

JK Cement WORKS

MUDDAPUR

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Dist. Bagalkot (Karnataka) India

No. JKCW / ENV. /E.C. / (PLANT)/89/09

Date- 11-11-2020

To
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-2020 to September-2020 for expansion of Cement Grinding Unit (2.5 MTPA to 3.5 MTPA) of JK Cement Works, Village- Muddapur, Taluka- Mudhol, District- Bagalkot (Karnataka)

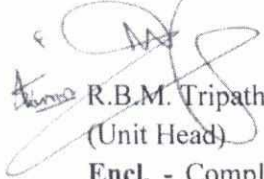
Ref: MoEF Letter No. F.No. J-11011/263/2009-IA II (I) dated 21-06-2010

Dear Sir,

With reference to your above cited environmental clearance letter for expansion of Cement Grinding Unit (2.5 MTPA to 3.5 MTPA) of JK Cement Works, Village- Muddapur, Taluka- Mudhol, District- Bagalkot (Karnataka), we are sending here with enclosed point wise EC compliance report for the period from April-2020 to September-2020 for your kind information and record please.

Thanking you

Yours faithfully
For J.K. Cement Works


R.B.M. Tripathi
(Unit Head)

Encl. - Compliance report, Socio-economic development report & six monthly manual AAQ monitoring, stack, fugitive emission, treated effluent monitoring, noise monitoring, Continuous Emission Monitoring System (CEMS) and CAAQM report, Environmental expenditure
CC:

- 1- The Addl. Principal Chief Conservator of Forest (C), Ministry of Environment & Forest, Regional Office (South Zone), Koramangala, Bangalore
- 2- Chairman, Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, New Delhi
- 3- Scientist 'D' & Incharge, Central Pollution Control Board, Nisarga Bhavan, Bengaluru
- 4- Member Secretary, Karnataka Pollution Control Board, Church Street, Bangalore
- 5- The Environmental officer, Karnataka State Pollution Control Board, Bagalkot - 587102



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Environmental Clearance Compliance Report for the period from April, 2020 to September, 2020

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 consultation	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

Environmental Clearance Compliance Report for the period from April, 2020 to September, 2020

	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 wastes viz. fly ash and dust etc. are being properly recycled and re-utilized in the process itself. 100% fly ash, generated in Captive power plant, is used in the own cement plant in manufacturing of cement.
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 33% area of total land area from plantation 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 14001:2015, ISO 9001:2015, OHSAS 18001:2007 and ISO

Environmental Clearance Compliance Report for the period from April, 2020 to September, 2020

		50001:2011 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 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 April, 2020 to September, 2020

	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 process itself.
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-2019 to March-2020 are as per Annexure-3 .
X)	As proposed, Rs 431 lakhs and Rs. 117.95 lakhs shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated	Complied, We are spending more than recurring cost/annum for environment pollution control measures. An implementation schedule for implementing all the conditions stipulated herein has been submitted to the regional Office of the Ministry at Bangalore.

Environmental Clearance Compliance Report for the period from April, 2020 to September, 2020

	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, 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 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 Statement Report (Form-V) for F.Y. 2019-20 was submitted to regulatory authority via. letter no. JKCW/ENV./CFO (Plant)/60/13 dated 08-09-2020.

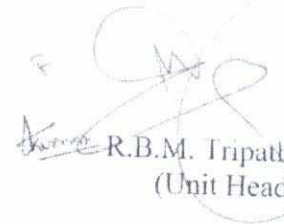
Environmental Clearance Compliance Report for the period from April, 2020 to September, 2020

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)


R.B.M. Tripathi
(Unit Head)

J K CEMENT WORKS, MUDDAPUR

APRIL'20 TO SEPTEMBER'20

DETAILS OF CSR ACTIVITY UNDERTAKEN DURING

CSR Project or activity identified (60-75 words)	Section in which the project is covered	Local Area or other	Specify State and other	Amount Spent	Amount	
					spent:Direct or through implementing Agency	Amount
Distribution of Vegetable & food Packet to near by area (COVID 19)	Rural development projects	Muddapur Village	Karnataka	3,04,950		Direct
				3,04,950		

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 APRIL-2020 TO SEPTEMBER-2020

(ALL VALUES IN MICROGRAMS / CUBIC METER)

Month	SLNo.	Date	Week	SO ₂				NO ₂				PM ₁₀				PM _{2.5}			
				Locations				Locations				Locations				Locations			
				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
A P R I L	1	24/2020	1st	Lockdown															
	2	6/4/2020																	
	3	9/4/2020																	
	4	13/4/2020	2nd	43	45	60	48	15.0	16.8	15.5	15.8	33.3	40.0	43.3	22.7	20.8	29.2	20.8	12.5
	5	16/4/2020		57	58	55	48	15.2	16.5	15.2	16.2	53.4	45.7	39.4	32.1	12.5	25.0	16.7	25.0
	6	20/4/2020	3rd	48	58	47	51	14.8	16.0	14.8	15.8	48.6	33.9	47.0	45.8	25.0	12.5	12.5	20.8
	7	23/4/2020		57	48	48	48	15.8	14.8	15.3	15.8	40.8	49.9	30.1	60.7	16.7	20.8	29.2	16.7
	8	27/4/2020	4th	55	43	60	50	16.0	14.3	16.0	17.2	47.1	40.0	37.4	48.1	16.7	25.0	20.8	12.5
	9	30/4/2020		73	55	60	47	17.3	16.2	15.3	14.3	36.2	48.7	45.0	34.8	20.8	29.2	33.3	25.0
M A Y	1	4/5/2020	1st	45	68	70	55	15.5	18.8	17.0	13.5	46.7	43.7	58.8	47.5	16.7	20.8	16.7	16.7
	2	7/5/2020		58	80	63	60	18.8	18.0	16.3	15.8	57.3	66.0	68.4	42.7	20.8	25.0	33.3	20.8
	3	11/5/2020	2nd	77	78	73	68	17.8	18.3	17.5	16.5	72.1	49.1	81.8	57.7	16.7	33.3	20.8	25.0
	4	14/5/2020		63	77	60	57	18.0	18.5	17.7	15.7	55.9	41.4	56.5	38.0	12.5	28.5	25.0	33.3
	5	18/5/2020	3rd	80	75	70	48	18.0	18.0	17.0	15.8	69.4	59.0	72.5	49.9	16.7	30.7	29.2	45.8
	6	21/5/2020		67	67	78	58	16.5	17.8	17.7	15.5	48.7	61.5	47.5	68.2	25.0	29.2	33.3	37.5
	7	25/5/2020	4th	75	57	77	38	18.6	15.7	18.5	14.2	74.8	47.9	56.1	54.5	17.5	25.0	20.8	50.0
	8	28/5/2020		77	38	80	48	18.7	14.0	17.5	15.3	68.8	44.6	60.4	40.0	16.7	33.3	29.2	37.5
	9	31/5/2020		65	52	60	55	17.3	15.7	17.7	16.0	72.8	60.8	42.2	67.5	20.8	29.2	37.5	29.2
J U N E	1	1/6/2020	1st	70	92	80	68	17.8	19.0	18.0	17.0	28.1	33.6	29.7	37.3	8.3	12.0	16.7	20.8
	2	4/6/2020		75	68	78	80	17.5	16.7	18.3	18.0	14.2	38.4	36.0	32.9	12.5	20.8	20.8	16.7
	3	8/6/2020	2nd	65	72	77	82	17.3	17.0	18.5	19.0	31.0	45.8	34.1	41.8	16.7	16.7	20.8	12.5
	4	11/6/2020		83	83	75	92	18.0	18.3	18.0	19.2	16.8	36.6	26.3	32.0	12.5	20.8	16.7	8.3
	5	15/6/2020	3rd	67	78	67	87	17.0	17.5	17.8	19.2	14.6	40.7	30.3	45.7	20.8	16.7	20.8	16.7
	6	18/6/2020		98	80	57	68	20.0	18.2	15.7	16.7	15.7	45.1	44.8	40.2	16.7	20.8	8.3	20.8
	7	22/6/2020	4th	100	90	38	73	19.5	20.2	14.0	17.3	28.9	33.1	31.4	47.7	20.8	16.7	12.5	12.5
	8	25/6/2020		83	98	57	70	18.3	19.2	15.7	16.8	14.3	42.4	23.3	36.6	8.3	20.8	12.5	16.7
	9	29/6/2020		95	82	68	80	19.5	18.0	14.3	18.0	16.2	46.1	29.7	23.6	7.2	16.7	16.7	12.5
J U L Y	1	2/7/2020	1st	80	62	63	57	18.7	16.0	15.7	15.7	10.2	44.3	18.6	17.9	8.3	20.8	4.2	8.1
	2	6/7/2020		77	77	82	73	17.7	17.2	15.5	17.3	33.7	55.9	37.1	30.3	16.7	25.0	16.7	20.8
	3	9/7/2020	2nd	83	57	77	65	18.3	14.0	17.7	16.8	44.9	62.7	13.3	12.9	12.5	29.2	20.8	8.3
	4	13/7/2020		67	73	67	73	16.7	17.8	14.3	17.0	47.0	43.6	31.5	36.3	20.8	16.7	16.7	16.7
	5	16/7/2020	3rd	57	80	62	65	15.7	18.0	16.8	16.5	30.2	39.9	29.1	24.2	12.5	29.2	12.5	16.7
	6	20/7/2020		73	73	78	67	17.3	17.3	17.8	17.5	36.5	30.1	23.6	35.4	16.7	25.0	29.2	12.5
	7	23/7/2020	4th	62	80	80	80	15.8	19.0	18.5	16.5	42.2	44.2	36.6	31.5	20.8	29.2	20.8	20.8
	8	27/7/2020		67	63	67	67	14.5	16.3	16.7	16.0	41.4	61.8	29.8	33.2	29.2	25.0	16.7	16.7
	9	30/7/2020		67	70	57	77	16.7	17.2	14.7	17.7	30.6	33.4	20.9	28.6	20.8	20.0	25.0	12.5
A U G U S T	1	3/8/2020	1st	73	80	60	73	17.5	18.2	16.7	17.3	10.6	30.4	21.0	25.1	4.2	20.8	8.3	16.7
	2	6/8/2020		65	68	70	65	16.5	17.3	17.5	16.8	26.4	42.2	15.2	20.8	4.2	16.7	8.3	8.3
	3	10/8/2020	2nd	70	82	80	80	18.0	19.2	18.8	18.0	15.6	34.2	11.3	15.8	8.3	12.5	16.7	12.5
	4	13/8/2020		97	100	77	77	19.0	19.8	17.7	17.7	28.3	37.2	33.9	27.1	8.3	16.7	12.5	16.7
	5	17/8/2020	3rd	73	75	83	62	17.3	18.0	18.2	17.8	20.0	28.2	30.5	32.1	4.2	12.5	8.3	8.3
	6	20/8/2020		68	85	73	70	17.5	18.8	17.8	18.7	27.8	35.1	22.4	36.9	4.2	16.7	4.2	4.2
	7	24/8/2020	4th	80	97	92	80	19.8	20.2	17.0	18.8	26.4	40.8	20.8	16.6	4.2	20.8	4.2	8.3
	8	27/8/2020		77	83	80	88	18.5	19.2	18.0	19.5	33.2	45.8	43.2	38.6	8.3	16.7	8.3	12.5
	9	31/8/2020		85	77	88	83	18.2	18.2	18.0	18.3	53.4	62.9	53.7	45.6	12.5	20.8	12.5	16.7
S E P T E M B E R	1	3/9/2020	1st	73	72	62	83	17.3	17.7	16.3	17.3	29.7	35.5	23.7	21.1	12.5	16.7	12.5	8.3
	2	7/9/2020		80	88	73	42	18.0	18.8	17.3	18.7	15.4	29.6	17.2	28.4	4.2	12.5	8.3	4.2
	3	10/9/2020	2nd	93	67	80	42	19.1	16.7	18.8	16.8	22.6	33.7	15.7	19.1	4.2	16.7	4.2	4.2
	4	14/9/2020		73	77	77	83	17.8	17.8	17.7	17.2	17.2	29.0	23.9	18.0	8.3	12.5	8.3	8.3
	5	17/9/2020	3rd	67	80	68	16.7	16.7	18.5	16.7	16.3	13.8	22.6	34.8	28.1	4.2	12.5	8.3	16.7
	6	21/9/2020		70	60	72	12.5	17.3	16.3	17.7	18.0	9.6	35.9	4.5	4.2	2.8	8.3	12.5	12.5
	7	24/9/2020	4th	62	73	80	42	16.8	17.5	18.0	16.7	32.2	47.1	28.9	13.5	2.9	12.5	2.1	4.2
	8	28/9/2020		70	82	73	16.7	17.7	18.2	17.3	17.3	59.8	64.8	68.1	37.9	10.4	16.7	12.9	16.7
Minimum				4.3	3.8	3.8	3.8	14.5	14.0	14.0	13.5	9.6	22.6	4.5	4.2	2.8	8.3	2.1	4.2
Maximum				10.0	10.0	9.2	16.7	20.0	20.2	18.8	19.5	74.8	66.0	81.8	68.2	37.5	33.4	37.5	50.0
Average				7.2	7.2	6.9	7.1	17.4	17.5	16.9	16.9	35.3	43.3	35.6	34.5	13.7	20.9	16.8	17.2

[Signature]
Monitored by

J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit : J.K. Cement Ltd.)

Half Yearly Stack monitoring report of Cement plant & 2x25 MW Thermal power plant for April-2020 to September-2020

Sl. No.	Month/Year	Stack locations										
		Thermal Power Plant			Kiln / Raw Mill			SPM in mg/Nm ³				
		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	Apr-20	22.2	95.0	56.0	15.6	0.0	460.0	14.4	7.3	8.6	8.1	5.0
2	May-20	27.0	95.0	60.0	16.8	0.0	682.0	15.0	11.5	16.0	6.1	7.2
3	Jun-20	20.4	114.0	70.0	11.9	0.0	436.0	11.6	10.0	10.7	10.5	7.0
4	Jul-20	31.7	140.0	68.0	11.5	0.0	484.0	11.3	6.4	9.0	11.3	5.9
5	Aug-20	21.8	168.0	95.0	13.8	0.0	695.0	12.7	10.6	16.4	14.1	12.0
6	Sep-20	20.7	143.7	102.1	10.9	6.0	640.0	12.7	7.5	7.7	8.4	7.0
Avg		24.0	125.9	75.2	13.4	1.0	566.2	13.0	8.9	11.4	9.7	7.3
Min		20.4	95.0	56.0	10.9	0.0	436.0	11.3	6.4	7.7	6.1	5.0
Max		31.7	168.0	102.1	16.8	6.0	695.0	15.0	11.5	16.4	14.1	12.0

Sl. No.		Month/Year	Stack locations									
			SPM in mg/Nm ³									
			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
1	Apr-20	12.8	13.5	10.4	7.4	10.2	13.4	10.1	18.2	7.2	8.1	5.0
2	May-20	13.0	17.0	11.0	13.0	16.0	20.0	13.0	15.0	17.0	6.1	7.2
3	Jun-20	17.1	15.7	14.6	13.4	10.8	12.9	14.6	12.4	10.2	10.5	7.0
4	Jul-20	16.4	12.2	11.2	13.9	12.8	11.7	14.6	13.9	11.0	11.3	5.9
5	Aug-20	13.2	10.5	8.4	11.5	11.9	13.6	12.7	11.0	13.4	14.1	12.0
6	Sep-20	11.5	12.1	13.8	10.5	12.4	15.1	9.5	9.9	11.6	8.4	7.0
Avg		14.0	13.5	11.6	11.6	12.4	14.4	12.4	13.4	11.7	9.7	7.3
Min		11.5	10.5	8.4	7.4	10.2	11.7	9.5	9.9	7.2	6.1	5.0
Max		17.1	17.0	14.6	13.9	16.0	20.0	14.6	18.2	17.0	14.1	12.0


 Vani Pappi
 Monitored by

J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit : J.K. Cement Limited)

Half Yearly Fugitive Emission Monitoring Report of Cement plant for the month of April-2020 to September-2020

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
1	Apr-20	750.2	985.2	729.3	900.7	1114.4	926.9	946.2
2	May-20	771.4	680.4	844.6	792.4	914.7	773.5	837.1
3	Jun-20	878.3	771.8	848.3	724.5	1014.5	940.5	854.5
4	Jul-20	826.6	663.5	560.7	480.2	587.4	516.9	628.7
5	Aug-20	677.0	562.5	470.8	699.2	506.2	456.6	585.3
6	Sep-20	638.0	711.9	575.5	725.2	619.5	716.9	639.1
	Minimum	637.99	562.50	470.76	480.21	506.22	456.60	585.35
	Maximum	878.30	985.22	848.29	900.71	1114.41	940.45	946.24
	Average	756.90	729.22	671.52	720.37	792.79	721.88	748.49
								749.68


 Vanil Rajil
 Monitored by

J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit: J.K. Cement Ltd.)

EFFLUENT WATER ANALYSIS REPORT (Monthly Average) FOR THE MONTH OF APRIL-2020 TO SEPTEMBER-2020

Constituents	Suspended Solids (mg/L)	Temperature (°C) max	pH value	Oils and Grease (mg/L)
Permissible limit	100	Unobjectionable	5.5 to 9	10
Apr-20	66.5	0.33	8.34	Nil
May-20	42.1	0.63	8.14	Nil
Jun-20	40.7	0.58	8.16	Nil
Jul-20	46.3	0.56	8.15	Nil
Aug-20	49.8	0.50	8.23	Nil
Sep-20	50.6	0.46	8.3	Nil
Half Avg	49.3	0.5	8.2	Nil
Half Minimum	46.5	0.3	8.1	Nil
Half Maximum	47.2	0.6	8.3	Nil


Vani Pati
Monitored by

J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit: J.K. Cement Ltd.)

STP water Analysis Report (Monthly Average) for the Month of April-2020 to September-2020

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	Apr-20	8.25	7.22	7.77	29.17	3.14	6.74	Nil	0.76
2	May-20	8.09	7.25	6.65	34.10	3.44	7.37	Nil	0.77
3	Jun-20	8.08	7.46	6.84	26.02	4.50	7.16	Nil	0.77
4	Jul-20	8.00	7.22	7.83	27.15	3.73	7.13	Nil	0.74
5	Aug-20	8.22	7.44	6.93	24.38	3.32	7.44	Nil	0.80
6	Sep-20	8.22	7.34	8.12	24.91	3.56	7.48	Nil	0.77
	Half Yearly Min.	8.00	7.22	6.65	24.38	3.14	6.74	Nil	0.7
	Half Yearly Max.	8.25	7.46	8.12	34.10	4.50	7.48	Nil	0.8
	Half Yearly Avg.	8.14	7.32	7.35	27.62	3.61	7.22	Nil	0.8

Monitored by

Vani Pradi

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

Half Yearly Noise monitoring report of Cement & Power Plant for the month of April-2020 to September-2020

Sl. No.	Location Name	Apr-20		May-20		Jun-20		Jul-20		Aug-20		Sep-20		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 side	45.6	31.5	43.2	30.4	48.2	32.8	47.5	34.8	48.6	35.8	48.6	35.5	43.2	30.4	48.6	35.8	47.0	33.5
2	Administrative Building	42.2	30.6	40.6	31.5	40.5	30.2	44.6	31.8	45.8	32.6	45.8	32.1	40.5	30.2	45.8	32.6	43.3	31.5
3	Lime Stone gate	42.5	33.5	54.6	33.5	50.7	40.7	51.5	46.5	52.7	47.6	52.8	43.8	50.7	33.5	54.6	47.6	52.5	41.3
4	Lime Stone Crusher	46.6	35.2	48.5	35.2	47.2	37.5	49.8	37.5	65.8	58.2	65.9	52.5	46.6	35.2	65.9	58.2	54.0	47.5
5	Kiln/ Cooler	50.4	36.6	51.8	36.6	55.8	41.2	64.8	48.9	68.5	60.6	70.5	60.8	50.4	36.6	70.5	60.8	65.9	55.5
6	Kiln Platform	60.5	45.2	62.5	45.2	50.5	43.6	72.6	65.8	74.8	66.7	74.5	66.5	50.5	43.6	74.8	66.7	65.9	55.5
7	Power Plant	66.1	50.5	64.2	50.5	60.6	50.7	63.5	47.8	68.7	55.8	65.4	48.5	60.6	47.8	68.7	55.8	63.3	41.1
8	Despatch gate	52.4	40.6	50.5	40.6	53.5	41.6	53.4	40.8	55.4	41.2	54.6	41.6	50.5	40.6	55.4	41.6	48.1	36.2
9	Near QC Lab.	50.6	32.8	49.2	32.8	45.9	36.2	48.5	38.5	46.8	39.2	47.6	37.5	45.9	32.8	50.6	39.2	55.8	40.4
10	Coal Yard	56.5	35.4	55.4	35.4	54.7	38.5	56.8	42.8	55.7	48.7	55.4	41.5	54.7	35.4	56.8	48.7	54.0	37.9
11	Slag yard	55.4	34.2	52.8	34.2	66.8	40.1	48.5	35.6	52.8	45.6	47.6	36.8	47.6	34.2	66.8	45.6	58.5	40.6
12	Gypsum yard	56.6	35.8	54.5	35.8	65.7	40.1	57.8	41.6	58.4	47.5	58.2	42.5	54.5	35.8	65.7	47.5	58.5	34.9
13	Near Canteen	40.6	30.2	41.5	30.2	62.2	40.2	46.7	32.8	47.5	40.7	48.5	35.5	40.6	30.2	62.2	40.7	47.8	38.9
14	Plant main gate	50.5	32.6	50.4	32.6	58.8	45.5	52.5	35.5	53.7	46.4	53.6	35.5	50.4	32.6	58.8	46.4	53.3	33.6
15	Dispensary	44.6	30.2	43.6	30.2	46.5	40	43.6	32.6	45.8	34.8	44.7	33.7	43.6	30.2	46.5	40	44.8	33.6
16	Packing Plant	50.2	36.6	51.5	36.6	71.5	55.4	55.8	42.5	56.7	48.7	56.7	43.5	50.2	36.6	71.5	55.4	57.1	43.9
17	General Store	55.4	33.4	52.8	33.4	60.1	45.5	50	38.6	51.6	45.5	51.6	38.6	50	33.4	60.1	45.5	53.6	39.2
18	DC House (1-meter distance)	64.5	-	65.5	-	75.5	-	78.2	-	76.4	-	78.8	-	64.5	0	78.8	0	73.2	#DIV/0!
19	DC House (2-meter distance)	62.2	-	62.8	-	71.5	-	78.6	-	74.1	-	75.6	-	62.2	0	75.6	0	70.3	#DIV/0!
20	Raw mill proportioning hopper	60.6	40.5	64.6	41.5	79.9	63	68.7	42.8	74.5	68.5	69.5	45.8	60.6	40.5	79.9	68.5	69.6	50.4
21	coal mill	64.5	45.6	65.2	43.6	77	61	55.8	44.6	70.5	65.6	62.5	42.6	55.8	42.6	77	65.6	65.9	50.5
22	Near silo clinker loading point	60.6	46.8	62.2	41.5	64.2	51.8	58.4	47.6	65.2	59.8	58.4	47.6	58.4	41.5	65.2	59.8	61.5	49.2
23	CM-1 weigh feeder	61.5	50.2	62.5	51.2	71.5	55.5	62.5	52.4	60.5	55.6	63.5	52.5	60.5	50.2	71.5	55.6	63.7	52.9
24	CM-2 weigh feeder	60.2	55.2	65.5	52.8	67.7	52.6	65.8	55.7	65.2	58.2	65.2	53.8	60.2	52.6	67.7	58.2	64.9	54.7
25	Cement silo Packer-1	62.8	45.5	60.7	43.3	64.8	50.7	63.5	50.8	64.5	59.5	62.8	51.6	60.7	43.3	64.8	59.5	63.2	50.2
26	Cement silo Packer-2	60.6	50.2	61.8	51.5	69.5	45.2	65.8	52.8	66.4	55.7	65.8	52.8	60.6	45.2	69.5	55.7	65.0	51.4
27	Cement silo Packer-3	62.5	49.7	64.4	50.5	64.8	52.5	60.5	48.7	65.3	57.4	67.2	54.5	62.5	48.7	67.2	57.4	65.1	52.2
28	Cement silo Packer-4	63.6	50.5	60.1	48.9	57.5	47.2	62.8	45.8	63.4	56.8	63.4	46.5	57.5	45.8	63.6	56.8	61.8	49.3
29	Truck Loading point- 1	61.5	45.5	62.2	44.7	71.6	51.7	52.8	46.7	60.9	50.4	55.5	47.5	52.8	44.7	71.6	51.7	60.4	47.8
30	Truck Loading point- 2	60.6	50.6	58.7	48.5	61.8	52.8	64.5	48.5	65.6	59.5	65.4	48.6	58.7	48.5	65.6	59.5	62.8	51.4
31	Truck Loading point- 3	60.5	51.5	62.4	50.6	65.2	50.5	65.2	47.5	67.4	63.8	68.5	50.5	60.5	47.5	68.5	59.7	64.9	52.4
32	Truck Loading point- 4	62.4	45.4	65.5	46.5	60.7	48.5	58.4	46.5	64.2	59.7	60.7	48.5	58.4	45.4	65.5	59.7	62.0	49.2
33	Slag mill weigh feeder	62.1	49.6	68.7	45.6	73.8	55.4	64.5	50.7	60.8	56.4	73.8	55.4	60.8	45.6	73.8	56.4	67.3	52.2

Monitored by
V.K. Halli

Station: CEMS Periodically: April 2020 - September 2020 Type: AVG Monthly [1 Hr.]

Date & Time	RABH_STACK- PM-(mg/Nm3)	RABH_STACK- SO2-(mg/Nm3)	RABH_STACK- NOx-(mg/Nm3)	CPPSTACK- PM-(mg/Nm3)	CPPSTACK- SO2- (mg/Nm3)	CPPSTACK- NOx- (mg/Nm3)	Coal_Mill- PM- (mg/Nm3)	Cooler- ESP-PM- (mg/Nm3)	Cement_Mill_1 PM(mg/Nm3)	Cement_Mill 2PM(mg/Nm3)	Cement_Mill_3 PM(mg/Nm3)
Apr-20											
May-20	16.0	8.0	623.0	28.1	100.0	89.7	18.7	2.8	3.0	4.0	14.6
Jun-20	14.0	0.0	316.6	23.7	98.4	63.2	7.1	6.1	2.8	1.8	12.0
Jul-20	11.7	0.0	348.0	28.8	120.0	74.2	10.4	5.0	2.0	0.8	11.7
Aug-20	15.0	3.4	567.2	15.0	136.4	87.5	9.6	9.2	2.5	1.8	9.0
Sep-20	9.2	10.9	442.9	16.2	146.3	95.3	4.7	8.1	2.6	0.8	11.0
Minimum	9.2	0.0	316.6	15.0	98.4	63.2	4.7	2.8	2.0	0.8	9.0
Maximum	16.0	10.9	623.0	28.8	146.3	95.3	18.7	9.2	3.0	4.0	14.6
Average	13.2	4.5	459.5	22.4	120.2	82.0	10.1	6.3	2.6	2.1	11.7

Station: AAQMS1 Periodically: April 2020 - September 2020 Type: AVG Monthly [1 Hr.]

Date & Time	PM10	PM2.5	SO2	NO2	CO
	µg/m ³	µg/m ³	µg/m ²	µg/m ³	µg/m ³
Apr-20	Nodata				
May-20	54.00	20.77	Analyzer Problem	Analyzer Problem	1.2
Jun-20	20.08	8.91	Analyzer Problem	28.2	0.7
Jul-20	27.39	4.25	Analyzer Problem	13.6	1.2
Aug-20	21.28	3.52	Analyzer Problem	16.6	1.57
Sep-20	32.00	8.25	Analyzer Problem	12.0	1.55
Minimum	20.08	3.52	0	12	0.65
Maximum	54	20.77	0.00	28.17	1.57
Average	30.95	9.14	#DIV/0!	17.61	1.23

Station: AAQMS2 Periodically: April 2020 - September 2020 Type: AVG Monthly [1 Hr.]

Date & Time	PM10	PM2.5	SO2	NO2	CO
	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Apr-20	Nodata				
May-20	88.52	25.6	Analyzer Problem	Analyzer Problem	Analyzer Problem
Jun-20	36.76	7.3	Analyzer Problem	5.28	Analyzer Problem
Jul-20	28.88	15.2	6.20	Analyzer Problem	0.49
Aug-20	19.19	2.6	Analyzer Problem	Analyzer Problem	3.26
Sep-20	33.13	7.1	Analyzer Problem	Analyzer Problem	1.14
Minimum	19.19	2.56	6.2	5.28	0.49
Maximum	88.52	25.6	6.2	5.28	3.26
Average	41.30	11.55	6.20	5.28	1.63

EXPENDITURE ON THE ENVIRONMENTAL MANAGEMENT PLAN FOR PERIOD
FROM APRIL 2020 TO SEPTEMBER 2020

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	759.31
Fly ash Silo's and ash handling systems	58.76
Emission Monitoring equipment (including online emission monitoring equipment (CEMS) at sources and ambient air quality in the vicinity) and laboratory	13.49
Green Belt Development, Sewage Treatment plant and Water Harvesting Schemes for plant	20.08
Extra expenditure on green purchase (Purchase of green fuel, recycled materials or any other such purchase (AFR purchase, Fly ash and Slag purchase) to reduce environmental footprint	1943.17
Other environmental management costs (AFR system operation, odour control, environmental training/Award, SNCR system CPP, Environmental License Fees)	126.38
TOTAL (Rs in Lakhs)	2921.19