 37.9 | 45.8 | 36.9 | 40.2 | 30.2 | 42.8 | 38.4 | 41.7 | 37.5 | 40.5 | 36.6 | 42.8 | 36.3 | 40.2 | 30.2 |
| 8 | Coal Yard | 48.6 | 36.1 | 47.2 | 37.5 | 46.5 | 36.8 | 52.7 | 41.8 | 51.5 | 40.6 | 54.6 | 41.5 | 50.2 | 39.1 | 46.5 | 36.1 |
| 9 | Near Canteen | 45.3 | 30.6 | 44.2 | 31.2 | 40.4 | 32.1 | 40.1 | 30.7 | 42.8 | 31.5 | 52.2 | 40.2 | 44.2 | 32.7 | 40.1 | 30.6 |
| 10 | Plant main gate | 46.8 | 31.2 | 43.5 | 35.4 | 50.2 | 41.6 | 50.2 | 40.8 | 49.9 | 38.8 | 46.7 | 35.6 | 47.9 | 37.2 | 43.5 | 31.2 |
| 11 | Dispensary | 43.2 | 32.3 | 42.8 | 33.2 | 41.5 | 33.3 | 46.7 | 32.8 | 45.5 | 30.5 | 42.1 | 30.8 | 43.6 | 32.2 | 41.5 | 30.5 |
| 12 | Packing Plant | 50.8 | 42.1 | 51.6 | 43.5 | 54.6 | 46.8 | 56.8 | 48.5 | 54.2 | 45.6 | 52.6 | 43.7 | 53.4 | 45.0 | 50.8 | 42.1 |
| 13 | General Store | 48.3 | 39.1 | 47.8 | 38.4 | 41.2 | 32.4 | 42.5 | 32.6 | 40.8 | 30.8 | 38.5 | 29.6 | 43.2 | 33.8 | 38.5 | 29.6 |
| 14 | DG House (1-meter distance) | 57.9 | — | 58.3 | — | 56.9 | — | 62.5 | — | 60.4 | — | 58.2 | — | 59.0 | #DIV/0! | 56.9 | 0 |
| 15 | DG House (2-meter distance) | 55.37 | — | 56.7 | — | 58.4 | — | 60.8 | — | 62.8 | — | 60.6 | — | 59.1 | #DIV/0! | 55.37 | 0 |

[Signature]
Verified by
Monitored by

[Signature]
Dr. Saurabh Kumar
Mgr. (Env.)

Annexure-3

Social Development Expenses for the period from April 2017 to September 2017

| S.N. | Subject | Amount (Rs.) |
|------|--|--------------|
| 1 | Sir Padampat Primary School Salary May 2017 | 137000.00 |
| 2 | Sir Padampat Primary School Salary June 2017 | 135000.00 |
| 3 | Sir Padampat Primary School Salary June 2017 | 30000.00 |
| 4 | Sir Padampat Primary School Salary September 2017 | 188000.00 |
| 5 | Donation to Sightsavers for Blind Persons | 10000.00 |
| 6 | High Mast Towers in Villages | 24105.14 |
| 7 | High Mast Towers in Villages | 17552.70 |
| 8 | High Mast Towers in Villages | 33891.00 |
| 9 | High Mast Towers in Villages | 104191.25 |
| 10 | High Mast Towers in Villages | 47000.25 |
| 11 | High Mast Towers in Villages | 6225.00 |
| 12 | Hanuman temple Hebbal | 81448.77 |
| 13 | Hanuman temple Hebbal | 70010.25 |
| 14 | Hanuman temple Hebbal | 5758.40 |
| 15 | Hanuman temple Hebbal | 2170.51 |
| 16 | ganesh festival exp at lokapur police stn | 5000.00 |
| 17 | Hanuman temple Hebbal | 4252.82 |
| 18 | Muppin Siddeshwar Jhatra Petlur 10.04.17-12.04.17 | 25000.00 |
| 19 | Soil Testing Lab at Haliyal Taluka CSR | 3000000.00 |
| 20 | Panch Kalyan Pooja 28.04.17 - 02.05.17 | 50000.00 |
| 21 | Shri Kashilingeshwar Jathra 30.04.17 to 02.05.17 | 50000.00 |
| 22 | Director, Deptt. of Sainik Welfare & Resettlement | 5010.00 |
| 23 | Guru Sadashiv Muttya & Chandrigiri Jatra, Petlur | 12000.00 |
| 24 | Balumama Maharaj Jathra at Ningapur | 5000.00 |
| 25 | Police Benevolvement Fund Payment | 25000.00 |
| 26 | Pandurang Dindi PaadYatra at Halki | 15000.00 |
| 27 | Shakti Siddapur Studying Help for Navodaya School | 20000.00 |
| 28 | Gram Devi Jhatra Hebbal for Annaprasad 29.06.2017 | 15000.00 |
| 29 | Laxmidevi Jathra of Bhajantri Community Metagud | 15000.00 |
| 30 | Ramappa H. Ittanavar Poor Student Finance Help | 15000.00 |
| 31 | Mounesh Badiger Poor Student Finance Help | 10000.00 |
| 32 | Daughter of Driver Suresh Pattar Medical Help | 15000.00 |
| 33 | Shree Guru raghavendra Swami Aradhana Mahotsav | 25000.00 |
| 34 | Shree Pandurang Dindi Utsav Meals Arrangement | 5000.00 |
| 35 | Poor & Aged People Help for Pilgrims at Holy Place | 7500.00 |
| 36 | Sweets to School Childrens on 15.08.2017 Mudhol | 1000.00 |
| 37 | K. H. Sabarad - Kalyan Darshan Pravachan Mudhol | 1000.00 |
| 38 | 'Raas Garbha & Dandiya' Programe 2017 | 2000.00 |
| 39 | Durga Devi Puja at Worker's Colony Muddapur | 1500.00 |
| 40 | Ganesh Chaturthi Singing Programme at Metgud | 1000.00 |
| 41 | Holabasu Kushal Hebbal wrestling Coach Sponsorship | 1000.00 |
| | Total | 909 |

(Unit : J.K. Cement Ltd)

Half Yearly Fugitive Emission Monitoring Report of Cement plant for the Period from April-2017 to September-2017

Monitored By
Van Patil

Dr.Saurabh Kumar
Mgr(Env)

J.K. Cement Works, MUDDAPUR (KARNATAKA)

(Unit : J.K. Cement Ltd.)

Half Yearly Stack monitoring report of Cement plant & 2x25 MW Thermal power plant for April-2017 to September-2017

| Sl. No. | Month/Year | Stack locations | | | | | | | | |
|---------|------------|---------------------|-----------------|----------------------|------------|------|------|------|-----------|--------------|
| | | Thermal Power Plant | Kiln / Raw Mill | Coal Mill Bag Filter | Cooler ESP | LSC | CM-1 | CM-2 | Slag mill | Coal crusher |
| 1 | Apr-17 | 13.1 | 12.5 | 13.4 | 14.0 | 11.7 | 11.7 | 10.7 | 15.6 | 13.9 |
| 2 | May-17 | 14.6 | 12.2 | 14.9 | 13.3 | 13.5 | 12.4 | 13.0 | 14.4 | 13.0 |
| 3 | Jun-17 | 15.0 | 11.2 | 10.9 | 13.7 | 13.8 | 12.4 | 13.0 | 12.5 | 11.2 |
| 4 | Jul-17 | 16.0 | 12.6 | 12.3 | 14.0 | 13.8 | 13.4 | 14.8 | 11.5 | 13.0 |
| 5 | Aug-17 | 17.1 | 14.7 | 14.8 | 15.7 | 13.0 | 13.2 | 10.2 | 14.4 | 14.0 |
| 6 | Sep-17 | 15.0 | 12.3 | 11.3 | 11.2 | 11.4 | 13.2 | 13.5 | 13.39 | 13.82 |
| Avg | | 15.1 | 12.6 | 12.9 | 13.6 | 12.9 | 12.7 | 12.5 | 13.6 | 13.1 |
| Min | | 13.1 | 11.2 | 10.9 | 11.2 | 11.4 | 11.7 | 10.2 | 11.5 | 11.2 |
| Max | | 17.1 | 14.7 | 14.9 | 15.7 | 13.8 | 13.4 | 14.8 | 15.6 | 14.0 |

| Sl. No. | Month/Year | Stack locations | | | | | | | | |
|---------|------------|--------------------|--------------------|--------------------|--------------------|------------|-------------------|-----------------|----------|----------|
| | | Packing plant No-1 | Packing plant No-2 | Packing plant No-3 | Packing plant No-4 | RMT System | Clinker Transport | Clinker Storage | CM Sep-1 | CM Sep-2 |
| 1 | Apr-17 | 11.4 | 11.0 | 15.4 | Shutdown | 12.6 | 13.1 | 10.3 | 11.7 | 10.7 |
| 2 | May-17 | 13.5 | 12.6 | 10.7 | Shutdown | 11.1 | Shutdown | 10.1 | 12.4 | 13.0 |
| 3 | Jun-17 | 13.0 | 14.0 | 11.2 | Shutdown | 13.7 | Shutdown | 11.3 | 13.8 | 12.4 |
| 4 | Jul-17 | 13.9 | 14.6 | 13.0 | Shutdown | 12.6 | Shutdown | 11.9 | 13.4 | 14.8 |

Monitored By

 Dr. Saurabh Kumar
 Mgr(Env)

J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit: J.K. Cement Ltd.)

EFFLUENT WATER ANALYSIS REPORT (Monthly Average) FOR THE MONTH OF APRIL-2017 TO SEPTEMBER-2017

| Constituents | Suspended Solids (mg/L) | Temperature (°C) max | pH value | Oils and Grease (mg/L) |
|---------------------|-------------------------|----------------------|----------|------------------------|
| Permissible limit | 5 | Unobjectionable | 100 | 5.5 to 9 |
| Apr-17 | 50.53 | 0.58 | 7.91 | Nil |
| May-17 | 56.8 | 0.62 | 8.20 | Nil |
| Jun-17 | 26.29 | 16.58 | 18.07 | Nil |
| Jul-17 | 50.09 | 0.52 | 8.10 | Nil |
| Aug-17 | 48.13 | 0.48 | 8.10 | Nil |
| Sep-17 | 84.77 | 0.48 | 8.14 | Nil |
| Half Yearly Avg | 52.8 | 3.2 | 9.8 | #DIV/0! |
| Half Yearly Minimum | 26.3 | 0.5 | 7.9 | 0.0 |
| Half Yearly Maximum | 84.8 | 16.6 | 18.1 | 0.0 |


Vani Patil
Analysed by



Dr. Saurabh Kumar
Mgr. (Env.)

J.K. Cement Works, MUDDAPUR (KARNATAKA)

(Unit: J.K. Cement Ltd.)

STP water Analysis Report (Monthly Average) for the Month of April-2017 to September-2017

| SLNo. | Month | Suspended Solids | PH | BOD | COD | NH4-N | N-total | Fecal Coliform | PO4-P, |
|-------|------------------|------------------|--------|------|-------|-------|---------|----------------|--------|
| | Tolerance limit | 10 | 6 to 9 | 10 | 50 | 5 | 10 | <230 | 2 |
| 1 | Apr-17 | 6.05 | 7.68 | 6.86 | 37.11 | 3.75 | 7.45 | Nil | 0.68 |
| 2 | May-17 | 5.49 | 7.68 | 6.84 | 36.90 | 3.73 | 7.45 | Nil | 0.68 |
| 3 | Jun-17 | 7.08 | 7.23 | 6.85 | 37.49 | 3.61 | 7.01 | Nil | 0.65 |
| 4 | Jul-17 | 7.46 | 7.12 | 6.90 | 32.66 | 3.84 | 7.08 | Nil | 0.67 |
| 5 | Aug-17 | 7.02 | 6.58 | 6.77 | 31.63 | 3.96 | 7.71 | Nil | 0.77 |
| 6 | Sep-17 | 6.82 | 6.59 | 6.70 | 28.88 | 3.73 | 7.38 | Nil | 0.76 |
| | Half Yearly Min. | 5.5 | 6.6 | 6.7 | 28.9 | 3.6 | 7.0 | 0.0 | 0.6 |
| | Half Yearly Max. | 7.5 | 7.7 | 6.9 | 37.5 | 4.0 | 7.7 | 0.0 | 0.8 |
| | Half Yearly Avg. | 6.7 | 7.1 | 6.8 | 34.1 | 3.8 | 7.3 | #DIV/0! | 0.7 |


Vani Patil
Analysed by


Dr. Saurabh Kumar
Mgr. (Env.)

| Station: AAQMS1 Periodically: APRIL 2017 - SEPTEMBER 2017 Type: AVG Monthly [15 Mins.] | | | | | | | | | |
|--|----------------|----------------|--------------|-------------|--------------|--------------|-------------|--|--|
| Date & Time | PM 10 µg/m3 | PM2.5 µg/m3 | SO2 µg/m3 | NO µg/m3 | NO2 µg/m3 | NOX µg/m3 | CO mg/m3 | | |
| Apr-17 | 66.78 | 19.35 | 12.92 | 2.01 | 10.58 | 12.67 | 0.41 | | |
| May-17 | 57.47 | 21.91 | 5.89 | 0.58 | 7.59 | 8.05 | 0.28 | | |
| Jun-17 | 31.29 | 22.25 | 9.03 | 0.66 | 2.49 | 3.09 | 0.31 | | |
| Jul-17 | 35.8 | 12.56 | 4.95 | 0.98 | 2.84 | 4.03 | 0.49 | | |
| Aug-17 | 36.11 | 11.55 | 2.1 | 1.15 | 4.01 | 4.96 | 0.41 | | |
| Sep-17 | 34.105 | 14.8 | 3.55 | 1.58 | 5.85 | 6.8 | 0.51 | | |
| Minimum | 31.29 | 11.55 | 2.01 | 0.58 | 2.49 | 3.09 | 0.31 | | |
| Maximum | 66.78 | 22.25 | 12.92 | 2.01 | 10.58 | 12.67 | 0.51 | | |
| Avg | 43.59 | 17.07 | 6.41 | 1.16 | 5.56 | 6.60 | 0.40 | | |
| Num | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | |
| Data[%] | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | |

| Station: AAQMS2 Periodically: April 2017 - September 2017 Type: AVG Monthly [15 Mins.] | | | | | | | |
|--|----------------|----------------|--------------|-------------|--------------|--------------|-------------|
| Date & Time | PM 10 µg/m3 | PM2.5 µg/m3 | SO2 µg/m3 | NO µg/m3 | NO2 µg/m3 | NOX µg/m3 | CO mg/m3 |
| Apr-17 | 57.1 | 13.4 | 11.2 | 1.2 | 9.9 | 11.5 | 0.8 |
| May-17 | 59.4 | 19.2 | 10.6 | 2.6 | 10.0 | 12.6 | 0.7 |
| Jun-17 | 42.6 | 9.7 | 9.3 | 3.5 | 6.7 | 10.2 | 0.5 |
| Jul-17 | 40.1 | 11.4 | 8.6 | 7.9 | 4.5 | 12.3 | 0.5 |
| Aug-17 | 37.4 | 9.7 | 9.6 | 10.3 | 4.9 | 15.2 | 0.5 |
| Sep-17 | 33.8 | 12.4 | 10.7 | 8.1 | 3.2 | 11.4 | 0.4 |
| Minimum | 33.8 | 9.7 | 8.6 | 1.2 | 3.2 | 10.2 | 0.4 |
| Maximum | 59.4 | 19.2 | 11.2 | 10.3 | 10.0 | 15.2 | 0.8 |
| Avg | 45.1 | 12.6 | 10.0 | 5.6 | 6.5 | 12.2 | 0.6 |
| Nun | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| | | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

[illegible][illegible]

Station: CEMS Periodically: April 2017 - September 2017 Type: AVG Monthly [15 Mins.]

| Date & Time | KILN & RM Stack SPM mg/m3 | KILN & RM Stack SO2 mg/m3 | KILN & RM Stack NOx mg/m3 | KILN & RM Stack O2 % |
|-------------|------------------------------|------------------------------|------------------------------|-------------------------|
| Apr-17 | 24.88 | 51.02 | 431.26 | 14.95 |
| May-17 | 18.03 | 37.12 | 462.00 | 15.16 |
| Jun-17 | 5.29 | 49.40 | 463.02 | 14.05 |
| Jul-17 | 13.91 | 45.78 | 426.75 | 13.77 |
| Aug-17 | 7.27 | 18.06 | 339.24 | 15.18 |
| Sep-17 | 16.12 | 37.58 | 480.12 | 15.08 |
| Minimum | 5.29 | 18.06 | 339.24 | 13.77 |
| Maximum | 24.88 | 51.02 | 480.12 | 15.18 |
| Avg | 14.25 | 39.83 | 433.73 | 14.70 |
| Num | 6.00 | 6.00 | 6.00 | 6.00 |
| Data[%] | 100.00 | 100.00 | 100.00 | 100.00 |