

# JK Cement WORKS

**MUDDAPUR**

(Unit - J.K. Cement Ltd.)

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Dist Bagalkot (Karnataka) India

No. JKCW / ENV./E.C./ (PLANT)/11/10

Date- 10-11-2016

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-2016 to September-2016 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-2016 to September-2016** 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

  
Jayant Malhotra  
(Technical 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, IInd 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 .**

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**Environmental Clearance Compliance Report for the period from April, 2016 to September, 2016**

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 <sup>3</sup> . At no time, particulate emissions from the grinding unit shall exceed 50 mg/Nm <sup>3</sup> . 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 <sup>3</sup> and at no time, particulate emissions from the grinding unit is being exceeded 50 mg/Nm <sup>3</sup> 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 for ambient air, stack and fugitive	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

**Environmental Clearance Compliance Report for the period from April, 2016 to September, 2016**

	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.	being submitted to Ministry's regional Office at Bangalore, Central Pollution Control Board (CPCB) and KSPCB half-yearly. Instruments, used for ambient air quality 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 <sup>3</sup> /day. No waste water shall be generated from the cement grinding unit.	Complying, ground water is not abstracting more than 200 m <sup>3</sup> /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 more than 34.5 ha of 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 Protection (CREP) for the cement plants shall	Complying, Recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the

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	be implemented.	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>B. GENERAL CONDITION:</b>		
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 <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its regional Office at Bangalore and	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 and stack emission has

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	the SPCB/CPCB once in six Months.	been enclosed <b>as per Annexure- 1</b>
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) <b>as per Annexure- 2</b>
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. Company is doing number of socio-economic development activities <b>as per Annexure-3.</b>
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 for any other purpose.	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.

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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 <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> (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 <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> 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 <sup>st</sup> 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, 1986, 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 <sup>st</sup> 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



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	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 <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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 <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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)

  
Jayant Malhotra  
(Technical Head)

**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, 2016 to September, 2016**

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 <sub>2</sub> , 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 <sub>2</sub> , 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 <sup>3</sup> /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 <sup>3</sup> /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 amended in august, 2003. STP sludge shall	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 notification of September, 1999 and



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	be used as manure for green belt development. Used oil shall be sold to authorized recycler / re processor only.	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 developed greenbelt in 97.96 acre land which is more than 33% area of total land area.
<b>General Condition :</b>		
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**  
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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, The gaseous and particulate matter emissions from various units are within the standard prescribed by the KSPCB. 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, out of them; one is in down wind direction. 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 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.

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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 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 purpose.	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.
xiv.	The Regional of this Ministry at Bangalore / CPCB / KSPCB shall monitor the stipulated condition. A six monthly compliance report	Agreed, A six monthly compliance report and monitor data along with statistical interpretation is being submitted to The

**J.K. Cement Works, Village- Lokapur, Taluka-Mudhol, District- Bagalkot, Karnataka**  
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	and monitor data along with statistical interpretation shall be submitted to them regularly.	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 <a href="http://www.envfor.nic.in">http: www.envfor.nic.in</a> . 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 <a href="http://www.envfor.nic.in">http: www.envfor.nic.in</a> . 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 manner.	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, 2016 to September, 2016**

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.
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Thanking you,

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

  
Jayant Malhotra  
(Technical 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, 2016 to September, 2016**

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.

<b>S.N.</b>	<b>Conditions</b>	<b>Reply</b>
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 is not increased.
iii.	The company shall with all the conditions stipulated vide Ministry's letter of even number dated 21 <sup>st</sup> 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 stack emissions and ambient air have been installed and continuous records maintained. All the monitored data are well within the standard. After telephonic discussion in Regional Office of MoEF, we have stopped to submit monthly report to Regional Office of MoEF. We are submitting monthly report to Regional office of KSPCB only. Online data is uploading at CPCB website also and monitoring reports 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, 2016 to September, 2016**

	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)

  
Jayant Malhotra  
(Technical Head)

**J.K. Cement WORKS, MUDDAPUR (KARNATAKA)**

CEMENT PLANT &amp; 2X25 CPP MW

HALF YEARLY AAQM REPORT (SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>), FOR THE MONTH OF APRIL-2016 TO SEPTEMBER-2016

( ALL VALUES IN MICROGRAMS / CUBIC METER )

Month	Sl.No.	Date	Week	SO <sub>2</sub>				NO <sub>2</sub>				PM <sub>10</sub>				PM <sub>2.5</sub>			
				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	4.4.2016	1st	5.33	6.17	5.67	6.00	6.67	7.17	6.33	7.17	59.09	58.75	59.61	59.43	16.67	33.33	29.17	41.67
	2	7.4.2016		6.50	5.83	6.50	5.50	7.00	6.83	7.17	6.50	57.63	57.28	57.29	58.02	45.83	33.33	45.83	33.33
	3	11.4.2016	2nd	5.67	5.83	5.67	6.50	6.83	6.17	6.33	7.50	59.17	58.28	59.35	59.60	16.67	33.33	37.50	33.33
	4	14.4.2016		6.17	6.50	5.83	6.00	7.17	7.50	6.17	7.00	59.53	59.56	60.78	58.45	50.00	25.00	37.50	33.33
	5	18.4.2016	3rd	5.50	6.17	5.50	6.50	6.83	7.00	6.33	7.17	57.41	57.47	59.78	57.07	33.33	16.67	37.50	54.17
	6	21.4.2016		6.00	6.50	6.17	6.17	7.00	7.50	7.00	7.00	57.99	58.03	56.79	58.94	25.00	50.00	33.33	41.67
	7	25.4.2016	4th	6.17	6.83	6.17	6.67	7.50	7.50	7.33	7.17	57.57	57.87	58.96	58.51	45.83	25.00	45.83	33.33
	8	28.4.2016		6.00	6.67	6.00	6.00	7.00	7.17	7.50	7.00	59.20	58.52	58.23	59.52	16.67	50.00	37.50	41.67
M A Y	1	3.5.2016	1st	6.50	5.83	5.67	6.67	7.67	7.83	6.67	7.50	29.17	33.33	37.50	41.67	29.17	33.33	37.50	41.67
	2	6.5.2016		5.83	6.00	6.00	6.00	6.67	7.00	7.50	7.67	25.00	33.33	37.50	29.17	25.00	33.33	37.50	29.17
	3	10.5.2016	2nd	5.83	5.50	6.00	5.50	6.67	7.33	7.50	7.50	45.83	33.33	37.50	41.67	45.83	33.33	37.50	41.67
	4	13.5.2016		6.50	6.50	6.50	6.67	7.17	7.00	7.67	7.50	50.00	25.00	29.17	50.00	50.00	25.00	29.17	50.00
	5	17.5.2016	3rd	6.83	5.33	6.33	6.83	7.17	7.00	7.50	7.17	16.67	33.33	33.33	45.83	16.67	33.33	33.33	45.83
	6	20.5.2016		6.17	6.00	6.33	5.67	7.33	7.50	7.50	7.50	29.17	25.00	37.50	29.17	29.17	25.00	37.50	29.17
	7	24.5.2016	4th	6.83	5.17	5.67	5.67	7.50	7.17	6.67	7.67	16.67	29.17	37.50	45.83	16.67	29.17	37.50	45.83
	8	27.5.2016		5.50	6.50	6.00	6.50	7.00	7.00	7.17	7.50	16.67	33.33	37.50	33.33	16.67	33.33	37.50	33.33
	9	31.5.2016		5.50	5.50	6.50	5.50	7.50	7.75	7.50	6.50	33.33	33.33	45.83	54.17	29.17	33.33	45.83	54.17
J U N E	1	3.6.2016	1st	5.50	6.00	6.17	5.50	6.83	7.17	7.33	6.83	60.18	56.26	57.06	59.15	16.67	33.33	25.00	45.83
	2	7.6.2016		5.17	6.17	5.50	6.17	6.00	7.50	6.33	7.50	57.94	58.96	60.92	56.99	29.17	37.50	45.83	25.00
	3	10.6.2016	2nd	5.00	5.50	6.17	6.17	6.17	6.50	7.17	7.17	58.28	58.13	60.57	55.89	45.83	29.17	33.33	33.33
	4	14.6.2016		6.33	6.17	5.33	5.50	7.50	7.50	6.67	6.33	57.70	57.90	59.48	56.48	58.33	37.50	29.17	37.50
	5	17.6.2016	3rd	6.17	6.17	6.33	6.17	7.50	7.00	7.67	7.17	60.65	61.21	60.04	61.27	33.33	20.83	33.33	25.00
	6	21.6.2016		5.50	6.00	6.50	6.00	6.50	7.50	7.50	7.00	61.74	59.47	59.35	61.02	45.83	33.33	29.17	54.17
	7	24.6.2016	4th	6.33	5.50	5.83	5.17	7.33	6.83	6.50	6.00	58.22	60.78	60.56	60.19	45.83	29.17	25.00	50.00
	8	28.6.2016		6.33	6.33	5.83	5.00	7.50	7.00	6.33	6.83	58.48	58.45	57.18	57.46	45.83	37.50	25.00	33.33
J U L Y	1	1.7.2016	1st	5.83	6.17	6.00	6.50	6.50	7.00	7.17	7.50	57.46	56.77	61.00	58.11	16.67	54.17	29.17	25.00
	2	5.7.2016		6.50	5.83	6.83	6.17	7.50	7.50	7.50	7.17	59.34	57.14	60.10	58.22	16.67	33.33	45.83	33.33
	3	8.7.2016	2nd	6.17	6.33	6.83	5.50	7.17	7.17	7.17	6.17	58.28	59.77	59.09	58.70	25.00	25.00	33.33	29.17
	4	12.7.2016		6.33	6.67	5.33	6.17	7.17	7.50	6.67	7.50	61.18	60.93	58.48	60.13	16.67	25.00	25.00	41.67
	5	15.7.2016	3rd	6.00	6.00	6.17	5.50	7.50	7.50	7.50	6.33	60.07	59.32	60.24	59.66	33.33	29.17	37.50	41.67
	6	19.7.2016		5.83	6.50	6.00	5.17	6.67	7.50	7.50	6.67	59.76	58.39	57.80	58.97	50.00	29.17	37.50	45.83
	7	22.7.2016		5.83	6.83	6.50	6.67	6.50	7.50	7.50	7.00	58.33	60.19	58.97	59.25	16.67	33.33	33.33	54.17

	8	26.7.2016	4th	6.00	6.00	6.17	5.83	7.83	7.33	7.50	6.17	59.55	57.92	59.95	60.54	45.83	54.17	37.50	29.17
	9	29.7.2016		5.50	5.50	5.50	6.50	7.50	6.50	6.50	7.00	59.89	60.01	60.26	58.22	25.00	33.33	41.67	25.00
A U G U S T	1	2.8.2016	1st	5.17	6.67	5.67	5.67	6.17	7.50	6.50	6.67	44.22	48.09	47.44	47.97	16.67	16.43	16.47	12.50
	2	5.8.2016		6.00	5.50	6.00	6.50	7.50	6.67	7.00	7.17	45.45	47.40	49.85	49.38	20.83	29.60	29.72	16.67
	3	9.8.2016	2nd	5.50	6.33	6.50	5.67	6.33	7.50	7.50	6.83	49.63	50.55	51.04	51.85	20.83	20.67	20.68	20.83
	4	12.8.2016		6.50	6.00	6.17	6.67	7.50	7.00	7.00	7.17	51.68	52.58	50.44	52.48	25.00	29.39	29.00	20.83
	5	16.8.2016	3rd	6.67	6.17	6.50	5.83	7.50	7.50	7.17	6.67	54.17	55.64	53.32	54.33	20.83	20.00	16.71	16.67
	6	19.8.2016		5.50	5.83	6.50	5.50	6.50	6.83	7.33	7.00	55.05	54.35	54.76	55.32	16.67	16.52	16.55	16.67
	7	23.8.2016	4th	5.17	6.50	5.67	5.33	6.83	7.50	6.67	6.67	53.10	55.28	54.77	55.13	20.83	16.75	16.84	20.83
	8	26.8.2016		5.50	6.50	6.00	6.50	6.67	7.00	7.50	7.67	44.78	50.08	51.45	53.19	20.83	25.00	20.83	16.67
	9	30.8.2016		5.50	5.50	5.25	5.50	7.50	6.50	6.50	6.50	54.05	56.45	51.85	54.72	20.83	16.67	16.67	12.50
S E P T E M B E R	1	2.9.2016	1st	5.00	5.50	5.83	6.17	6.17	6.83	6.67	7.00	59.65	54.68	57.10	57.57	16.67	25.00	20.83	16.67
	2	6.9.2016		6.17	5.33	6.50	5.67	7.17	6.17	7.00	6.83	55.71	56.96	55.99	56.25	20.83	16.67	16.67	20.83
	3	9.9.2016	2nd	5.17	5.50	5.50	5.67	6.83	6.17	6.83	6.50	57.17	54.86	55.84	55.78	33.33	20.83	25.00	25.00
	4	13.9.2016		6.00	6.17	6.17	6.67	7.33	7.33	7.00	7.00	55.24	56.85	56.51	56.40	25.00	16.67	20.83	20.83
	5	16.9.2016	3rd	6.17	6.33	5.67	5.50	7.17	7.83	7.50	6.50	50.85	55.20	56.37	54.96	20.83	16.67	25.00	25.00
	6	20.9.2016		6.50	5.67	5.83	6.17	7.33	6.17	6.33	7.50	54.25	57.96	57.12	56.19	20.83	25.00	25.00	20.83
	7	23.9.2016	4th	6.00	6.50	6.33	5.50	7.50	7.17	7.33	6.50	56.34	55.11	54.88	54.10	16.67	12.50	25.00	12.50
	8	27.9.2016		6.17	6.00	6.00	6.17	7.50	7.50	7.67	7.00	57.18	56.56	56.17	56.98	20.83	20.83	16.67	16.67
	9	30.9.2016		5.50	5.50	6.25	5.50	7.50	6.50	7.00	6.50	56.92	57.52	57.52	57.69	20.83	29.17	20.83	29.17
Avg.				5.91	6.04	6.04	5.96	7.06	7.13	7.05	6.98	51.78	52.36	53.61	54.25	27.96	28.75	30.45	31.81
Min.				5.00	5.17	5.25	5.00	6.00	6.17	6.17	6.00	16.67	25.00	29.17	29.17	16.67	12.50	16.47	12.50
Max.				6.83	6.83	6.83	6.83	7.83	7.83	7.67	7.67	61.74	61.21	61.00	61.27	58.33	54.17	45.83	54.17
Standard deviation				0.48	0.43	0.39	0.48	0.46	0.44	0.46	0.43	12.15	10.37	8.43	7.48	12.19	9.51	8.91	12.29

**J.K. Cement WORKS, MUDDAPUR (KARNATAKA)**

(Unit : J.K. Cement Ltd.)

Half Yearly Stack monitoring report of Cement plant &amp; 2x25 MW Thermal power plant for April-2016 to September-2016

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	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-16	18.8	11.4	17.3	10.6	10.8	13.0	11.4	18.0	11.9	12.1	13.6	11.7	11.4	13.2	12.3	11.3	13.0	11.4
2	May-16	17.0	12.0	16.2	11.9	11.4	11.3	11.5	18.5	12.4	11.3	11.5	12.6	11.3	13.3	11.9	12.3	11.3	11.5
3	Jun-16	16.3	11.2	15.2	12.6	11.3	12.5	11.5	17.4	12.3	11.5	12.5	12.4	13.6	13.7	12.2	11.2	12.5	11.5
4	Jul-16	15.6	11.3	14.0	12.5	11.2	12.7	13.0	17.1	11.8	11.6	11.9	13.8	12.0	12.8	13.4	11.2	12.7	13.0
5	Aug-16	14.9	10.7	12.5	11.2	10.6	11.8	12.7	Shutdown	12.6	12.3	11.7	11.3	12.6	12.7	12.9	11.8	11.8	12.7
6	Sep-16	14.0	12.0	13.4	12.8	11.7	12.3	13.2	Shutdown	13.4	11.5	12.4	11.3	12.1	11.9	12.1	12.1	12.3	13.2
Avg		16.1	11.4	14.8	12.0	11.2	12.3	12.2	17.8	12.4	11.7	12.3	12.2	12.2	12.9	12.4	11.7	12.3	12.2
Min		14.0	10.7	12.5	10.6	10.6	11.3	11.4	17.1	11.8	11.3	11.5	11.3	11.3	11.9	11.9	11.2	11.3	11.4
Max		18.8	12.0	17.3	12.8	11.7	13.0	13.2	18.5	13.4	12.3	13.6	13.8	13.6	13.7	13.4	12.3	13.0	13.2

**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-2016 to September-2016**

Sl. No.	Location Name	Month												Half Yearly					
		Apr-16		May-16		Jun-16		Jul-16		Aug-16		Sep-16		Avg.		Minimum		Maximum	
		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	Day (dB) Leq	Night (dB) Leq
1	Boundary side	50.4	38.5	51.4	42.5	50.6	41.5	50.6	41.2	51.2	42.1	51.2	42.5	50.9	41.4	50.4	38.5	51.4	42.5
2	Administrative Building	51.6	36.4	52.5	41.4	51.4	40.2	51.2	40.6	50.6	39.5	50.8	40.4	51.4	39.8	50.6	36.4	52.5	41.4
3	Lime Stone Crusher	53.4	39.6	55.8	46.5	54.6	45.2	52.2	43.5	51.2	42.5	52.5	43.6	53.3	43.5	51.2	39.6	55.8	46.5
4	Kiln/ Cooler Office	60.2	49.6	63.2	53.4	62.2	52.8	60.2	50.4	59.5	48.6	61.4	51.5	61.1	51.1	59.5	48.6	63.2	53.4
5	Power Plant	57.2	44.5	62.4	51.4	61.8	50.8	60.4	51.2	59.4	50.2	62.2	51.6	60.6	50.0	57.2	44.5	62.4	51.6
6	Despatch weigh bridge	54.5	45.7	56.4	51.6	56.7	52.4	54.2	46.5	53.6	47.8	53.2	47.8	54.8	48.6	53.2	45.7	56.7	52.4
7	Near QC Lab.	57.4	43.6	60.7	51.2	59.7	50.2	60.2	51.2	57.6	50.2	48.2	39.7	57.3	47.7	48.2	39.7	60.7	51.2
8	Coal Yard	55.8	40.2	55.6	41.5	54.6	40.2	55.6	41.5	56.4	40.8	53.2	40.8	55.2	40.8	53.2	40.2	56.4	41.5
9	Near Canteen	50.2	39.6	53.8	43.5	52.4	44.2	50.3	40.2	48.2	39.5	50.6	42.8	50.9	41.6	48.2	39.5	53.8	44.2
10	Plant main gate	48.2	37.4	50.1	41.6	51.2	40.3	50.2	31.6	49.6	32.8	52.1	42.9	50.2	37.8	48.2	31.6	52.1	42.9
11	Dispensary	46.2	34.5	50.8	41.8	49.8	40.6	48.5	38.2	50.2	40.5	48.6	39.8	49.0	39.2	46.2	34.5	50.8	41.8
12	Packing Plant	46.7	35.6	53.2	42.7	52.6	41.7	51.6	41.6	49.5	40.8	53.7	41.8	51.2	40.7	46.7	35.6	53.7	42.7
13	General Store	50.2	40.2	50.6	40.8	51.2	39.6	50.2	39.6	51.4	40.5	50.4	38.5	50.7	39.9	50.2	38.5	51.4	40.8
14	DG House ( 1-meter distance)	63.8	—	65.4	—	64.5	—	63.5	—	62.5	—	63.2	—	63.8	—	62.5	0	65.4	0
15	DG House (2-meter distance)	62.7	—	62.2	—	61.2	—	62.4	—	60.2	—	60.4	—	61.5	—	60.2	0	62.7	0

**Social Development Expenses for the period from April 2016 to September 2016**

<b>S.N.</b>	<b>Subject</b>	<b>Amount (Rs.)</b>
1	Paid for Revayya Shivayogi Math Jatra, Hebbal	15000
2	Muppin Siddeshwar Jhatra Petlur 21.04.16-23.04.16	25000
3	Sir Padampat Primary School Salary April 2016	100000
4	Shri Kashilingeshwar Jathra 10.05.16 to 12.05.16	50000
5	Shri Huded Laxmidevi Yatra Nimitya 04.05.2016	5000
6	Guru Sadashiv Muttya & Chandrigiri Jatra, Petlur	12000
7	Balumama Maharaj Jathra at Ningapur	5000
8	Sir Padampat Primary School Salary May 2016	100000
9	Pooja Metri get 90% marks in SSLC 2015-16 grant	10000
10	Ms. Jyoti get 90% marks in SSLC 2015-16 grant	10000
11	Laxmidevi Jathra of Bhajantri Community Metagud	10000
12	Hanamant N.Madar - Durgadevi Jatra Ningapur	5000
13	Rajatavalli Sri sarvajendra Saraswati Prati Sirsi	20000
14	construction of durgadevi temple belgaum	10000
15	Pandurang Padayatra Annaprasad 28.06.16 to 14.07.16	15000
16	Sir Padampat Primary School Salary June 2016	100000
17	Jnana Aithal Mangalore Misc.	10000
18	Shri 108 Acharyaratn Deshbushan Digambar Jain tru	50000
19	Sir Padampat Primary School Salary July 2016	100000
20	Shri 1008 Shantinath Digambar Jain Bhavan trust	50000
21	Shree Pandurang Dindi Utsav Meals Arrangement	5000
22	Repair work of Play Equipmen-Adj Entry	1250
23	Shree Guru raghavendra Swami Aradhana Mahotsav	25000
24	Bone Miro Test Bills as per statement-for Halki vi	170000
25	K. H. Sabarad - Kalyan Darshan Pravachan Mudhol	50000
26	Construct of Temple & Samudaya Bhavan at Moratgi	50000
27	Sir Padampat Primary School Salary August 2016	100000
28	ganesh festival at lokapur police stn	5000
29	Govt.First Grade College, Chamarajanagar 10 Nos.PC	137775
30	Govt.First Grade College, Chamarajanagar 10 Nos.PC	137775
31	Sweets to School Childrens on Independence Day Mud	36900
32	Mounesh Badiger Poor Student Finance Help	20000
33	Sir Padampat Primary School Salary September 2016	150000
	<b>Total Amount</b>	<b>1590700.00</b>



**J.K. Cement WORKS, MUDDAPUR (KARNATAKA)**

(Unit : J.K. Cement Limited)

Half Yearly Fugitive Emission Monitoring Report of Cement plant for the period from April-2016 to September-2016

SL. NO.	MONTH/YEAR	SPM (Microgram/m <sup>3</sup> )					
		Gypsum Yard	Slag Yard	Flyash Yard	Cement mill	Lime stone unloading hopper	Lime stone crushing Site
1	Apr-16	543.1	555.0	547.9	503.7	500.7	560.6
2	May-16	555.6	524.1	478.3	494.3	495.4	555.9
3	Jun-16	495.5	517.4	516.8	513.7	456.6	586.6
4	Jul-16	668.5	579.3	482.9	584.3	488.1	540.3
5	Aug-16	575.6	543.9	472.6	509.4	468.5	512.3
6	Sep-16	483.2	575.9	502.0	543.9	517.5	452.5
Average		553.6	549.3	500.1	524.9	487.8	534.7
Minimum		483.2	517.4	472.6	494.3	456.6	452.5
Maximum		668.5	579.3	547.9	584.3	517.5	586.6

**J.K. Cement WORKS, MUDDAPUR (KARNATAKA)**

(Unit: J.K. Cement Ltd.)

**EFFLUENT WATER ANALYSIS REPORT (Monthly Average) FOR THE MONTH OF APRIL-2016 TO SEPTEMBER-2016**

Constituents	Colour (Hazen)	Odour	Suspended Solids (mg/L)	pH value	Oils and Grease (mg/L)	Biochemical Oxygen Demand (mg/L)
<b>Permissible limit</b>	<b>5</b>	<b>Unobjectionable</b>	<b>100</b>	<b>5.5 to 9</b>	<b>10</b>	<b>30</b>
Apr-16	1.2	O.L.	59.88	8.0	Nil	Nil
May-16	1.2	O.L.	64.08	8.1	Nil	Nil
Jun-16	1.1	O.L.	56.65	8.1	Nil	Nil
Jul-16	1.2	O.L.	57.2	8.2	Nil	Nil
Aug-16	1.2	O.L.	51.4	8.1	Nil	Nil
Sep-16	1.1	O.L.	54.8	8.0	Nil	Nil
<b>Half Yearly Avg</b>	<b>1.2</b>	<b>—</b>	<b>57.3</b>	<b>8.1</b>	<b>—</b>	<b>—</b>
<b>Half Yearly Minimum</b>	<b>1.1</b>	<b>0.0</b>	<b>51.4</b>	<b>8.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Half Yearly Maximum</b>	<b>1.2</b>	<b>0.0</b>	<b>64.1</b>	<b>8.2</b>	<b>0.0</b>	<b>0.0</b>

**J.K. Cement WORKS, MUDDAPUR (KARNATAKA)**

(Unit: J.K. Cement Ltd.)

STP water Analysis Report (Monthly Average) for the Month of April-2016 to September-2016

<b>Sl.No.</b>	<b>Month</b>	<b>pH</b>	<b>Total suspended solids</b>	<b>BOD</b>
<b>Tolerance limit</b>		<b>6 to 9</b>	<b>30</b>	<b>20</b>
<b>1</b>	<b>Apr-16</b>	22.75	7.01	14.01
<b>2</b>	<b>May-16</b>	24.60	7.17	15.22
<b>3</b>	<b>Jun-16</b>	22.44	7.00	14.87
<b>4</b>	<b>Jul-16</b>	22.87	7.30	15.34
<b>5</b>	<b>Aug-16</b>	23.25	7.42	14.56
<b>6</b>	<b>Sep-16</b>	23.25	7.42	14.56
<b>Half Yearly Min.</b>		<b>22.4</b>	<b>7.0</b>	<b>14.0</b>
<b>Half Yearly Max.</b>		<b>24.6</b>	<b>7.4</b>	<b>15.3</b>
<b>Half Yearly Avg.</b>		<b>23.2</b>	<b>7.2</b>	<b>14.8</b>



Online Ambient Air Quality Monitoring Station -2							
Date & Time	PM 10	PM2.5	SO2	NO	NO2	NOX	CO
	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3
April 2016	28	11	3.1	0.5	5.9	6.4	0.3
May 2016	18	6	9.7	2.9	9.6	12.4	0
June 2016	25	7	2.2	1.2	5.3	6.5	0
July 2016	28	9	1.9	0.6	2.1	2.7	0
August 2016	40	9	4.1	3.8	5.4	9.2	0.2
September 2016	36	12	3.5	3.8	3.7	7.5	0.2
Minimum	18	6	1.9	0.5	2.1	2.7	0
MinDate	May-16	May-16	July 2016	Apr-16	July 2016	July 2016	May-16
Maximum	40	12	9.7	3.8	9.6	12.4	0.3
MaxDate	Aug-16	Sep-16	May-16	Aug-16	May-16	May-16	Apr-16
Avg	29	9	4.1	1.8	5.2	7.4	0.1
Num	6	6	6	6	6	6	6

Continous Emission Monitoring System											
Date & Time	KILN & RM Stack SPM	KILN & RM Stack SO2	KILN & RM Stack NOx	KILN & RM Stack O2	CPP/ESP SPM	CPP/ESP SO2	CPP/ESP NOx	CPP/ESP O2	CEMENT MILL Stack SPM	Cooler ESP SPM	Coal Mill SPM
	mg/m3	mg/m3	mg/m3	%	mg/m3	mg/m3	mg/m3	%	mg/m3	mg/m3	mg/m3
April 2016	3.98	NoData	NoData	NoData	23.99	522.22	298.74	8.3	NoData	16.5	NoData
May 2016	6.66	NoData	NoData	NoData	25.72	329.13	315.33	11.2	12.3	13.6	NoData
June 2016	7.14	35.22	272.46	13.79	32.94	387.88	371.62	8.5	11.7	17	16.3
July 2016	5.9	31.11	159.42	15.86	25.56	479.95	437.52	11.3	8.8	16.9	16.1
August 2016	8.95	25.14	439.79	13.18	28.48	408.06	401.7	10.5	0.2	17	15.9
September 2016	3.62	4.37	117.24	18.81	16.67	151.5	107.67	16.2	0.3	8.1	8.4
Minimum	3.62	4.37	117.24	13.18	16.67	151.5	107.67	8.3	0.2	8.1	8.4
MinDate	Sep-16	Sep-16	Sep-16	Aug-16	Sep-16	Sep-16	Sep-16	Apr-16	Aug-16	Sep-16	Sep-16
Maximum	8.95	35.22	439.79	18.81	32.94	522.22	437.52	16.2	12.3	17	16.3
MaxDate	Aug-16	Jun-16	Aug-16	Sep-16	Jun-16	Apr-16	July 2016	Sep-16	May-16	Jun-16	Jun-16
Avg	6.13	23.96	247.23	15.41	25.66	379.79	322.09	11	6.66	14.85	14.2
Num	6	4	4	4	6	6	6	6	5	6	4