

JK Cement WORKS

MUDDAPUR

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Dist. Bagalkot (Karnataka) India

No. JKCW / ENV. /E.C. / (PLANT)/11/13

Date- 21-05-2018

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 October-2017 to March-2018 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 **October-2017 to March-2018** 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 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, CAAQM report and yearly environmental expenditure report for F.Y. 2017-18

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

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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 October, 2017 to March, 2018

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	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

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	ash notification of September, 1999 and 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.	per the provision stipulated in the fly ash notification of September, 1999 and amended in august, 2003. STP sludge is used as manure for green belt development. Now, we obtained permission to dispose in-house generated Used oil/waste oil in our kiln.
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, ETP sludge etc. vide authorization No: 305481 dated 15/03/2018, Authorization No: 305481 dated 15/03/2018 & PCB/WMC/293/HWM/2016/6968 dated 28/03/2018 etc. We are co-processing various hazardous wastes in our 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

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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		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.
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.

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

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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.
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.

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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 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	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

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	Bangalore.	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
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 October, 2017 to March, 2018

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. KSPCB has granted Consent to Operate vide Combined Consent Order No. AWH-301684 dated 19-12-2016 and it is valid up to 30-06-2021.
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 30 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	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

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	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 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.	exceeding the NAAQM standards, 2009. Ambient air, stack and fugitive emission monitoring reports are being submitted to 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

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		OHSAS 18001 also.
xii)	All the recommendations made in the charter on Corporate Responsibility for Environment Protection (CREP) for the 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.
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	Complied, We have established four (AAQMS) monitoring stations and monitored data of ambient air quality and stack emission

Environmental Clearance Compliance Report for the period from October, 2017 to March, 2018

	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 regularly submitted to this Ministry including its regional Office at Bangalore and the SPCB/CPCB once in six Months.	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 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 October-2017 to March-2018 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	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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	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.	
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	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.

Environmental Clearance Compliance Report for the period from October, 2017 to March, 2018

	Bangalore by e mail.	
xv)	The Project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also 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.	Complied, we had informed the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also 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 October, 2017 to March, 2018

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 October, 2017 to March, 2018

	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 (SO₂, NO₂, PM₁₀, PM_{2.5}) FOR THE MONTH OF OCTOBER-2017 TO MARCH-2018

(ALL VALUES IN MICROGRAMS / CUBIC METER)

Month	SLNo.	Date	Week	SO ₂				NO ₂				PM ₁₀				PM _{2.5}			
				Locations				Locations				Locations				Locations			
				Adm	weigh bridge	Crusher	Cpp	Adm	weigh bridge	Crusher	Cpp	Adm	weigh bridge	Crusher	Cpp	Adm	weigh bridge	Crusher	Cpp
OCTOBER	1	5.10.2017	1st	2.2	3.5	2.8	5.2	10.5	4.5	4.3	7.5	57.1	49.5	49.9	57.8	37.5	25.0	24.2	20.8
	2	9.10.2017		2.2	6.8	3.8	6.5	4.3	7.2	5.2	7.5	32.1	52.5	44.8	49.4	20.8	20.8	29.2	41.7
	3	12.10.2017	2nd	1.7	5.5	6.7	4.7	8.0	9.5	13.5	12.2	15.7	21.1	34.7	41.3	15.0	25.0	16.7	16.7
	4	16.10.2017		4.8	8.3	7.8	4.3	7.3	12.5	13.3	7.8	88.7	59.2	50.8	52.8	20.8	29.2	24.2	36.7
	5	19.10.2017	3rd	3.7	5.3	8.5	7.5	8.7	11.8	12.0	13.0	81.8	89.5	56.3	62.6	37.5	12.5	37.5	11.5
	6	23.10.2017		3.5	6.5	8.2	5.5	8.3	8.8	12.8	12.0	69.8	70.7	60.0	45.6	33.3	10.4	37.5	20.8
	7	26.10.2017	4th	2.2	7.2	6.5	6.0	13.0	12.5	13.2	8.5	60.1	59.8	55.4	54.4	37.5	12.5	33.3	29.2
	8	30.10.2017		3.5	4.5	7.5	5.8	14.0	12.5	10.3	7.2	92.5	70.1	67.9	65.8	45.8	37.5	41.7	37.5
NOVEMBER	1	3.11.2017	1st	1.8	5.8	6.2	5.8	8.7	6.5	7.5	6.8	51.9	53.8	51.3	59.8	50.0	45.8	33.3	36.7
	2	7.11.2017		2.8	7.7	7.7	7.0	7.3	13.3	15.8	9.0	30.6	60.1	58.4	48.3	20.8	24.2	29.2	41.7
	3	10.11.2017	2nd	2.0	4.2	4.2	6.2	4.5	8.5	8.5	7.5	44.0	48.5	46.9	39.7	25.0	33.3	25.0	25.0
	4	14.11.2017		2.5	7.5	7.2	7.5	4.8	8.2	8.0	9.3	46.4	56.3	60.5	50.9	50.0	29.2	12.5	29.2
	5	17.11.2017	3rd	1.2	6.5	6.5	8.7	9.8	7.3	7.8	10.5	62.2	40.8	55.3	55.3	54.2	37.5	16.7	20.8
	6	21.11.2017		4.5	8.0	3.5	7.0	9.3	7.5	4.5	8.8	97.2	57.3	50.6	41.4	33.3	45.8	29.2	37.5
	7	24.11.2017	4th	1.2	9.3	8.0	6.0	12.0	10.8	7.5	7.8	68.8	48.1	66.1	53.1	45.8	25.0	20.8	40.8
	8	28.11.2017		0.8	7.7	6.8	9.3	13.7	9.3	8.0	10.8	44.9	78.6	78.9	61.7	45.8	37.5	12.5	36.7
DECEMBER	1	1.12.2017	1st	1.8	7.5	6.2	6.5	6.8	8.5	7.5	7.5	51.6	57.9	60.5	57.8	37.5	20.8	45.8	41.7
	2	5.12.2017		1.5	6.7	7.7	7.5	7.3	7.8	15.8	8.5	47.3	59.5	58.1	56.6	45.8	45.8	37.5	36.7
	3	8.12.2017	2nd	1.7	6.7	4.2	6.5	4.5	7.3	8.5	8.5	74.5	49.8	59.8	61.3	50.0	20.8	29.2	20.8
	4	12.12.2017		2.5	7.5	7.2	6.8	4.8	8.5	8.0	7.5	55.9	53.1	59.3	57.0	25.0	29.2	25.0	48.9
	5	15.12.2017	3rd	1.2	7.5	6.5	6.8	9.8	8.5	7.8	7.5	59.0	58.3	45.9	48.6	25.0	33.3	45.8	41.7
	6	19.12.2017		4.5	7.3	3.5	6.0	9.3	8.5	4.5	7.2	64.3	56.3	66.0	71.9	50.0	37.5	20.8	37.5
	7	22.12.2017	4th	1.2	6.8	8.0	7.3	12.0	7.5	7.5	8.5	47.0	45.1	56.9	63.3	16.7	20.8	37.5	41.7
	8	26.12.2017		0.8	6.8	3.5	6.7	10.8	7.5	7.0	7.7	43.3	57.2	49.1	58.5	20.8	45.8	54.2	36.7
				1.0	5.5	4.5	5.5	6.5	7.5	7.5	6.5	36.7	63.9	56.4	61.9	37.5	33.3	37.5	50.0
				Adm	D-Block	weigh bridge	Guest House	Adm	D-Block	weigh bridge	Guest House	Adm	D-Block	weigh bridge	Guest House	Adm	D-Block	weigh bridge	Guest House
JANUARY	1	2.1.2018	1st	3.2	1.7	7.5	1.3	4.2	2.8	8.0	3.5	82.7	98.0	57.8	65.5	50.0	29.2	37.5	36.7
	2	5.1.2018		2.2	2.2	6.0	2.7	3.7	3.7	7.0	4.5	72.9	93.8	51.8	51.9	16.7	37.5	33.3	41.7
	3	9.1.2018	2nd	2.8	2.5	7.2	2.2	3.5	4.8	8.5	3.5	52.4	49.9	40.8	71.0	45.8	33.3	24.2	20.8
	4	12.1.2018		3.2	2.0	7.5	3.5	4.5	4.5	9.0	4.5	55.5	56.7	63.0	48.9	33.3	29.2	37.5	29.2
	5	16.1.2018	3rd	4.5	2.2	8.5	2.2	6.0	3.2	9.2	3.5	64.4	69.6	52.3	58.8	16.7	37.5	29.2	41.7
	6	19.1.2018		3.0	3.5	5.5	3.0	4.0	5.2	9.2	4.2	53.2	58.2	45.2	62.5	20.8	33.3	29.2	29.2
	7	23.1.2018	4th	2.3	2.2	6.0	3.2	4.7	3.3	9.0	4.5	74.2	95.2	58.8	55.5	37.5	41.7	41.7	20.8
	8	26.1.2018		3.5	1.7	5.8	2.5	5.8	2.8	7.5	4.5	69.1	50.2	62.7	68.9	20.8	45.8	20.8	41.7
FEBRUARY	1	30.1.2018		1.5	2.8	8.5	2.5	3.5	3.0	10.5	4.5	65.9	36.2	56.7	49.1	20.8	25.0	33.3	48.9
	2	2.2.2018	1st	1.8	5.8	10.2	7.3	3.8	6.8	9.3	8.2	42.9	63.7	57.2	36.1	37.5	45.8	25.8	41.7
	3	6.2.2018		5.7	3.5	10.0	6.5	6.7	7.0	8.5	7.0	83.2	55.4	68.9	72.7	50.0	33.3	45.8	37.5
	4	9.2.2018	2nd	1.5	5.3	5.8	7.3	14.3	6.7	8.5	8.7	55.7	47.7	54.9	61.4	29.2	37.5	41.7	41.7
	5	13.2.2018		14.7	4.3	5.7	6.7	3.2	7.5	6.7	7.5	45.4	59.1	71.8	51.0	25.0	33.3	54.2	48.9
	6	16.2.2018	3rd	7.8	3.0	9.5	7.2	3.5	8.8	11.8	8.5	43.1	69.2	61.9	45.9	29.2	41.7	37.5	33.3
	7	20.2.2018		1.2	3.8	8.3	7.0	2.8	4.0	12.0	8.2	70.3	68.4	84.3	62.8	33.3	29.2	33.3	50.0
	8	23.2.2018	4th	0.8	7.0	10.7	5.8	2.8	8.3	12.5	6.7	64.4	56.0	68.7	57.4	37.5	37.5	45.8	41.7
MARCH	1	27.2.2018		0.8	6.3	11.5	6.5	3.5	7.5	11.0	7.5	74.6	66.4	72.0	69.6	20.8	45.8	44.6	37.5
	2	2.3.2018	1st	1.5	2.7	6.0	4.2	13.8	1.2	7.5	5.5	62.4	43.1	46.8	61.3	16.7	20.8	25.0	29.2
	3	6.3.2018		2.0	1.8	7.0	2.8	8.5	2.8	8.0	6.5	50.3	53.0	51.0	57.2	20.8	25.0	29.2	45.8
	4	9.3.2018	2nd	2.7	0.8	3.0	6.0	3.5	1.7	5.0	7.8	68.4	58.1	67.5	68.7	37.5	20.8	50.0	33.3
	5	13.3.2018		2.2	1.2	2.8	3.5	5.8	2.8	6.3	5.3	56.5	40.0	59.9	61.5	16.7	16.7	37.5	54.2
	6	16.3.2018	3rd	1.5	1.7	7.2	5.8	4.7	3.5	8.0	6.8	54.6	32.0	25.5	74.9	12.5	20.8	33.3	37.5
	7	20.3.2018		2.0	7.8	5.7	7.0	3.2	2.2	6.3	9.0	65.8	52.2	47.6	69.5	16.7	16.7	41.7	29.2
	8	23.3.2018	4th	1.5	11.2	5.8	2.7	6.7	4.7	6.3	3.5	60.8	67.0	40.4	57.7	20.8	20.8	37.5	50.0
				2.7	12.2	6.2	6.5	3.5	2.7	7.5	7.5	56.4	63.5	54.6	62.4	29.2	25.0	29.2	37.5
				1.5	11.0	5.5	4.5	4.5	1.8	6.5	7.0	66.1	57.7	73.0	67.3	25.0	20.8	33.3	45.8
Minimum				0.8	0.8	2.8	1.3	2.8	1.2	4.3	3.5	15.7	21.1	25.5	36.1	12.5	10.4	12.5	11.5
Maximum				14.7	12.2	11.5	9.3	14.3	13.3	15.8	13.0	97.2	98.0	84.3	74.9	54.2	45.8	54.2	54.2
Average				2.6	5.4	6.6	5.5	6.9	6.6	8.7	7.3	59.5	58.4	56.8	57.8	31.4	30.3	33.1	36.2
Standard deviation				2.2	2.8	2.0	1.9	3.4	3.2	2.7	2.2	16.0	14.7	10.8	9.0	12.0	9.8	9.9	9.8

Station: AAQMS1 Periodically: October 2017 - April 2018 Type: AVG Monthly [1 Hr.]

Date & Time	PM 10 µg/m ³	PM2.5 µg/m ³	SO ₂ µg/m ³	NO µg/m ³	NO ₂ µg/m ³	NOX µg/m ³	CO mg/m ³
October 2017	71	30	8.59	2.84	10.55	13.36	0.7
November 2017	86	42	2.34	4.96	15.03	19.66	0.98
December 2017	53	31	2.29	2.19	8.76	10.93	1.07
January 2018	67	30	7.88	2.14	11.48	13.08	0.71
February 2018	65	21	5.82	1.27	4.11	5.39	1.91
March 2018	46	19	1.37	2.48	10.54	11.52	0.86
Minimum	46	19	1.37	1.27	4.11	5.39	0.7
MinDate	March 2018	March 2018	March 2018	February 2018	February 2018	February 2018	October 2017
Maximum	86	42	8.59	4.96	15.03	19.66	1.91
MaxDate	November 2017	November 2017	October 2017	November 2017	November 2017	November 2017	February 2018
Avg	64	29	4.28	2.47	10.53	12.63	1.02
Num	7	7	7	7	7	7	7
Data[%]	100	100	100	100	100	100	100
STD	12.1	7	2.9	1.1	3.2	4	0.4

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Station: AAQMS2 Periodically: October 2017 - March 2018 Type: AVG Monthly [1 Hr.]

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
October 2017	64	29	12.8	8.4	4.9	13.2	0.5
November 2017	88	42	14.2	7.9	2.8	10.3	0.5
December 2017	44	23	14.9	2.4	0	2	0.6
January 2018	68	33	15.7	8.2	2.1	10.2	0.4
February 2018	51	18	13.2	7.7	1.9	9.5	0.2
March 2018	52	19	5.2	10.3	2.1	12.4	0.2
Minimum	44	18	5.2	2.4	0	2	0.2
MinDate	December 2017	February 2018	March 2018	December 2017	December 2017	December 2017	February 2018
Maximum	88	42	15.7	10.3	4.9	13.2	0.6
MaxDate	November 2017	November 2017	January 2018	March 2018	October 2017	October 2017	December 2017
Avg	61	28	13.3	6.5	2	8.4	0.4
Num	7	7	7	7	7	7	7
Data[%]	100	100	100	100	100	100	100
STD	13.4	7.9	3.6	3.2	1.5	4.5	0.2

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J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit : J.K. Cement Limited)

Half Yearly Fugitive Emission Monitoring Report of Cement plant for the month of October-2017 to March-2018

SL. NO.	MONTH/YEAR	SPM (microgram/m ³)							
		Gypsum Yard	Slag Yard	Flyash Yard	Cement mill	Lime stone unloading hopper	Lime stone crushing Site	Coal Yard	Packing Plant
1	Oct-17	593.3	577.3	516.9	602.2	511.0	592.8	556.4	720.8
2	Nov-17	695.7	567.0	492.0	625.7	532.1	589.0	467.0	707.3
3	Dec-17	688.8	575.9	555.4	602.2	590.8	592.0	525.8	544.0
4	Jan-18	609.1	580.6	759.1	691.1	632.5	650.8	611.1	559.9
5	Feb-18	540.5	642.5	609.1	717.4	698.1	730.2	699.1	652.8
6	Mar-18	620.0	690.9	696.2	645.2	696.2	678.1	703.9	621.3
	Minimum	540.45	567.01	492.01	602.15	510.96	589.05	467.01	544.03
	Maximum	695.66	690.88	759.08	717.41	698.08	730.21	703.95	720.80
	Average	624.57	605.70	604.80	647.30	610.10	638.83	593.91	634.35

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 October-2017 to March-2018

Sl. No.	Month/Year	Thermal Power Plant				Kiln / Raw Mill		Stack locations				
		SPM in mg/Nm ³	SO ₂ in mg/Nm ³	NO _x in mg/Nm ³	SPM in mg/Nm ³	SO ₂ in mg/Nm ³	NO _x in mg/Nm ³	Coal Mill Bag Filter	Cooler	LSC	CM-1	CM-2
1	Oct-17	25.1	184.5	462.8	10.6	0.0	462.8	15.1	12.1	10.5	9.0	12.3
2	Nov-17	27.4	219.0	147.0	18.4	43.0	556.0	8.9	13.7	14.9	12.3	16.4
3	Dec-17	33.2	232.0	186.0	18.6	20.0	560.0	9.9	12.8	14.1	11.0	11.9
4	Jan-18	21.0	409.8	183.4	15.1	32.3	542.1	10.8	12.6	10.7	9.7	11.7
5	Feb-18	29.7	140.0	94.0	19.1	60.0	520.0	9.5	13.6	13.2	11.0	12.5
6	Mar-18	17.3	423.2	118.2	23.8	54.8	581.3	12.2	8.3	11.4	11.5	13.2

Sl. No.	Month/Year	Stack locations										
		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	Oct-17	11.2	14.0	11.9	13.8	13.6	Not in operation	11.4	15.1	15.7	9.0	12.3
2	Nov-17	12.5	12.8	12.5	11.7	13.5	13.4	15.7	13.6	11.9	12.3	16.4
3	Dec-17	10.5	18.8	12.3	11.8	11.1	10.7	13.6	14.0	11.9	11.0	11.9
4	Jan-18	9.8	8.2	14.0	13.2	11.1	12.5	11.3	12.0	13.0	9.7	11.7
5	Feb-18	9.8	12.4	10.6	14.6	12.4	13.3	9.0	11.7	10.8	11.0	12.5
6	Mar-18	12.7	11.2	15.7	12.5	13.7	14.1	13.8	14.4	10.2	11.5	15.2

[Signature]

Station: AAQMST Periodically: October 2017 - March 2018 Type: AVG Monthly [1 Hr]

Date & Time	KILN & RM Stack SPM	KILN & RM Stack SO ₂	KILN & RM Stack NO _x	KILN & RM Stack O ₂	CP/ESP SPM	CP/ESP SO ₂	CP/ESP NO _x	CP/ESP O ₂	CEMENT MILL Stack SPM	Cooler ESP SPM	Coal Mill SPM
	mg/m ³	mg/m ³	mg/m ³	%	mg/m ³	mg/m ³	mg/m ³	%	mg/m ³	mg/m ³	mg/m ³
October 2017	8.37	9.5	279.35	12.86	25.89	383.09	154.82	14.7	6.7	15.8	9.5
November 2017	9.9	24.53	328.38	12.9	21.92	176.16	109.95	13	7.6	11	3.1
December 2017	12.16	11.6	268.65	14.39	20.07	246.62	164.45	12.5	5.5	6.8	3.2
January 2018	17.03	22.39	392.81	9.9	25.11	347.96	168.37	8.9	4.9	8.4	5.1
February 2018	12.26	19.27	264.67	13.54	16.58	109.96	68.59	14.5	6.7	3.2	3.7
March 2018	16.27	37.66	394.45	11.2	25.82	198.1	101.41	12.9	12.1	5.5	8.8
Minimum	8.37	9.5	264.67	9.9	16.58	109.96	68.59	8.9	4.9	3.2	3.1
MinDate	October 2017	October 2017	February 2018	January 2018	February 2018	February 2018	February 2018	January 2018	January 2018	February 2018	November 2017
Maximum	17.03	37.66	394.45	14.39	25.89	383.09	168.37	14.7	12.1	15.8	9.5
MaxDate	January 2018	March 2018	March 2018	December 2017	October 2017	October 2017	January 2018	February 2018	March 2018	October 2017	October 2017
Avg	12.19	20.8	314.3	12.58	21.49	218.81	118.19	13.2	6.5	8.3	5.9
Num	7	7	7	7	7	7	7	7	7	7	7
Daily%	100	100	100	100	100	100	100	100	100	100	100
STD	3.1	8.6	53.9	1.4	4.1	107.4	41.8	2.1	2.8	3.8	2.6

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J.K. Cement WORKS, MUDDAPUR (KARNATAKA)
(Unit: J.K. Cement Ltd.)

Half Yearly Noise monitoring report of Cement & Power Plant for the month of October 2017 to March-2018

Sl. No.	Location Name	Oct-17		Nov-17		Dec-17		Jan-18		Feb-18		Mar-18		Minimum		Maximum		Average	
		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 site	43.4	38.6	44.8	36.5	43.2	35.4	44.2	36.2	46.5	38.5	48.5	34.2	43.2	34.2	48.5	38.6	45.4	36.6
2	Administrative Building	42.2	30.2	40.1	32.6	41.1	30.4	42.7	31.6	42.6	30.8	40.7	32.5	40.1	30.2	42.6	32.6	41.2	31.4
3	Lime Stone gate	50.6	40.6	52.8	41.5	50.4	42.7	51.5	43.2	50.6	44.5	50.4	42.8	50.4	40.6	52.8	44.5	51.1	42.6
4	Lime Stone Crusher	48.8	40.4	50.4	40.4	56.2	42.8	55.4	41.2	52.5	40.8	51.6	40.3	48.8	40.3	56.2	42.8	52.5	41.0
5	Kiln/ Cooler	50.1	40.5	52.7	38.6	51.4	39.5	50.2	40.5	51.4	40.5	50.8	41.7	50.1	38.6	52.7	41.7	51.1	40.2
6	Kiln Platform	64.4	51.7	62.6	52.5	61.7	50.8	60.8	52.7	62.5	51.9	61.6	50.5	60.8	50.5	64.4	52.7	62.3	51.7
7	Power Plant	53.4	48.5	55.8	46.7	57.4	45.7	58.6	44.7	59.7	45.8	55.4	46.6	52.4	44.7	59.7	48.5	56.6	46.3
8	Despatch gate	50.4	45.6	51.4	44.8	51.2	43.6	52.3	41.5	53.3	42.2	52.2	41.5	50.4	41.5	53.3	45.6	51.8	43.2
9	Near QC Lab.	42.8	35.8	45.6	36.4	44.8	35.5	43.7	36.6	44.5	37.5	43.7	38.8	42.8	35.5	45.6	38.8	44.2	35.8
10	Coal Yard	55.8	40.4	56.5	41.2	55.7	42.2	54.5	41.8	55.7	41.8	56.6	42.2	54.5	40.4	56.6	42.2	55.8	41.6
11	Slag yard	52.6	46.7	54.2	45.6	46.9	32.2	47	34.5	50.4	36.3	50.2	37.7	46.9	32.2	54.2	46.7	50.2	38.8
12	Gypsum yard	50.4	40.5	51.5	35.8	52.8	36.7	51.7	35.7	52.5	38.8	58.7	39.5	50.4	35.7	58.7	40.5	52.9	37.8
13	Near Canteen	49.6	39.5	48.6	35.2	46.7	36.5	47.5	34.4	46.6	32.2	46.5	33.2	46.5	32.2	49.6	39.5	47.6	35.2
14	Plant main gate	44.8	38.7	42.5	36.8	43.6	35.5	42.2	36.6	43.6	35.5	50.2	36.6	42.2	35.5	50.2	38.7	44.5	36.6
15	Dispensary	40.2	30.4	38.5	26.9	48.6	25.5	50.6	24.4	51.5	25.5	42.5	26.2	38.5	24.4	51.5	30.4	45.3	26.5
16	Packing Plant	50.8	40.8	52.4	42.8	50.4	40.2	51.2	42.8	54.4	43.2	52.2	43.7	50.4	40.2	54.4	43.7	51.9	42.3
17	General Store	36.5	30.2	40.8	32.6	43.8	27.6	44.7	28.6	45.8	30.3	55.7	33.6	36.5	27.6	55.7	33.6	44.6	30.5
18	DG House (1-meter distance)	60.4	—	62.5	—	61.5	—	62.5	—	62.1	—	63.1	—	60.4	0	63.1	0	62.0	#DIV/0!
19	DG House (2-meter distance)	62.5	—	60.2	—	60.8	—	61.6	—	61.8	—	62.7	—	60.2	0	62.7	0	61.6	#DIV/0!
20	Raw mill preporting hopper	58.5	41.7	62.8	42.1	61.6	41.5	60.8	42.5	60.4	41.6	58.5	42.7	58.5	41.5	62.8	42.7	60.4	42.0
21	coal mill	60.2	51.8	60.2	50.5	58.2	48.6	59.6	49.9	58.5	48.5	60.6	49.8	58.2	48.5	60.6	51.8	59.6	49.9
22	Near silo clinker loading point	65.4	52.7	64.5	51.8	62.7	50.5	61.7	51.6	62.2	52.8	61.5	51.6	61.5	50.5	65.4	52.8	63.0	51.8
23	CM-1 weigh feeder	70.5	58.9	71.4	60.2	72.7	61.4	71.8	60.4	72.4	58.8	65.1	56.7	65.1	56.7	72.7	61.4	70.7	59.4
24	CM-2 weigh feeder	72.1	61.5	70.5	62.6	71.9	61.6	72.6	60.8	71.6	60.2	70.4	62.8	70.4	60.2	72.6	62.8	71.5	61.6
25	Cement silo Packer-1	65.6	51.6	66.8	50.5	65.7	51.4	66.4	50.5	65.5	52.2	67.8	53.3	65.5	50.5	67.8	53.3	66.3	51.6
26	Cement silo Packer-2	60.2	50.2	58.9	49.6	60.1	50.4	61.6	51.4	62.7	50.4	65.4	51.7	58.9	49.6	65.4	51.7	61.5	50.6
27	Cement silo Packer-3	73.4	51.8	72.5	50.4	68.5	51.6	67.5	52.5	67.5	53.7	68.8	52.2	67.5	50.4	73.4	53.7	69.7	52.0
28	Cement silo Packer-4	Shutdown	Shutdown	Shutdown	Shutdown	65.2	51.1	64.5	52.2	63.6	51.1	63.3	52.7	63.3	51.1	65.2	52.7	64.2	51.8
29	Truck Loading point- 1	60.5	49.7	61.8	48.5	62.7	50.5	61.6	51.1	62.8	52.7	60.2	50.4	60.2	—	62.8	—	61.6	—
30	Truck Loading point- 2	61.6	50.8	60.4	51.2	60.9	51.6	62.6	52.4	65.5	53.3	65.5	54.6	60.4	—	65.5	—	62.4	—
31	Truck Loading point- 3	67.5	51.5	65.7	52.8	65.9	50.2	63.7	50.8	64.4	50.5	65.5	52.8	63.7	—	67.5	—	65.1	—
32	Truck Loading point- 4	—	—	—	—	62.8	51.7	61.6	51.5	60.7	53.6	60.2	51.1	60.2	—	62.8	—	61.3	—
33	Slag mill weigh feeder	70.4	61.7	69.8	57.2	70.4	52.8	68.5	50.5	65.6	50.1	64.7	50.4	64.7	—	70.4	—	68.2	—

Signature

J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit: J.K. Cement Ltd.)

EFFLUENT WATER ANALYSIS REPORT (Monthly Average) FOR THE MONTH OF OCTOBER-2017 TO MARCH-2018

Constituents	Suspended Solids (mg/L)	Temperature (°C) max	pH value	Oils and Grease (mg/L)
Permissible limit	5	Unobjectionable	100	5.5 to 9
Oct-17	47.92	0.48	8.07	Nil
Nov-17	49.2	0.51	8.07	Nil
Dec-17	54.72	0.51	8.12	Nil
Jan-18	48.69	0.56	8.15	Nil
Feb-18	44.71	0.51	8.08	Nil
Mar-18	54.43	0.57	8.11	Nil
Half Yearly Avg	49.9	0.5	8.1	#DIV/0!
Half Yearly Minimum	44.7	0.5	8.1	0.0
Half Yearly Maximum	54.7	0.6	8.2	0.0

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J.K. Cement WORKS, MUDDAPUR (KARNATAKA)
(Unit: J.K. Cement Ltd.)

STP water Analysis Report (Monthly Average) for the Month of October-2017 to March-2018

Sl.No.	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	Oct-17	7.46	7.16	7.53	24.03	3.36	7.57	Nil	0.80
2	Nov-17	7.33	6.77	7.35	22.60	3.43	7.27	Nil	0.77
3	Dec-17	7.47	6.75	7.13	21.83	3.33	7.25	Nil	0.75
4	Jan-18	6.76	7.32	7.00	33.13	3.91	7.39	Nil	0.75
5	Feb-18	7.36	7.54	6.51	38.77	3.96	7.50	Nil	0.72
6	Mar-18	7.60	6.75	7.08	26.76	3.49	7.59	Nil	0.57
	Half Yearly Min.	6.8	6.7	6.5	21.8	3.3	7.2	0.0	0.6
	Half Yearly Max.	7.6	7.5	7.5	38.8	4.0	7.6	0.0	0.8
	Half Yearly Avg.	7.3	7.0	7.1	27.9	3.6	7.4	#DIV/0!	0.7

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Annexure-3

Social Development Expenses for the period from October 2018 to March 2018

S.No.	Subject	Amount (Rs.)
1	Sir Padampat Primary School Salary October 2017	1,65,000.0
2	Sir Padampat Primary School Salary	20,000.0
3	Sir Padampat Primary School Salary	1,72,000.0
4	Sir Padampat Primary School Salary December 2017	1,72,000.0
5	Sir Padampat Primary School Salary January 2018	1,72,000.0
6	WHITEWASHING ON NEW SURFACE	5,870.7
7	LOKAPUR TEMPLE WORK	16,027.0
8	EXP AGST SWACH PAKHWADA AT HALKI MINES	14,489.0
9	EARTH FILLING(AVAILABLE EARTH)	20,768.0
10	RCC 1:2:4 RAFT, FOUNDATION	1,55,052.0
11	STONE SOLING	15,694.0
12	SCHOOL WRITING GREEN BOARD FOR HALKI SCHOOL	20,586.0
13	HP COMPUTER ,DVD WRITER EXTERNAL FOR SCHOOL	71,643.0
14	CANON ALL IN ONE 3010 PRINTER FOR SCHOOL	12,307.0
15	COMPUTER TABLE,CHAIR FOR SCHOOL ADJUSTED	16,000.0
16	stamp program tb association	2,000.0
21	Padayatra to Shri Kshetra Pandarpur Lord Pandurang	4,000.0
22	Shri Kashilingeshwar Jathra 30.04.17 to 02.05.17	1,10,000.0
23	Karnataka Rajostava by Karnataka Raksahna Vedike	25,000.0
24	Koti Japyatna Programme & Vedant Mahotsav	40,000.0
25	Mudhol Mahila Credit Souhard Sahakari Ltd. Program	1,50,000.0
26	Paid for Yamanureshwar Jatra, Muddapur	2,00,000.0
27	Pandurang Rukmini Devasthan Jathra Annaprasad	25,000.0
28	Durga Devi Jathra Mahotsav Petlur 16-20 March 18	75,000.0
29	Paid for Revayya Shivayogi Math Jatra, Hebbal	15,000.0
30	Muppin Siddeshwar Jhatra Petlur 30.03.18-01.04.18	35,000.0
31	Muddapur Limestone Mines Swachhta Pakhwada 2017	15,185.0
32	Basavaraj Horaddi International Athletics Help	35,000.0
33	22nd National Road Cycling Championships Jamkhandi	1,00,000.0
34	SHANKAR NAIK PETLUR	25,000.0
35	Sponsorship for Cricket Players from 26.01.2018	11,000.0
36	Sponsorship for 10 KM Marathon 2018 @ Bagalkot	15,000.0
37	Sponsorship for National Level Karate & Teakwando	2,00,000.0
	Total	21,31,621.7

**EXPENDITURE ON THE ENVIRONMENTAL MANAGEMENT PLAN FOR PERIOD
FROM APRIL 2017 TO MARCH 2018**

DESCRIPTION	Expenditure (in Lakh)
Air Pollution Control in Kiln, Cooler, cement mill, coal mill, and LS crusher (main equipment) including stacks, Bag filters along with ventilation system for the control of fugitive dust emissions from the plant including stacks/ Cost of equipment for controlling emission like bag house, ESP, Bag filter etc., Operational cost/electricity cost, Operation & Maintenance cost	2151.92
Fly ash Silo's and ash handling systems	109.71
Emission Monitoring equipment (including online emission monitoring equipment (CEMS) at sources and ambient air quality in the vicinity) and laboratory	31.74
Green Belt Development & Sewage Treatment plant for plant	52.36
Water Harvesting Schemes	
Extra expenditure on green purchase (Purchase of green fuel, recycled materials or any other such purchase to reduce environmental footprint	189.28
Environmental License Fees	5.69
Other environmental management costs	29.41
TOTAL (Rs in Lakhs)	2570.11

