

No.JKCW/ENV/2022-23/ EC Compliance/2nd Half(PLANT)/89/21

Date- 19-05-2023

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 Oct-2022 to Mar-2023 (2nd Half) 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**

Dear Sir,

With reference to aforesaid subject and reference matter, we are here by sending the enclosed pointwise environmental clearance compliance report for the period **Oct-2022 to Mar-2023 (2nd Half)** of JK Cement Works, Muddapur, (Unit: JK Cement Ltd) (Cement Plant -2.20 MTPA Clinker & 2.50 MTPA OPC and Captive Power Plant 2 x 25 MW, for JK Cement Works, Village-Muddapur, Taluka-Mudhol, District-Bagalkot, Karnataka, along with **Annexure-1 to 8**.

This for your kind perusal and acknowledge the receipt.

Thanking you

Yours faithfully

For J.K. Cement Works


Umashankar Choudhary
(Unit Head)

Enclosures as above:

- | | |
|---|---|
| 1. EC Compliance Report Annexure-1 | 5.Fugitive emission Monitoring - Annexure -5 |
| 2. AAQ Monitoring Annexure -2 | 6.Water Quality Monitoring - Annexure 6 |
| 3. Stack Emission Monitoring - Annexure -3 | 7. Environmental expenditures Annexure-7 |
| 4. Noise Level Monitoring- Annexure -4 | 8.CSR Report Annexure-8 |

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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, 1st & 2nd Floors, Nisarga Bhavan, A-Block, Thimmaiah, Main Road, 7thD 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, Bagalkot – 587102

Subject: EC to Cement Plant (2.20 MTPA) Clinker & 2.50 MTPA OPC and Captive Power Plant (2x25 MW) at Village- Lokapur, Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works (Unit: JK Cement Ltd).

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EC Compliance Report for the period October- 2022 to March- 2023

A. Specific Conditions:

Annexure-1

i.	Electrostatic precipitator (ESP) to cooler, Bag House to Raw mill, Bag filter to coal kiln burner and pre-calciner shall be provided. Online 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. Online gas analyzer for O ₂ , CO, emission at kiln inlet and online 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, the water requirement from Ghatprabha river is not exceeding the specified quantity. Dry manufacturing process has been adopted for cement manufacturing so no waste water is generated in cement plant. The treated waste water, generated in CPP, is being used for dust suppression, green belt development, other plant related activities /process. So, no process waste water is being discharged outside the factory premises and zero discharge is being adopted. Domestic effluent treated in sewage treatment plant (STP) is used for green belt development within the plant and colony areas.
iii.	The fly ash and bottom ash generated from the power plant shall be used in the process itself for manufacturing PPC. All the cement dust collected from the pollution control devices shall be recycled and reuse in the process and used for cement manufacturing. The fly ash utilization shall be as per the provision stipulated in the fly ash notification of September, 1999 and amended in august, 2003. STP sludge shall be	Complied. The fly ash and bottom ash generated from the power plant is being used in the manufacturing of PPC, however our CPP is not in operation since 02.11.2021. The cement dust collected from the pollution control devices is recycled back in the cement manufacturing. The fly ash utilization is as per the

Subject: EC to Cement Plant (2.20 MTPA) Clinker & 2.50 MTPA OPC and Captive Power Plant (2x25 MW) at Village- Lokapur, Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works (Unit: JK Cement Ltd).

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	used as manure for green belt development. Used oil shall be sold to authorized recycler / re processor only.	provision stipulated in the fly ash notification of September, 1999 and amended in august, 2003. Quarterly & Annual report on fly ash utilization is being submitted to SPCB/MoEF/CEA. STP sludge is utilizing as manure for green belt development. Used oil/waste oil in our kiln is being handed over to authorized recycler/re-processor only.
iv.	High calorific hazardous waste shall be utilized in the cement plant.	Complying. We obtained permission from KSPCB for co-processing various Hazardous and Non-Hazardous wastes vide KSPCB authorization no. 327139 dated 29th September 2021, for co-processing in our kiln and the same is practiced.
v.	As proposed in EIA / EMP, green belt shall be developed in 80 ha. (66%) out of total 120 ha. 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. Green belt has been developed in phased manner so far we have covered 46.03% of green cover @ 118.94 acres out of 258.37 Acres in plant and colony. As 66% is misprinted and it is corrected in the amendment taken on 2010 EC.
General Condition :		
i.	The project authorities shall adhere to the stipulation made by Karnataka State Pollution Control Board and State Government.	Noted.
ii.	No further Expansion or modification of the plant shall be carried out without prior approval of	Agreed. We have obtained environmental clearance for

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	Ministry or rules made there under.	expansion of Cement Grinding Unit (2.50 MTPA to 3.5 MTPA) via. MoEF Letter No. F.No. J-11011/263/2009-IA II (I) dated 21-06-2010 and also obtained permission for manufacturing the cement based adhesive without increasing the production capacity from MoEF via F. No. J 11011/263/2009- IA II (I) dated 26 September 2012.
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 all major stacks and the gaseous and particulate matter emissions from within the standards as prescribed by the Ministry/KSPCB. Interlocking facilities have been provided in pollution control equipment.
iv.	One Ambient Air Quality Monitoring station shall be installed in down wind direction. Ambient air quality including Ambient Noise Level shall not exceed the standard stipulated under EPA or by the state authorities. Monitoring of Ambient air quality and stack emission shall be carried out regularly in consultation with KSPCB and report submitted to the KSPCB quarterly and to the Ministry Regional Office at Bangalore Half Yearly.	Complied, 4 No's of AAQ stations are installed to monitor Ambient air quality including ambient Noise level is not exceeding the standard stipulated under EPA or by the state authorities. In consultation with KSPCB Environmental Monitoring of Ambient Air Quality and Stack Emission are being carried out. The reports are being submitted to the KSPCB Monthly, Quarterly & Half Yearly and Regional Office of Ministry at Bangalore on 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. Asphaltting / concreting of roads and water spray all around the stock yard and loading / unloading areas shall	Complied, we have installed adequate dust collection and extraction system to control fugitive dust handling. Asphaltting / concreting of roads and water spray all around the stock yard and loading / unloading areas are being carried

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	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.	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 are stored in silos.
vi.	Prior permission from the State Ground water Board, Central Ground Water Authority (SGWB / CGWA) regarding drawl of ground water shall be obtained.	Permission to abstract Ground water is obtained from Karnataka Ground Water Authority, Bangalore via. Letter no. KGWA/GW/NOC/32/2020-21/4323 dated 30.03.2021.
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, rain water harvesting structures have been adopted from roof tops. Storm water drains are paved for 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 under CSR, the expenditure incurred from October-22 to March-23 for community welfare is enclosed as Annexure-8 . Additionally, RDF/Plastic from nearby ULB's and Hazardous wastes, non-Hazardous wastes is being used for Manufacturing of PPC/Slag cement.
ix.	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) 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 (85dBA) 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 (Night Time). Ambient noise level monitoring report for the Period

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		October-2022 to March-2023 is enclosed as Annexure-4
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.
1.	Cement Plants, which are not complying with notified standards, shall do the following to meet the standards: <ul style="list-style-type: none"> • Augmentation of existing Air Pollution Control Devices -by July 2003 • Replacement of existing Air Pollution Control Devices -by July 2004 	Complying.
2	Cement Plants located in critically polluted or urban areas (including 5-km distance outside urban boundary) will meet 100 mg/Nm ³ limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm ³	We are maintaining the emission level below 30 mg/Nm ³ for particulate matter as per MoEF Notification Vide GSR 612(E) dated 25.08.2014.
3	The new cement kilns to be accorded NOC/Environmental Clearance w.e.f. 01.04.2003 will meet the limit of 50 mg/Nm ³ for particulate matter emissions	The emission level of particulate matter is maintaining below 30 mg/Nm ³ for kiln/raw mill as per the prescribed standards.
4	CPCB will evolve load based standards by December 2003	MoEF & CC has released notification on load based standards on 10 th May 2016, for cement plants with co-processing for rotary kiln (Raw mill, kiln and precalciner system put together) not exceeding 0.125kg/tonne of clinker and complying the same.
5	CPCB and NCBM will evolve SO ₂ and NO _x emission standards by June 2004	Emission standards (for SO ₂ & NO _x) are notified by MoEF&CC vide notifications G.S.R. 612(E) dt. 25/08/2014, G.S.R. 496(E) dt. 09/05/2016 and G.S.R. 497(E) dt. 10/05/2016 are complying. Additionally We have installed DeNO _x system (SNCR) to control NO _x

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		emissions
6	The Cement industries will control fugitive emissions from all the raw material and products storage and transfer points by December 2003. However, the feasibility for the control of fugitive emissions from limestone and coal storage areas will be decided by the National Task Force (NTF). The NTF shall submit its recommendations within three months	The fugitive dust emissions are controlling by implementing the below practices. <ul style="list-style-type: none"> • Raw materials, product sheds, transfer points and belt conveyors are fully covered. • Bag filters are installed at all transfer points. • Concreted Roads are paved to suppress the dust emissions.
7	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum coke as fuel in cement kiln by July 2003	Complied. We are using petroleum coke as a fuel in cement kiln after obtaining permission from KSPCB.
8	After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operations/sections for installation of continuous monitoring equipment. The industry will install the Continuous Monitoring Systems (CMS) by December 2003	Complied. We have already installed online continuous emission monitoring stations (OCEMS) at all major stacks and the data is connected to CPCB and KSPCB servers.
9	Trippings in kiln ESP to be minimized by July 2003 as per the recommendation of NTF	Reverse Air Bag House has been installed at Raw Mill/kiln in place of ESP for minimization of Kiln tripping.
10	Industries will submit the target date to enhance the utilization of waste material by April 2003	Complied, utilization of various wastes in kiln as a supplementary fuel.
11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003	Complied. Hazardous and other waste from various industries is being co processed in cement kiln.
12	Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003	Captive power plant of 50 MW has been installed to cater our plant and colony requirements, also 5MW Solar Plant has been installed as green energy.
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 has been established headed by Unit Head to carry out Environmental monitoring and various management function.
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, expenditure incurred on environmental pollution control measures taken up on environment management plan and the details of expenditure are enclosed as Annexure-7.
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.	Complying, six monthly compliance report along with statistical interpretation of environmental monitoring data is submitting regularly to The Regional office of Ministry at Bangalore, CPCB & KSPCB.
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, The Project has been successfully commissioned and informed to the Regional office of Ministry.
xvi.	The project proponent shall inform the public that the project has been accorded environmental clearance by Ministry and copies of the clearance letter are available with the Karnataka Pollution Control Board / committee and may be seen at website of the Ministry of Environment and Forests at http: www.envfor.nic.in . This should be advertised within seven days from the date of issues of clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the regional office at Bangalore.	Complied, we had informed to 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 .
6.0	The Ministry or any other competent authority may stipulate any further condition(s) on	Noted.

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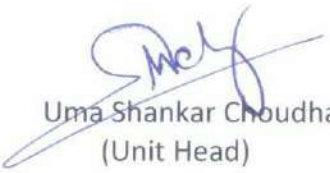
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	receiving reports from the project authorities. The above conditions shall be monitored by the Regional offices of this Ministry located of Bangalore.	
7.0	The Ministry may revoke or suspend the clearance if implementation of any of the above condition is not satisfactory.	Noted.
8.0	Any other condition or alteration in the above conditions shall to be implemented by the project authorities in a time bound manner.	Noted.
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.	Noted.

Thanking you,

Yours Faithfully

J.K. Cement Works, Muddapur (Karnataka)


Uma Shankar Choudhary
(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-2022 TO MARCH-2023

(ALL VALUES IN MICROGRAMS / CUBIC METER)

Month	Sl.No.	Date	Week	SO ₂				NO ₂				PM ₁₀				PM _{2.5}			
				Locations				Locations				Locations				Locations			
				Admin Bld	Guest House	Muddapur	Bamanbuddhini	Admin Bld	Guest House	Muddapur	Bamanbuddhini	Admin Bld	Guest House	Muddapur	Bamanbuddhini	Admin Bld	Guest House	Muddapur	Bamanbuddhini
OCTOBER	1	1.10.2022	1st	8.0	7.0	7.5	7.7	18.0	17.2	17.5	18.0	59.8	40.4	49.4	47.8	12.5	20.8	12.5	16.7
	2	5.10.2022		7.7	8.0	8.0	6.8	17.0	18.0	18.0	16.8	56.6	45.3	44.6	44.8	17.5	22.9	20.8	20.8
	3	8.10.2022	2nd	9.5	7.7	6.8	8.0	19.3	17.7	16.8	18.0	64.6	49.1	36.3	45.6	13.3	12.5	16.7	18.8
	4	12.10.2022		8.0	6.8	7.0	7.5	18.7	16.8	17.0	17.5	62.9	47.1	40.7	48.1	16.7	20.8	18.8	21.7
	5	15.10.2022	3rd	8.2	8.2	6.8	8.2	17.8	18.2	16.8	18.0	70.1	50.0	46.3	53.0	14.2	22.9	10.0	23.3
	6	19.10.2022		9.0	7.0	7.3	6.7	19.0	17.7	17.3	16.8	60.3	48.0	51.0	43.3	18.8	16.7	17.5	20.8
	7	22.10.2022	4th	8.3	8.0	6.8	7.0	18.3	18.0	16.8	17.5	68.1	50.4	49.4	54.3	14.2	12.5	15.8	16.7
	8	26.10.2022		9.0	7.0	8.2	7.5	18.0	17.0	18.2	17.5	59.5	49.6	46.3	47.1	20.5	20.8	18.3	13.7
	9	29.10.2022		7.5	6.8	7.0	8.2	16.5	16.8	17.7	18.7	67.3	46.1	43.3	41.3	11.7	15.4	16.7	16.7
NOVEMBER	1	3.11.2022	1st	5.5	7.5	6.0	6.0	16.7	18.7	16.5	16.5	55.8	44.9	74.8	47.4	17.9	25.0	16.7	20.8
	2	7.11.2022		6.2	5.5	7.3	7.3	16.8	17.3	18.3	18.3	47.0	59.0	57.6	45.9	12.5	29.2	23.8	25.0
	3	10.11.2022	2nd	8.2	6.7	8.8	8.8	17.8	17.0	18.0	18.0	52.8	47.7	68.4	43.3	20.8	33.3	17.9	29.2
	4	14.11.2022		7.0	11.0	6.8	6.8	17.0	18.0	17.5	17.5	63.3	44.7	57.1	40.2	12.5	20.8	20.8	22.1
	5	17.11.2022	3rd	8.0	9.8	7.3	7.3	18.0	18.3	17.5	17.5	60.5	50.6	46.6	33.7	20.8	31.3	20.8	25.0
	6	21.11.2022		6.8	9.0	6.8	6.8	16.8	17.2	18.0	18.0	55.1	59.9	56.5	41.3	16.7	29.2	16.7	33.3
	7	24.11.2022	4th	8.0	8.5	7.2	7.2	18.0	18.0	17.8	17.8	63.7	45.6	61.8	46.6	20.8	32.5	20.8	20.8
	8	28.11.2022		7.5	6.8	8.0	8.0	17.5	17.0	18.8	18.8	42.6	50.2	65.6	40.7	16.0	20.8	23.3	29.2
	9	30.11.2022		7.0	7.3	9.0	7.0	17.0	17.5	19.0	17.0	52.6	56.0	49.9	52.4	12.5	23.3	16.7	24.2
DECEMBER	1	3.12.2022	1st	7.8	6.8	7.7	7.5	17.8	16.7	17.5	18.0	53.3	55.5	50.2	46.2	23.3	25.0	27.1	20.8
	2	7.12.2022		8.0	7.5	6.0	5.5	18.0	17.5	17.3	15.0	51.0	57.5	85.1	41.0	33.3	37.5	25.8	25.0
	3	10.12.2022	2nd	7.8	8.0	7.0	8.0	18.8	18.0	18.0	17.3	60.4	52.7	61.3	52.4	29.2	17.9	20.8	20.8
	4	14.12.2022		8.0	6.8	8.5	6.8	18.0	16.8	18.3	16.8	67.6	54.0	42.7	50.3	20.8	33.3	20.8	22.5
	5	17.12.2022	3rd	8.3	7.8	5.5	8.0	18.3	17.8	17.3	15.8	56.8	63.4	62.9	44.0	22.9	20.8	21.7	15.4
	6	21.12.2022		6.2	6.8	6.7	5.8	17.5	16.8	17.8	14.2	50.8	57.8	46.8	57.9	25.0	46.7	29.2	37.5
	7	24.12.2022	4th	8.0	7.5	6.2	6.8	18.0	17.5	16.8	14.2	55.7	49.8	58.4	50.1	41.7	37.5	20.8	33.3
	8	28.12.2022		8.0	8.0	7.7	8.2	18.2	18.0	18.5	18.3	57.8	55.7	64.6	53.4	28.0	20.8	25.0	20.8
	9	31.12.2022		8.0	8.0	8.3	5.5	18.0	18.0	19.0	17.5	52.1	48.0	53.2	57.0	29.2	33.3	31.7	33.3
JANUARY	1	3.1.2023	1st	7.0	8.0	6.8	7.7	17.7	18.5	16.5	17.8	89.5	79.0	65.2	57.7	50.0	25.0	20.8	20.8
	2	7.1.2023		6.8	10.2	7.5	8.0	16.8	19.3	17.5	18.0	80.9	66.1	60.0	48.8	45.8	37.5	25.0	25.0
	3	10.1.2023	2nd	9.7	6.7	5.8	6.8	19.7	16.7	15.8	16.8	75.2	57.1	68.1	55.0	37.5	29.2	33.3	16.7
	4	14.1.2023		6.2	7.0	6.7	8.0	16.2	17.0	16.7	18.7	69.8	63.1	51.6	63.1	29.2	20.8	37.5	29.2
	5	17.1.2023	3rd	7.2	6.5	8.0	7.5	17.7	16.8	18.7	17.5	73.3	69.4	64.8	59.0	27.5	33.3	41.7	20.8
	6	21.1.2023		8.0	7.3	6.7	7.2	17.0	18.0	17.3	18.0	68.1	67.1	58.2	65.5	20.8	41.7	29.2	16.7
	7	24.1.2023	4th	8.0	8.0	8.0	10.3	18.5	18.0	18.0	20.3	65.4	60.2	65.4	56.2	24.6	16.7	25.0	12.5
	8	28.1.2023		6.8	6.8	7.0	7.5	16.8	17.5	16.8	17.5	57.1	73.3	62.6	67.7	28.0	20.8	31.3	20.8
FEBRUARY	1	3.2.2023	1st	8.0	8.0	6.2	6.8	18.0	17.8	16.2	16.7	61.8	67.8	68.9	73.1	25.0	33.3	41.7	33.3
	2	7.2.2023		7.7	7.7	8.0	7.0	17.0	17.7	18.0	17.5	75.9	61.2	76.6	70.6	29.2	37.5	33.3	37.5
	3	10.2.2023	2nd	9.8	8.0	9.2	6.8	19.3	18.0	19.2	16.8	69.3	72.6	91.7	72.8	33.3	41.7	50.0	29.2
	4	14.2.2023		8.0	10.3	8.0	8.0	18.7	19.8	18.0	18.0	77.5	65.9	69.0	69.0	31.3	40.0	37.5	41.7
	5	17.2.2023	3rd	8.2	7.7	9.3	7.0	17.8	17.5	19.0	16.8	73.9	75.2	75.8	84.2	33.3	45.8	35.4	45.8
	6	21.2.2023		9.0	8.0	8.3	6.5	19.0	18.7	18.2	16.5	69.6	64.2	70.0	65.1	37.5	37.5	37.5	25.0
	7	24.2.2023	4th	8.3	9.0	10.0	7.5	18.3	18.8	19.3	17.5	71.0	60.0	76.6	70.0	45.8	29.2	45.8	33.3
	8	28.2.2023		9.0	7.2	8.0	6.7	18.0	17.8	18.0	16.7	79.9	71.9	61.5	61.0	38.0	50.0	25.0	36.7
MARCH	1	3.3.2023	1st	7.5	7.7	8.0	7.7	17.5	17.7	18.0	17.7	79.7	79.1	85.7	66.0	37.5	32.5	41.7	29.2
	2	7.3.2023		8.2	9.0	7.5	6.7	18.7	19.0	16.3	16.7	87.4	68.2	64.7	71.8	41.7	28.3	33.3	33.3
	3	10.3.2023	2nd	10.0	6.7	8.0	8.0	20.0	16.7	16.7	18.0	65.0	84.6	75.7	69.7	33.3	41.7	35.4	25.0
	4	14.3.2023		8.0	8.0	6.7	6.8	18.0	17.3	17.3	16.8	72.8	74.0	62.4	75.3	38.3	33.3	34.6	37.5
	5	17.3.2023	3rd	7.3	7.0	8.0	7.0	17.5	17.5	18.0	17.5	69.6	68.0	68.8	69.4	31.3	28.3	35.0	33.4
	6	21.3.2023		6.7	8.0	7.2	8.0	16.7	18.7	18.0	18.0	59.4	78.2	64.4	73.3	25.0	42.5	29.2	31.8
	7	24.3.2023	4th	7.3	6.7	6.7	7.3	18.2	16.7	16.7	17.3	64.2	91.6	56.5	67.1	29.2	49.2	20.8	30.7
	8	28.3.2023		8.2	7.8	6.3	8.0	18.2	17.7	17.0	18.0	69.4	80.9	68.3	81.1	32.0	41.7	32.5	45.4
Minimum				5.5	5.5	5.5	5.5	16.2	16.7	15.8	14.2	42.6	40.4	36.3	33.7	11.7	12.5	10.0	12.5
Maximum				10.0	11.0	10.0	10.3	20.0	19.8	19.3	20.3	89.5	91.6	91.7	84.2	50.0	50.0	50.0	45.8
Average				7.8	7.7	7.4	7.3	17.9	17.7	17.6	17.4	64.6	60.3	60.8	56.5	26.4	29.8	26.7	26.3


 Vinit Kumar Sharma
 Monitored by


 Vinit Kumar Sharma
 Checked by



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Plant AAQ sample

Name and Address of Customer: M/s. JK Cement Works, Muddapur (Unit : J.K. Cement LTD.,) Muddapur -587122 Distt. Bagalkot (Karnataka) India				Report Date: 26/02/2023			
				Date of Receipt of sample: 20/02/2023			
				Test Report No: SIRC/2023/02/4825			
				Test Completed on: 26/02/2023			
Test Performed On: 20/02/2023				Sample Packing: Absorbing solution Sealed Bottle and Filter paper zip lock covered			
S.N o	Parameters	Method	NAAQ standards 2009	Location			
				Site-1	Site-2	Site-3	Site-4
1	Particulate Matter (PM10), µg/m ³	IS 5182 (P23):2006	100	68.5	58	52.4	73
2	Particulate Matter (PM2.5), µg/m ³	40CFR Part 53& 58	60	33	25.7	40.5	45.2
3	Sulfur Dioxide (SO ₂), µg/m ³	IS 5182 (P2):2001	80	12	16.5	9.5	21.3
4	Nitrogen Dioxide (NO ₂), µg/m ³	IS 5182 (P6):2006	80	15	12.5	25.4	29.3
5	Ammonia (NH ₃), µg/m ³	Method 401, Air Sampling	400	18.4	10.4	30.4	24
6	Carbon Monoxide (CO), mg/m ³	Non-Dispersive Infra-Red Method	04	ND	ND	ND	ND
7	Ozone (O ₃), µg/m ³	Method 411, Air Sampling	180	9.6	6.5	16.1	18.5
8	Lead (Pb), µg/m ³	EPA compendium method IO 3.2	1.0	BDL	BDL	BDL	BDL
9	Nickel (Ni), ng/m ³	EPA compendium method IO 3.2	20	BDL	BDL	BDL	BDL
10	Arsenic (As), ng/m ³	EPA compendium method IO 3.2	06	BDL	BDL	BDL	BDL
11	Benzo(a)Pyrene(BaP), ng/m ³	IS 5182 (Part 12):2004	01	BDL	BDL	BDL	BDL
12	Benzene (C ₆ H ₆), µg/m ³	IS 5182 (Part 11):2006	05	BDL	BDL	BDL	BDL

Note: Site-1: Near Administration Building Site-2: Near Guest House Site-3: Near D Block & Site-4: Dispatch Gate

BDL: Below detectable limit, ND: Not Detected

INFERENCE	As per NAAQMS Standards, Report Status: - - The measured values for the above parameters are within the standards
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AUTHORIZED SIGNATORY

Sateesh G Muttagi
Technical Manager

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J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit : J.K. Cement Ltd.)

Stack monitoring report of Cement plant & 2x25 MW Thermal power plant for October-2022 to March-2023

Sl. No.	Month/Year	Stack locations						
		Thermal Power Plant			Kiln / Raw Mill			DG Set
		SPM in mg/Nm3	SO2 in mg/Nm3	NOx in mg/Nm3	SPM in mg/Nm3	SO2 in mg/Nm3	NOx in mg/Nm3	SPM in mg/Nm3
1	Oct-22	Plant Shutdown			13.9	0.0	421.0	-
2	Nov-22				17.2	0.0	410.0	-
3	Dec-22				13.6	0.0	405.2	-
4	Jan-23				20.9	0.0	539.0	-
5	Feb-23				17.0	0.0	478.0	-
6	Mar-23				12.3	0.0	305.0	-

Sl. No.	Month/Year	Stack locations						
		SPM in mg/Nm3						
		CM-3 (Slag Cement Mill)	Coal crusher	LSC	CM-1	CM-2	Cooler	Coal Mill
1	Oct-22	7.2	13.0	9.6	13.28	16.00	7.4	13.0
2	Nov-22	13.2	7.5	16.2	7.1	13.2	9.5	11.2
3	Dec-22	14.1	9.7	10.0	10.2	29.6	12.3	15.3
4	Jan-23	11.0	13.3	13.4	8.27	13.06	15.1	17.3
5	Feb-23	17.4	11.0	12.1	7.3	11.8	10.1	10.5
6	Mar-23	16.4	13.2	10.9	7.3	11.9	8.5	17.1


Vinit Patil
Monitored by


Vinit Kumar Sharma
Checked by



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TEST REPORT

Name and Address of Customer: M/s. JK Cement Works, Muddapur (Unit : J.K. Cement LTD.,) Muddapur -587122 Distt. Bagalkot (Karnataka) India	Report Date: 05/03/2023
	Date of Receipt of sample: 25/02/2023
	Test Report No: SIRC/2023/02/4831
	Test Completed On: 27/02/2023
Test Performed On: 25/02/2023	Date of Monitoring: 24/02/2023

Sample Collected By	Sample Nature	Stack ID	Sample Packing:
SIRC	STACK	RAW MILL	Thimble in zip lock covered

Stack Details

Stack Id	RAW MILL
Ambient Temperature, (°C)	34
Stack Temperature, (°C)	166
Diameter, (m)	7.54
Cross Sectional Area in meter square, (m ²)	19.63
Velocity, (m/s)	5.61
Flue gas Discharge, Nm ³ /hr	278012
Dust Emission, mg/Hr	2.6

Results

S.No	Parameters	Unit	Results	Limits	Method
1	Particulate Matter	mg/Nm ³	10.5	30	IS 11255 (P1) 2003
2	Moisture	%	<1	NS	IS 11255 (P1) 2003
3	Sulphur Dioxide	mg/Nm ³	ND	100	IS 11255 (P2) 2003
4	Oxides of nitrogen	mg/Nm ³	388	800	Flue gas analyzer

Note: ND: Not Detected, NS: Not Specified

INFERENCE	As per MOEF Standards, Report Status: -- The measured values for the above parameters are within the standards.
------------------	---

AUTHORIZED SIGNATORY

Sateesh G Muttagi
Technical Manager

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TEST REPORT

Name and Address of Customer:	Report Date: 05/03/2023
M/s. JK Cement Works, Muddapur (Unit : J.K. Cement LTD.,) Muddapur -587122 Distt. Bagalkot (Karnataka) India	Date of Receipt of sample: 23/02/2023
	Test Report No: SIRC/2023/02/4832
	Test Completed On: 25/02/2023
Test Performed On: 23/02/2023	Date of Monitoring: 22/02/2023

Sample Collected By	Sample Nature	Stack ID	Sample Packing:
SIRC	STACK	Cement Mill-2	Thimble in zip lock covered

Stack Details

Stack Id	Cement Mill-2
Ambient Temperature, (°C)	30
Stack Temperature, (°C)	122
Diameter, (m)	1.4
Cross Sectional Area in meter square, (m²)	1.23
Velocity, (m/s)	5.21
Flue gas Discharge, Nm³/hr	18101.2
Dust Emission, mg/Hr	0.19

Results

S.No	Parameters	Unit	Results	Limits	Method
1	Particulate Matter	mg/Nm ³	11.3	30	IS 11255 (P1) 2003
2	Moisture	%	<1	NS	IS 11255 (P1) 2003

Note: NS: Not Specified

INFERENCE	As per MOEF Standards, Report Status: - - The measured values for the above parameters are within the standards.
------------------	--

AUTHORIZED SIGNATORY

Sateesh G Muttagi

Technical Manager

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TEST REPORT

Name and Address of Customer:	Report Date: 05/03/2023
M/s. JK Cement Works, Muddapur (Unit : J.K. Cement LTD.,) Muddapur -587122 Distt. Bagalkot (Karnataka) India	Date of Receipt of sample: 24/02/2023
	Test Report No: SIRC/2022/08/4833
	Test Completed On: 28/02/2023
Test Performed On: 25/02/2023	Date of Monitoring: 23/02/2023

Sample Collected By	Sample Nature	Stack ID	Sample Packing:
SIRC	STACK	Cement Mill-1	Thimble in zip lock covered

Stack Details

Stack Id	Cement Mill-1
Ambient Temperature ,(⁰C)	32
Stack Temperature, (⁰C)	112
Diameter, (m)	1.4
Cross Sectional Area in meter square, (m²)	1.23
Velocity, (m/s)	5.21
Flue gas Discharge, Nm³/hr	17801
Dust Emission , mg/Hr	0.12

Results

S.No	Parameters	Unit	Results	Limits	Method
1	Particulate Matter	mg/Nm ³	6.9	30	IS 11255 (P1) 2003
2	Moisture	%	<1	NS	IS 11255 (P1) 2003

Note: NS: Not Specified

INFERENCE	As per MOEF Standards, Report Status: - - The measured values for the above parameters are within the standards.
------------------	--

AUTHORIZED SIGNATORY

Sateesh G Muttagi
Technical Manager

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TEST REPORT

Name and Address of Customer:	Report Date: 05/03/2023
M/s. JK Cement Works, Muddapur (Unit : J.K. Cement LTD.,) Muddapur -587122 Distt. Bagalkot (Karnataka) India	Date of Receipt of sample: 24/02/2023
	Test Report No: SIRC/2022/08/4834
	Test Completed On: 28/02/2023
Test Performed On: 25/02/2023	Date of Monitoring: 23/02/2023

Sample Collected By	Sample Nature	Stack ID	Sample Packing:
SIRC	STACK	Cement Mill-3	Thimble in zip lock covered

Stack Details

Stack Id	Cement Mill-3
Ambient Temperature ,(⁰C)	32
Stack Temperature, (⁰C)	108
Diameter, (m)	3.75
Cross Sectional Area in meter square, (m²)	11.04
Velocity, (m/s)	5.65
Flue gas Discharge, Nm³/hr	179317.2
Dust Emission , mg/Hr	2.7

Results

S.No	Parameters	Unit	Results	Limits	Method
1	Particulate Matter	mg/Nm ³	14.1	30	IS 11255 (P1) 2003
2	Moisture	%	<1	NS	IS 11255 (P1) 2003

Note: NS: Not Specified

INFERENCE	As per MOEF Standards, Report Status: -- The measured values for the above parameters are within the standards.
------------------	---

AUTHORIZED SIGNATORY

Sateesh G Muttagi
Technical Manager

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TEST REPORT

Name and Address of Customer: M/s. JK Cement Works, Muddapur (Unit : J.K. Cement LTD.,) Muddapur -587122 Distt. Bagalkot (Karnataka) India	Report Date: 05/02/2023
	Date of Receipt of sample: 26/03/2023
	Test Report No: SIRC/2023/02/4835
	Test Completed On: 01/03/2023
Test Performed On: 27/02/2023	Date of Monitoring: 25/02/2023

Sample Collected By	Sample Nature	Stack ID	Sample Packing:
SIRC	STACK	Coal Mil	Thimble in zip lock covered

Stack Details

Stack Id	Coal Mil
Ambient Temperature, (°C)	29
Stack Temperature, (°C)	86
Diameter, (m)	1.80
Cross Sectional Area in meter square, (m²)	2.54
Velocity, (m/s)	5.23
Flue gas Discharge, Nm³/hr	34039.2
Dust Emission, mg/Hr	0.6

Results

S.No	Parameters	Unit	Results	Limits	Method
1	Particulate Matter	mg/Nm ³	15.3	30	IS 11255 (P1) 2003
2	Moisture	%	<1	NS	IS 11255 (P1) 2003

Note: NS: Not Specified

INFERENCE	As per MOEF Standards, Report Status: - - The measured values for the above parameters are within the standards.
------------------	--

AUTHORIZED SIGNATORY

Sateesh G Muttagi

Technical Manager

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TEST REPORT

Name and Address of Customer:	Report Date: 05/03/2023
M/s. JK Cement Works, Muddapur (Unit : J.K. Cement LTD.,) Muddapur -587122 Distt. Bagalkot (Karnataka) India	Date of Receipt of sample: 25/02/2023
	Test Report No: SIRC/2023/02/4836
	Test Completed On: 27/02/2023
Test Performed On: 25/02/2023	Date of Monitoring: 24/02/2023

Sample Collected By	Sample Nature	Stack ID	Sample Packing:
SIRC	STACK	Clinker Cooler Stack	Thimble in zip lock covered

Stack Details

Stack Id	Clinker Cooler Stack
Ambient Temperature ,(⁰C)	36
Stack Temperature, (⁰C)	285
Diameter, (m)	3.86
Cross Sectional Area in meter square, (m²)	12.56
Velocity, (m/s)	7.22
Flue gas Discharge, Nm³/hr	173116.6
Dust Emission , mg/Hr	1.23

Results

S.No	Parameters	Unit	Results	Limits	Method
1	Particulate Matter	mg/Nm ³	5.8	30	IS 11255 (P1) 2003
2	Moisture	%	<1	NS	IS 11255 (P1) 2003

Note: ND: Not Detected, NS: Not Specified

INFERENCE	As per MOEF Standards GSR 612 E dated 25.08 2014. Report Status: - - The measured values for the above parameters are within the standards.
------------------	--

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Sateesh G Muttagi
Technical Manager

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TEST REPORT

Name and Address of Customer:	Report Date: 05/02/2023
M/s. JK Cement Works,	Date of Receipt of sample: 26/03/2023
Muddapur	Test Report No: SIRC/2023/02/4837
(Unit: J.K. Cement LTD.,)	Test Completed On: 01/03/2023
Muddapur -587122	Date of Monitoring: 25/02/2023
Distt. Bagalkot (Karnataka) India	
Test Performed On: 27/02/2023	

Sample Collected By	Sample Nature	Stack ID	Sample Packing:
SIRC	STACK	Limestone Crusher	Thimble in zip lock covered

Stack Details

Stack Id	Crusher
Ambient Temperature ,(°C)	33
Stack Temperature, (°C)	59
Diameter, (m)	1.20
Cross Sectional Area in meter square, (m²)	1.13
Velocity, (m/s)	4.99
Flue gas Discharge, Nm³/hr	18742.3
Dust Emission , mg/Hr	0.25

Results

S. No	Parameters	Unit	Results	Limits	Method
1	Particulate Matter	mg/Nm ³	12.7	30	IS 11255 (P1) 2003

INFERENCE	As per MOEF Standards, Report Status: - - The measured values for the above parameters are within the standards.
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AUTHORIZED SIGNATORY

Sateesh G Muttagi
Technical Manager

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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-2022 to March-2023

Ambient Noise																			
Sl. No.	Location Name	Oct-22		Nov-22		Dec-22		Jan-23		Feb-23		Mar-23		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	69.5	66.8	68.2	65.4	66.5	63.6	65.6	62.5	67.5	65.3	68.5	62.8	65.6	62.5	69.5	66.8	67.6	64.4
2	Administrative Building	65.2	63.8	64.5	62.2	62.8	60.7	61.2	58.6	64.8	62.7	62.7	60.4	61.2	58.6	65.2	63.8	63.5	61.4
3	Lime Stone gate	71.4	68.5	67.3	64.3	65.4	63.5	67.8	65.3	70.5	68.5	72.5	67.5	65.4	63.5	72.5	68.5	69.2	66.3
4	Despatch gate	68.6	65.2	66.5	63.8	63.2	61.6	62.5	60.7	68.7	65.6	65.5	63.2	62.5	60.7	68.7	65.6	65.8	63.4
5	Near QC Lab.	60.6	58.4	62.8	60.3	64.5	62.8	66.8	66.8	67.5	64.6	63.8	60.7	60.6	58.4	67.5	64.6	64.3	61.7
6	Near Canteen	65.2	62.5	60.5	58.5	62.8	60.4	60.7	58.5	62.8	60.7	64.7	60.1	60.5	58.5	65.2	62.5	62.8	60.1
7	Plant main gate	60.5	58.2	62.3	58.2	60.6	57.6	65.5	63.4	68.6	66.2	67.9	62.6	60.5	57.6	68.6	66.2	64.2	61.0
8	General Store	62.2	60.7	60.3	56.4	62.5	58.8	64.6	62.7	65.9	63.8	62.6	59.5	60.3	56.4	65.9	63.8	63.0	60.3

Sl. No.	Location Name	Oct-22 (dB) Leq	Nov-22 (dB) Leq	Dec-22 (dB) Leq	Jan-23 (dB) Leq	Feb-23 (dB) Leq	Mar-23 (dB) Leq	Minimum (dB) Leq	Maximum (dB) Leq	Average (dB) Leq
		(dB) Leq	(dB) Leq	(dB) Leq	(dB) Leq	(dB) Leq	(dB) Leq	(dB) Leq	(dB) Leq	(dB) Leq
1	Lime Stone Crusher	78.6	82.5	84	82	80	82	78.6	84	81.5
2	Kiln/ Cooler	80.5	80.6	82	80	82	80	80	82	80.9
3	Kiln Platform	79.6	78.5	80	78	76	74	74	80	77.7
4	Power Plant	50.6	50.2	52	56	58	60	50.2	60	54.5
5	Coal Yard	64.3	60.6	62	64	66	64	60.6	66	63.5
6	Slag yard	60.7	62.5	64	66	68	66	60.7	68	64.5
7	Gypsum yard	62.8	63.7	61	62	64	68	61	68	63.6
8	Raw mill propporing hopper	70.8	68.5	70	74	72	74	68.5	74	71.6
9	coal mill	72.7	72.8	73	72	70	72	70	73	72.1
10	Near silo clinker loading point	74.3	68.5	70	73	71	73	68.5	74.3	71.6
11	CM-1 weigh feeder	70.4	70.2	72	75	74	78	70.2	78	73.3
12	CM-2 weigh feeder	72.2	73.7	75	78	76	76	72.2	78	75.2
13	Cement silo Packer-1	80.4	80.6	82	84	82	80	80	84	81.5
14	Cement silo Packer-2	72.6	72.4	76	75	73	74	72.4	76	73.8
15	Cement silo Packer-3	76.5	73.6	78	80	78	76	73.6	80	77.0
16	Cement silo Packer-4	78.5	80.5	81	82	80	73	73	82	79.2
17	Truck Loading point- 1	70	73	75	76	78	77	70	78	74.8
18	Truck Loading point- 2	72.4	68	70	72	73	75	68	75	71.7
19	Truck Loading point- 3	73.6	72.8	74	76	75	78	72.8	78	75.2
20	Truck Loading point- 4	73.7	74.5	75	78	77	76	73.7	78	75.7
21	Slag mill weigh feeder	68.5	66.5	68	70	71	73	66.5	73	69.5

Monitored by

Vinil Kumar Sharma

Checked by

Vinil Kumar Sharma

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-2022 to March-2023

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-22	902.8	752.6	867.0	1055.9	583.3	574.6	695.5	1030.6
2	Nov-22	897.4	821.6	1046.8	931.6	565.6	580.6	906.0	861.1
3	Dec-22	1004.5	1012.8	937.8	1082.8	579.2	597.9	1056.1	1146.5
4	Jan-23	901.2	811.2	1015.3	968.1	713.4	603.6	1031.4	1278.7
5	Feb-23	737.7	940.9	1323.1	1045.2	811.6	1059.8	1247.8	1331.8
6	Mar-23	1056.4	1231.8	1459.4	1215.5	1007.3	953.8	1139.8	1188.9
	Minimum	737.74	752.58	866.99	931.65	565.60	574.60	695.51	861.05
	Maximum	1056.45	1231.84	1459.39	1215.51	1007.30	1059.81	1247.76	1331.82
	Average	916.67	928.48	1108.24	1049.87	710.08	728.38	1012.75	1139.60


Vinit Patel
Monitored by


Vinit Kumar Sharma
Checked by



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TEST REPORT

Name and Address of Customer:	Report Date: 26/02/2023
M/s. JK Cement Works, Muddapur	Date of Receipt of sample: 22/02/2023
(Unit : J.K. Cement LTD.,)	Test Report No: SIRC/2023/02/4925-4932
Muddapur -587122 Distt. Bagalkot	Test Completed on: 22/02/2023
(Karnataka) India	
Test Performed On: 22/02/2023	

RESULTS

Sample Collected By	Sample Nature	Sample Location	Sample Condition on Receipt
SIRC	Fugitive Emission Monitoring	Mentioned Below	Satisfactory

Job Code	Locations	SPM (ug/m3)	Fugitive emission standard as per CPCB
4925	Near slag Storage shed	1645.3	5000µg/m3
4926	Near Gypsum Storage Shed	1232.5	
4927	Near Cement Mill Area	1303.3	
4928	Near Laterite Storage Area	1287.5	
4929	Near Cement Plant Coal Storage Shed	1580.4	
4930	Near Lime Stone Crusher area	1645.9	
4931	Near Packing Plant area	1298.4	2000µg/m3
4932	Near CPP Coal storage shed	1249.9	

AUTHORIZED SIGNATORY

Sateesh G Muttagi
Technical Manager

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Annexure-6

J.K. Cement WORKS, MUDDAPUR (KARNATAKA)

(Unit: J.K. Cement Ltd.)

EFFLUENT WATER ANALYSIS REPORT (Monthly Average) FOR THE MONTH OF OCTOBER-2022 TO MARCH-2023

Constituents	Suspended Solids (mg/L)	Temperature (°C) max	pH value	Oils and Grease (mg/L)
Permissible limit				
Oct-22	PLANT SHUT DOWN			
Nov-22				
Dec-22				
Jan-23				
Feb-23				
Mar-23				
Half Avg	#DIV/0!	#DIV/0!	#DIV/0!	Nil
Half Minimum	0.0	0.00	0.00	Nil
Half Maximum	0.0	0.00	0.00	Nil


Vani Patil
Monitored by


Vinit Kumar Sharma
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STP WATER ANALYSIS REPORT

Name and Address of Customer:			Date of Receipt of sample: 25/02/2023		
M/s. JK Cement Works, Muddapur			Test Performed On: 25/02/2023		
(Unit: J.K.CementLTD.,) Muddapur -587122 Dist. Bagalkot (Karnataka) India			Test Completed On: 05/03/2023		
			Report Date: 05/03/2023		
			Test Report No: SIRC/2023/02/4994		
Sl. No	Parameters	Protocol	Result		Standards As per IS :3025
			STP In Let	STP Out Let	
1.	pH	APHA 23 rd Edition-2017, 4500H+B	7.33	8.2	6.5-9.0
2.	Total Suspended Solids	APHA 23 rd Edition-2017, 2540 D	25	12	20
3.	BOD, mg/lt, 3 days at 270 C	APHA 23 rd Edition- 2017, 5210B	42	6.2	10
4.	COD, mg/lt	APHA 23 rd Edition- 2017, 5220B	121	19.5	50
5.	Ammonical Nitrogen mg/lt	APHA 23 rd Edition-2017, 4500 NH ₃ C	3.6	1.7	05
6.	Phosphorous as P	APHA 23 rd Edition-2017, 4500 P D	1.28	0.55	2
7.	Total Nitrogen mg/lt	APHA 23 rd Edition-2017, 4500- NO ₃ E, 4500 NH ₃ C, 4500Norg	6.9	4.5	10
8.	Faecal Coliforms, cfu/100ml	APHA 23 rd Edition-2017, 9222 D	Present	Absent	250

AUTHORIZED SIGNATORY

Dr. Siddalingeshwara K G

Quality Manager

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Annexure-7

EXPENDITURE ON THE ENVIRONMENTAL MANAGEMENT PLAN FOR PERIOD FROM OCTOBER 2022 TO MARCH 2023

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.	1146.51
Fly ash Silo's and ash handling systems.	57.53
Emission Monitoring equipment (including online emission monitoring equipment (CEMS) at sources and ambient air quality in the vicinity) and laboratory.	20.89
Green Belt Development, Sewage Treatment plant and Water Harvesting Schemes for plant.	45.08
Extra expenditure on green purchase (Purchase of green fuel, recycled materials or any other such purchase (<u>AFR purchase, Fly ash and Slag purchase</u>) to reduce environmental footprint.	4185.03
Other environmental management costs (AFR system operation, odour control, environmental training/Award, SNCR system CPP, Environmental License Fees).	762.38
TOTAL (Rs in Lakhs)	6217.43


Prepared by


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Annexure-8

JK CEMENT WORKS, MUDDAPUR

DETAILS OF CSR ACTIVITY UNDERTAKEN DURING OCTOBER-2022 TO MARCH-2023		
SL NO	Particulars	Amount (RS)
1	Health Camp at nearby village Halki	85,000
2	Running and maintenance of Sir Padampat School	1,165,243
3	Education aid and support	59,055
4	Pooja/ Fair/Festival/temple contributions	1,199,352
5	Rural development & other welfare activities	139,699
Total		2648349

Prepared by



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