JK Cement Works, Muddapur
A Unit of JK Cement Ltd.
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No. JK-MIU/EC-COM/2025-26/89/83 Date- 26-05-2025

To
The Deputy Director
Ministry of Environment, Forest and Climate Change (MoEFCC)
Govt. of India, Indira Paryavaran Bhavan
Aliganj, New Delhi- 110 003

Sub: **Half Yearly Environmental Clearance Compliance report for the period from October - 2024 to March-2025 (2nd Half) of M/s JK Cement Works, Muddapur (Unit: JK Cement Ltd) Cement Production - 3.5 Million Metric Tons/Annum, Clinker Production - 2.64 Million Metric Tons/Annum, Cement-based adhesive -100000 Metric Tonnes /Annum, Captive Power Plant - 1 x 25 Mega Watt, WHRS - 18 Mega Watt and AFR Co-processing with Chlorine Bypass system - 0.21 Million Metric Tons/Annum, Village- Muddapur, Taluka- Mudhol, District- Bagalkot (Karnataka)**

Ref: 1- EC No: J-11011/489/2006-1A. II (I)/dtd.14-09-2007
2- EC No: F. No. J-11011/263/2009-IA II (I) dated 26-06-2010
3- EC No: J-11011/263/2009-IA II (I) dated 26-09-2012

Dear Sir,

With reference to aforesaid subject and reference matter, we are hereby Submitting the enclosed pointwise environmental clearance compliance report for the period of **October-2024 to March-2025 (2nd Half)** of M/s JK Cement Works, Muddapur (Unit: JK Cement Ltd) Cement Production - 3.5 Million Metric Tons/Annum, Clinker Production - 2.64 Million Metric Tons/Annum, Cement-based adhesive - 100000 Metric Tons /Annum, Captive Power Plant - 1 x 25 Mega Watt, WHRS - 18 Mega Watt and AFR Co-processing with Chlorine Bypass system - 0.21 Million Metric Tons/Annum at Village-Muddapur, Taluka-Mudhol, District-Bagalkot, Karnataka.

This for your kind perusal and acknowledge the receipt.

Thanking you

Yours faithfully
For J.K. Cement Works, Muddapura
(Unit: JK Cement Ltd)

Prabhat Singh Parihar
(Unit Head)

Enclosures: As above

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

Content

Annexure-1

Subject: EC to Cement Plant (Cement Plant -2.20 MTPA OPC, Clinker 2.64 MTPA, Captive Power Plant 1 x 25 MW, WHRS 18 MW and AFR Co-processing with Chlorine Bypass system 0.21 MTPA for JK Cement Works at Village- Lokapur, Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works (Unit: JK Cement Ltd).

Reference: 1- MoEF vide Letter F. No. J-11011 / 489 / 2006-1A. II (I) / dated. 14th September 2007
2- Letter No. NIPL/CFO/AW-340496 dated 06/11/2023

EC Compliance Report for the period October- 2024 to March- 2025

A. Specific Conditions:

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 powerhouse 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 O2, 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 wastewater 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 wastewater 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 Ghataprabha river does not exceed the specified quantity. Dry manufacturing process has been adopted for cement manufacturing, so no wastewater is generated in cement plant. The treated wastewater, generated in CPP, is being used for dust suppression, green belt development, and other plant related activities /process. So, no process wastewater 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. Water Quality Monitoring report enclosed **Annexure-9**.
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 reused 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	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 cement manufacturing. The fly ash utilization is as per the provision stipulated in the fly ash notification of September,

Subject: EC to Cement Plant (Cement Plant -2.20 MTPA OPC, Clinker 2.64 MTPA, Captive Power Plant 1 x 25 MW, WHRS 18 MW and AFR Co-processing with Chlorine Bypass system 0.21 MTPA for JK Cement Works at Village- Lokapur, Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works (Unit: JK Cement Ltd).

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	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.	1999 and amended in august, 2003. Fly ash utilization report submitted online on coalash.cpcb.gov.in as well offline 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, greenbelt 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 46.02% of green cover @ 118.90 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 Ministry or rules made there under.	Agreed. We have obtained environmental clearance for expansion of Cement Grinding Unit (2.50 MTPA to 3.5 MTPA) via. MoEF Letter No. F.No. J-11011/263/2009-IA II (I) dated 21-06-2010 and also obtained permission for manufacturing the cement-based adhesive without increasing the

Subject: EC to Cement Plant (Cement Plant -2.20 MTPA OPC, Clinker 2.64 MTPA, Captive Power Plant 1 x 25 MW, WHRS 18 MW and AFR Co-processing with Chlorine Bypass system 0.21 MTPA for JK Cement Works at Village- Lokapur, Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works (Unit: JK Cement Ltd).

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		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 confirm 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. Ambient Air Quality Monitoring report is enclosed as **Annexure-4** and Stack emission Monitoring report is enclosed **Annexture-5.**
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,	Complied, we have installed adequate dust collection and extraction system to control fugitive dust handling. Asphalting / concreting of roads and water spray all around the stock yard and loading / unloading areas are 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 are stored in silos.

Subject: EC to Cement Plant (Cement Plant -2.20 MTPA OPC, Clinker 2.64 MTPA, Captive Power Plant 1 x 25 MW, WHRS 18 MW and AFR Co-processing with Chlorine Bypass system 0.21 MTPA for JK Cement Works at Village- Lokapur, Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works (Unit: JK Cement Ltd).

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	fly ash and clinker shall be 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. NOC no. KGWAN1854669818, Dated 26.10.2024.
vii.	The company must harvest the rainwater 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, rainwater 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 financial year - 2024-2025 for community welfare is enclosed as **Annexure-11.** 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 Monitoring Report enclosed as **Annexure-6** and Work zone Noise Monitoring report is enclosed as **Annexure-7.**
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	Complying.

Subject: EC to Cement Plant (Cement Plant -2.20 MTPA OPC, Clinker 2.64 MTPA, Captive Power Plant 1 x 25 MW, WHRS 18 MW and AFR Co-processing with Chlorine Bypass system 0.21 MTPA for JK Cement Works at Village- Lokapur, Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works (Unit: JK Cement Ltd).

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	following to meet the standards: • Augmentation of existing Air Pollution Control Devices -by July 2003 • Replacement of existing Air Pollution Control Devices -by July 2004	
2	Cement Plants located in critically polluted or urban areas (including 5-km distance outside urban boundary) will meet 100 mg/Nm3 limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm3	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 10th 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 SO2 and NOx 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 DeNOx system (SNCR) to control NOx 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	The fugitive dust emissions are controlled by implementing the below practices. • Raw materials, product sheds, transfer points and belt conveyors are fully covered. • Bag filters are installed at all transfer points.

Subject: EC to Cement Plant (Cement Plant -2.20 MTPA OPC, Clinker 2.64 MTPA, Captive Power Plant 1 x 25 MW, WHRS 18 MW and AFR Co-processing with Chlorine Bypass system 0.21 MTPA for JK Cement Works at Village- Lokapur, Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works (Unit: JK Cement Ltd).

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	National Task Force (NTF). The NTF shall submit its recommendations within three months	• Concreted Roads are paved to suppress the dust emissions. Fugitive emissions monitoring report enclosed as **Annexure-8.**
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 (2X25 MW) MW has been installed, however dropping out one boiler of CPP (1x25 MW) (Standby) out of (2x25 MW) to cater our plant and colony requirements, to reduce the pollution load & carbon footprint, also we have 18 MW of WHRS system and 10MW Solar Plant has been installed as green energy.
xi.	Proper housekeeping and adequate occupational health program shall be	Complying, Proper housekeeping and adequate occupational health programmes

Subject: EC to Cement Plant (Cement Plant -2.20 MTPA OPC, Clinker 2.64 MTPA, Captive Power Plant 1 x 25 MW, WHRS 18 MW and AFR Co-processing with Chlorine Bypass system 0.21 MTPA for JK Cement Works at Village- Lokapur, Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works (Unit: JK Cement Ltd).

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.	taken up.	are being taken up.
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-10.**
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	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.

	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.	
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.	Noted.
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.

Annexure-2

Subject: Expansion of Cement Grinding Unit (2.50 MTPA to 3.5 MTPA) at Village Muddapur, Taluka Mudhol, District Bagalkot, Karnataka by M/s J.K. Cement Works, (Unit JK Cement Ltd)

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

EC Compliance Report for the period October - 2024 to March - 2025

A. SPECIFIC CONDITIONS:

S.NO	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 obtained statutory clearances from the Karnataka State Pollution Control Board (KSPCB) prior to commencement of construction i.e, CTE and CTO during operation. Consent to Operate from Karnataka Pollution Control Board is being renewed once in every Five years. Latest Consent to Operate granted by KSPCB vide Order No. AW-326481 dated 30-08-2021 which is valid till 30-06-2026.
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. All the specific and general conditions stipulated by the Central/State Govt for the existing plant are complying and six-monthly compliance reports are being submitted to the Ministry and its Regional office at Bangalore, CPCB & KSPCB boards also.
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 emissions from various sources not exceeding 30 mg/Nm^3 and interlocking facility has been facilitated 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 pulse jet bag filter has been installed.
v)	Ambient air quality monitoring stations (AAQMS) shall be set up as per statutory requirement in consultation with the Karnataka Pollution Control Board (KSPCB). Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the State authorities. Monitoring of ambient air quality shall be carried out regularly in consultation with KSPCB and must not	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 do not exceed the NAAQM standards, 2009.

	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.	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 calibrated regularly from 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. water sprinkling in raw material stock yard and cement bag loading areas through water tankers. Dust sweeping machines also being used for paved roads.
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.	Complied, Secondary fugitive emissions have been monitored periodically and controlled and well within the prescribed norms. CPCB guidelines have been adopted for code of practice to control fugitive emission. Raw materials are being transported through covered means.
viii)	Total ground water requirement shall not exceed 200 m^3/day. No wastewater shall be generated from the cement grinding unit.	Complied, Abstraction of ground water does not exceed the permitted quantity. No wastewater 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. Dust collected in bag filters is recycled back in to the process. Fly ash generated in Captive power plant, is used in the own cement plant for cement manufacturing.
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, out of 104.55 ha, 48.12 Ha have been covered under green cover which is more than 33% area. additional plantation has been taken up to mitigate and reduce the impact of fugitive emissions. We are continuously developing the green belt in and surrounding the area as per the CPCB

		guidelines and in consultation with the local DFO.
xi)	Proper housekeeping and adequate occupational health programs shall be taken up.	Complied, Proper housekeeping and adequate occupational health programs are being taken up time to time.
xii)	All the recommendations made in the charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.	Complied, 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.	Complied, 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.	Complied, all facilities had been provided to labour during project time.
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.	Noted.
ii)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Noted.
iii)	The gaseous emissions from various process units shall conform to the load/mass-based	Noted.

	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.	
iv)	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO_2 and NOx 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.	Complied, we have established 4 Nos (AAQMS) monitoring stations and monitored data of ambient air quality and stack emission are being regularly submitted to the Ministry including its regional Office at Bangalore and the SPCB/CPCB once in six Months. Six monthly report of Ambient Air Quality report enclosed as **Annexure-4,** Stack emission report enclosed as **Annexure-5** and Fugitive emissions report enclosed **as Annexure- 8.**
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.	Complied, No wastewater is generated from cement plant and the waste water, generated in captive power plant is collected in neutralization pit and treated properly and the treated waste water is being used for process itself. Water Quality Monitoring report is Report is enclosed as **Annexure-9.**
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).	Complied, the noise levels in and around the 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 report enclosed as **Annexure-6** and Work Zone Monitoring report enclosed as **Annexure-7** also within the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
Vii)	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factory Act.	Complied, 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 rainwater for utilization in the lean season besides recharging the ground water table.	Complied.

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 programs, drinking water supply and health care etc.	Complied, Environmental protection measures and safeguards recommended in the EIA/EMP report are being followed. socio-economic development activities along with expenditure in the surrounding villages for community development Programmes, educational programs, drinking water supply and health care for the period financial year - 2024-25 is enclosed as **Annexure-11.**
X)	As proposed, Rs. 431 lakhs and Rs. 117.95 lakhs shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the regional Office of the Ministry at Bangalore. The funds so provided shall not be diverted for any other purpose.	Complied. expenditure incurred on environmental pollution control measures taken up on the environment management plan and the details of expenditure are enclosed as **Annexure-10**.
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 to concerned local bodies. No suggestions & representation were received, the same also displayed 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.	Complied, Environment clearance conditions status and results of monitored data are being updated & uploaded on company website periodically. The same report is being sent to the regional Office of the MoEF at Bangalore and the respective Zonal Office of CPCB. The pollutants levels namely, PM_{10}, SO_2, NO_x are displayed near the plant main gate of the company in the public domain.
xiii)	The project proponent shall also submit six	Complied, we are submitting six monthly

	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.	reports on the status of the compliance of the stipulated environmental conditions and monitored data in soft copies only by e-mail and to the Regional Office of this Ministry at Bangalore and upload the same in Parivesh website. Also, the same report is submitted to CPCB/SPCB as well.
xiv)	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (protection) Rules, 19086, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective regional Office of the MoEF at Bangalore by e mail.	Complied, the environmental statement for each financial year ending 31st March in Form-V is being submitted by us to the concerned State Pollution Control Board and is also sent to the regional office of the MoEF at Bangalore. Environmental Statement Report (Form-V) for F.Y. 2023-24 was submitted to regulatory authority via. letter no. JKCW/ENV./Env. Statement/ICP/2024-25/60/20, Dated 20-09-2024.
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.

Annexure-3

Subject: Expansion of Cement Grinding Unit (2.50 MTPA to 3.5 MTPA) at Village Muddapur, Taluka-Mudhol, District Bagalkot, Karnataka by M/s J.K.cement works, (Unit: JK Cement Ltd). Reg Change in product mix to manufacture cement-based adhesive without increasing the production capacity.

Reference: MoEF Letter No. F.No. J-11011/263/2009-IA II (I) dated 26.09.2012

Environmental Clearance Compliance Report (October-2024 to March-2025)

S.N.	Conditions	Reply
3 (i)	The overall capacity of the plant shall remain 3.5 MTPA.	Agreed and complied.
3 (ii)	There shall be no increase in the water consumption and land requirement.	Noted
3(iii)	The company shall comply with all the conditions stipulated vide Ministry's letter of even number dated 21st June, 2010.	We are complied with all the conditions stipulated vide Ministry's letter of even number dated 21st June 2010.
4	In case of change in the scope of the project, fresh proposal for environmental clearance shall be submitted to the Ministry.	Noted and agreed.
5	This issues with the prior approval of competent authority.	Noted.

COSMO CONSCIOUS RESEARCH LABORATORY
Environmental laboratory, Recognized by MoEF & CC, and Certified by ISO (45001:2018)

AIR QUALITY MONITORING DATA

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample Collected By	:	**Cosmo Conscious Research Laboratory**
4.	Particulars of Sample Collected	:	**Source Emission Air Quality Monitoring**
5.	Sample Condition	:	**Satisfactory**
6.	Analysis Start Date	:	**31.10.2024**
7.	Analysis Completion Date	:	**02.11.2024**
8.	Report Issue Date	:	**04.11.2024**
9.	Month of Monitoring	:	**October 2024**
10.	Environmental condition at the time of sampling	:	**29.1°C**

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collected			
		SO_2 (µg/m³)	NO_2 (µg/m³)	PM_{10} (µg/m³)	$PM_{2.5}$ (µg/m³)
AAQM Locations for Cement Plant		**NAAQ standards 2009**			
		80 (µg/m³)	**80 (µg/m³)**	**100 (µg/m³)**	**60 (µg/m³)**
AI- Admin Building					
25.10.2024	434, 434, C04, 241	11	15	50	14
AII- Guest House					
25.10.2024	437, 437, C01, 239	13	12	56	17
AIII-Muddapur Village					
24.10.2024	431, 431, C06, 242	17	20	54	12
AIV- Bomanbudhini Village					
24.10.2024	432, 432, C07, 243	21	10	55	16

END OF REPORT

Note: 1. SO2 – Sulfur Dioxide, NO2 – Nitrogen Dioxide, , PM10 – Particulate Matter (size less than 10 µm), PM2.5 – Particulate Matter (size less than 2.5 µm).
2. The above results are related only to the samples collected & tested on the particular date and time.
3. RA – Reaffirmed.

Name of the Equipment	Eq. ID. No.	Date of Calibration	Calibration Due on
Combo Sampler	230568 to 230571	30.11.2023	29.11.2024

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P.Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M. Shashikala)
Head of the Laboratory

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AIR QUALITY MONITORING DATA

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample Collected By	:	**Cosmo Conscious Research Laboratory**
4.	Particulars of Sample Collected	:	**Source Emission Air Quality Monitoring**
5.	Sample Condition	:	**Satisfactory**
6.	Analysis Start Date	:	**21.11.2024**
7.	Analysis Completion Date	:	**23.11.2024**
8.	Report Issue Date	:	**29.11.2024**
9.	Month of Monitoring	:	**November 2024**
10.	Environmental condition at the time of sampling	:	**29.6°C**
11.	Unique Lab Report Number	:	**TC148922400000000216F**

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collected			
		SO_2 (µg/m³)	NO_2 (µg/m³)	PM_{10} (µg/m³)	$PM_{2.5}$ (µg/m³)
AAQM Locations for Cement Plant		**NAAQ standards 2009**			
		80 (µg/m³)	**80 (µg/m³)**	**100 (µg/m³)**	**60 (µg/m³)**
AI- Admin Building					
21.11.2024	530, 530, C19, 794	11	10	50	12
AII- Guest House					
21.11.2024	529, 529, C18, 795	15	13	52	15
AIII-Muddapur Village					
20.11.2024	526, 526, C14, 791	20	19	55	21
AIV- Bomanbudhini Village					
20.11.2024	524, 524, C16, 792	14	18	59	23

END OF REPORT

Note: 1. SO2 – Sulfur Dioxide, NO2 – Nitrogen Dioxide, , PM10 – Particulate Matter (size less than 10 µm), PM2.5 – Particulate Matter (size less than 2.5 µm).
2. The above results are related only to the samples collected & tested on the particular date and time.
3. RA – Reaffirmed.

Name of the Equipment	Eq. ID. No.	Date of Calibration	Calibration Due on
Combo Sampler	230568 to 230571	30.11.2023	29.11.2024

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P.Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M. Shashikala)
Head of the Laboratory

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AIR QUALITY MONITORING DATA

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample Collected By	:	**Cosmo Conscious Research Laboratory**
4.	Particulars of Sample Collected	:	**Source Emission Air Quality Monitoring**
5.	Sample Condition	:	**Satisfactory**
6.	Analysis Start Date	:	**13.12.2024**
7.	Analysis Completion Date	:	**14.12.2024**
8.	Report Issue Date	:	**30.12.2024**
9.	Month of Monitoring	:	**December 2024**
10.	Environmental condition at the time of sampling	:	**29.1°C**
11.	Unique Lab Report Number	:	**TC148922400000000247F**

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collected			
		SO_2 (µg/m³)	NO_2 (µg/m³)	PM_{10} (µg/m³)	$PM_{2.5}$ (µg/m³)
AAQM Locations for Cement Plant		NAAQ standards 2009			
		80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)
AI- Weigh bridge					
13.12.2024	589, 589, C34, 533	15	11	50	12
AII- Guest House					
13.12.2024	590, 590, C35, 534	10	14	55	15
AIII-Muddapur Village					
13.12.2024	588, 588, C33, 544	12	15	59	19
AIV- Bomanbudhini Village					
12.12.2024	586, 586, C31, 542	18	20	58	13

END OF REPORT

Note: 1. SO2 – Sulfur Dioxide, NO2 – Nitrogen Dioxide, , PM10 – Particulate Matter (size less than 10 µm), PM2.5 – Particulate Matter (size less than 2.5 µm).
2. The above results are related only to the samples collected & tested on the particular date and time.
3. RA – Reaffirmed.

ANALYZED BY:
(G.Dhavalleshwar)
Analyst

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(P.Harika)
Technical Manager

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AIR QUALITY MONITORING DATA

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample Collected By	:	**Cosmo Conscious Research Laboratory**
4.	Particulars of Sample Collected	:	**Source Emission Air Quality Monitoring**
5.	Sample Condition	:	**Satisfactory**
6.	Analysis Start Date	:	**08.01.2025**
7.	Analysis Completion Date	:	**13.01.2025**
8.	Report Issue Date	:	**25.01.2025**
9.	Month of Monitoring	:	**January 2025**
10.	Environmental condition at the time of sampling	:	**28.9°C**
11.	Unique Lab Report Number	:	**TC1489225000000009F**

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collected			
		SO_2 (µg/m³)	NO_2 (µg/m³)	PM_{10} (µg/m³)	$PM_{2.5}$ (µg/m³)
AAQM Locations for Cement Plant		**NAAQ standards 2009**			
		80 (µg/m³)	**80 (µg/m³)**	**100 (µg/m³)**	**60 (µg/m³)**
AI- Weigh bridge					
08.01.2025	667, 667, C15, 056	11	13	50	14
AII- Guest House					
08.01.2025	668, 668, C13, 059	15	10	54	19
AIII-Muddapur Village					
08.01.2025	666, 666, C11, 007	18	14	60	22
AIV- Bomanbudhini Village					
07.01.2025	664, 664, C12, 065	14	21	55	12

END OF REPORT

Note: 1. SO2 – Sulfur Dioxide, NO2 – Nitrogen Dioxide, , PM10 – Particulate Matter (size less than 10 µm), PM2.5 – Particulate Matter (size less than 2.5 µm).
2. The above results are related only to the samples collected & tested on the particular date and time.
3. RA – Reaffirmed.

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P.Harika)
Technical Manager

AUTHORISED SIGNATORY:
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AIR QUALITY MONITORING DATA

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample Collected By	:	**Cosmo Conscious Research Laboratory**
4.	Particulars of Sample Collected	:	**Source Emission Air Quality Monitoring**
5.	Sample Condition	:	**Satisfactory**
6.	Analysis Start Date	:	**21.02.2025**
7.	Analysis Completion Date	:	**26.02.2025**
8.	Report Issue Date	:	**28.02.2025**
9.	Month of Monitoring	:	**February 2025**
10.	Environmental condition at the time of sampling	:	**32.2°C**
11.	Unique Lab Report Number	:	**TC148922500000000122F**

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collected			
		SO_2 (µg/m³)	NO_2 (µg/m³)	PM_{10} (µg/m³)	$PM_{2.5}$ (µg/m³)
AAQM Locations for Cement Plant		**NAAQ standards 2009**			
		80 (µg/m³)	**80 (µg/m³)**	**100 (µg/m³)**	**60 (µg/m³)**
AI- Weigh bridge					
20.02.2025	804, 804, C12, 124	15	12	50	17
AII- Guest House					
20.02.2025	803, 803, C11, 125	10	15	55	13
AIII-Muddapur Village					
21.02.2025	806, 806, C06, 128	20	21	49	14
AIV- Bomanbudhini Village					
20.02.2025	805, 805, C07, 123	13	16	56	15

END OF REPORT

Note: 1. SO2 – Sulfur Dioxide, NO2 – Nitrogen Dioxide, , PM10 – Particulate Matter (size less than 10 µm), PM2.5 – Particulate Matter (size less than 2.5 µm).
2. The above results are related only to the samples collected & tested on the particular date and time.
3. RA – Reaffirmed.

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
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Technical Manager

AUTHORISED SIGNATORY:
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AIR QUALITY MONITORING DATA

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample Collected By	:	**Cosmo Conscious Research Laboratory**
4.	Particulars of Sample Collected	:	**Source Emission Air Quality Monitoring**
5.	Sample Condition	:	**Satisfactory**
6.	Analysis Start Date	:	**21.03.2025**
7.	Analysis Completion Date	:	**22.03.2025**
8.	Report Issue Date	:	**31.03.2025**
9.	Month of Monitoring	:	**March 2025**
10.	Environmental condition at the time of sampling	:	**33.2°C**
11.	Unique Lab Report Number	:	**TC148922500000000242F**

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collected			
		SO_2 (µg/m³)	NO_2 (µg/m³)	PM_{10} (µg/m³)	$PM_{2.5}$ (µg/m³)
AAQM Locations for Cement Plant		**NAAQ standards 2009**			
		80 (µg/m³)	**80 (µg/m³)**	**100 (µg/m³)**	**60 (µg/m³)**
AI- Weigh bridge					
20.03.2025	878, 878, C20, 704	11	14	52	17
AII- Guest House					
20.03.2025	879, 879, C23, 847	16	17	49	11
AIII-Muddapur Village					
19.03.2025	874, 874, C15, 844	13	20	57	24
AIV- Bomanbudhini Village					
20.03.2025	877, 877, C21, 843	15	16	56	21

END OF REPORT

Note: 1. SO2 – Sulfur Dioxide, NO2 – Nitrogen Dioxide, , PM10 – Particulate Matter (size less than 10 µm), PM2.5 – Particulate Matter (size less than 2.5 µm).
2. The above results are related only to the samples collected & tested on the particular date and time.
3. RA – Reaffirmed.

ANALYZED BY:
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COSMO CONSCIOUS RESEARCH LABORATORY
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**25.10.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Raw Mill**
6	Duration of Monitoring	**27 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5608**
9	Analysis Start Date	**31.10.2024**
10	Analysis Completion Date	**04.11.2024**
11	Report Issue Date	**04.11.2024**
12	Environmental Condition at the time of sampling	**35**^{0}C IS-11255(Part 01)
13	Stack Temperature	**96**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**10.29** m/sec
15	Carbon Monoxide	**Nil** ppm CCRL/TOP/06:2016
16	Gas flow rate	**1251211.18** Nm^3/hr IS-11255(Part 03)
17	Moisture	**<1** %
18	Production rate	**423 TPH**

Stack Details

1	Stack attached to	**Raw Mill**
2	Stack Diameter (mtr)	**7.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**15.7**	mg/Nm^3	IS 11255 (Part 01)	**30.0**
2	Sulphur dioxide (SO2)	**20.6**	mg/Nm^3	CCRL/TOP/06:2016	**100.0**
3	Oxides of Nitrogen (NOX)	**16.5**	mg/Nm^3	CCRL/TOP/06:2016	**800.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: (G.Dhavaleshwar)
Analyst

VERIFIED BY: (P.Harika)
Technical Manager

AUTHORISED SIGNATORY: (M. Shashikala)
Head of the Laboratory

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist. Bagalkot (Karnataka) India**
3	Date of Sampling	**28.10.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Coal Mill**
6	Duration of Monitoring	**34 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5610**
9	Analysis Start Date	**31.10.2024**
10	Analysis Completion Date	**04.11.2024**
11	Report Issue Date	**04.11.2024**
12	Environmental Condition at the time of sampling	**30**^{0}C IS-11255(Part 01)
13	Stack Temperature	**56**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.43** m/sec
15	Gas flow rate	**37450.57**Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**23 TPH**

Stack Details

1	Stack attached to	**Coal Mill**
2	Stack Diameter (mtr)	**1.40**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1.	Particulate Matter	**10.2**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka)
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**30.10.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cooler station**
6	Duration of Monitoring	**45 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-01**
9	Analysis Start Date	**31.10.2024**
10	Analysis Completion Date	**04.11.2024**
11	Report Issue Date	**04.11.2024**
12	Environmental Condition at the time of sampling	**30**^{0}C IS-11255(Part 01)
13	Stack Temperature	**170**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.50** m/sec
15	Gas flow rate	**214741.97**Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**323 TPH**

Stack Details

1	Stack attached to	**Cooler station**
2	Stack Diameter (mtr)	**3.86**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**18.8**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**28.10.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -I**
6	Duration of Monitoring	**47 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5609**
9	Analysis Start Date	**31.10.2024**
10	Analysis Completion Date	**04.11.2024**
11	Report Issue Date	**04.11.2024**
12	Environmental Condition at the time of sampling	**36**^{0}C IS-11255(Part 01)
13	Stack Temperature	**76**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**5.54** m/sec
15	Gas flow rate *	**27003.53** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**125 TPH**

Stack Details

1	Stack attached to	**Cement mill-I**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**8.70**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**30.10.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -II**
6	Duration of Monitoring	**38 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5607**
9	Analysis Start Date	**31.10.2024**
10	Analysis Completion Date	**04.11.2024**
11	Report Issue Date	**04.11.2024**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**79**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.22** m/sec
15	Gas flow rate *	**33992.59** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**130 TPH**

Stack Details

1	Stack attached to	**Cement mill -II**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**19.2**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**28.10.2024**
4	Sample Type	**Stack Monitoring**
5	**Sampling Location**	**Cement mill -III**
6	Duration of Monitoring	**23 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5612**
9	Analysis Start Date	**31.10.2024**
10	Analysis Completion Date	**04.11.2024**
11	Report Issue Date	**04.11.2024**
12	Environmental Condition at the time of sampling	**38**^{0}C IS-11255(Part 01)
13	Stack Temperature	**90**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**11.78** m/sec
15	Gas flow rate	**397922.87** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**218** **TPH**

Stack Details

1	Stack attached to	**Cement mill -III**
2	Stack Diameter (mtr)	**3.75**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**12.8**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**28.10.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Lime Stone Crusher Stack**
6	Duration of Monitoring	**40 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5617**
9	Analysis Start Date	**31.10.2024**
10	Analysis Completion Date	**04.11.2024**
11	Report Issue Date	**04.11.2024**
12	Environmental Condition at the time of sampling	**30**^{0}C IS-11255(Part 01)
13	Stack Temperature	**42**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**6.04** m/sec
15	Gas flow rate	**23596.23** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**210 TPH**

Stack Details

1	Stack attached to	**Lime Stone Crusher**
2	Stack Diameter (mtr)	**1.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**11.3**	mg/Nm^3	IS 11255 (Part 01)	**50.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

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Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**30.10.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Captive Power Plant**
6	Duration of Monitoring	-
7	Sample Condition	-
8	Lab Sample code	-
9	Analysis Start Date	-
10	Analysis Completion Date	-
11	Report Issue Date	-
12	Environmental Condition at the time of sampling	-
13	Stack Temperature	-
14	Velocity of Flue Gas	-
15	Mercury	-
16	Gas flow rate	-
17	Moisture	-
18	Production rate	-

Stack Details

1	Stack attached to	**Captive Power Plant**
2	Stack Diameter (mtr)	**3.30**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**SHUT DOWN**	mg/Nm^3	IS 11255 (Part 01)	**50.0**
2	Oxides of Sulphur		mg/Nm^3	CCRL/TOP/06:2016	**600.0**
3	Oxides of Nitrogen		mg/Nm^3	CCRL/TOP/06:2016	**300.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhaneleshwar)**
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Technical Manager

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Analysis Report of Stack Emission .

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**20.11.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Raw Mill**
6	Duration of Monitoring	**28 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5613**
9	Analysis Start Date	**23.11.2024**
10	Analysis Completion Date	**25.11.2024**
11	Report Issue Date	**29.11.2024**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**95**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**10.17** m/sec
15	Carbon Monoxide	**Nil** ppm CCRL/TOP/06:2016
16	Gas flow rate	**1206821.73** Nm^3/hr IS-11255(Part 03)
17	Moisture	**<1** %
18	Production rate	**423 TPH**
19	Unique Lab Report Number	**TC14892240000000225F**

Stack Details

1	Stack attached to	**Raw Mill**
2	Stack Diameter (mtr)	**7.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**23.2**	mg/Nm^3	IS 11255 (Part 01)	**30.0**
2	Sulphur dioxide (SO2)	**41.2**	mg/Nm^3	CCRL/TOP/06:2016	**100.0**
3	Oxides of Nitrogen (NOX)	**28.5**	mg/Nm^3	CCRL/TOP/06:2016	**800.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist. Bagalkot (Karnataka) India**
3	Date of Sampling	**20.11.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Coal Mill**
6	Duration of Monitoring	**34 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5625**
9	Analysis Start Date	**23.11.2024**
10	Analysis Completion Date	**25.11.2024**
11	Report Issue Date	**29.11.2024**
12	Environmental Condition at the time of sampling	**28**^{0}C IS-11255(Part 01)
13	Stack Temperature	**56**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.37** m/sec
15	Gas flow rate	**37148.14** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**23 TPH**
18	Unique Lab Report Number	**TC1489224000000000226F**

Stack Details

1	Stack attached to	**Coal Mill**
2	Stack Diameter (mtr)	**1.40**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1.	Particulate Matter	**24.7**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**21.11.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cooler station**
6	Duration of Monitoring	**42 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5614**
9	Analysis Start Date	**23.11.2024**
10	Analysis Completion Date	**25.11.2024**
11	Report Issue Date	**29.11.2024**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**140**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.47** m/sec
15	Gas flow rate	**229609.69** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**323 TPH**
18	Unique Lab Report Number	**TC148922400000000227F**

Stack Details

1	Stack attached to	**Cooler station**
2	Stack Diameter (mtr)	**3.86**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**23.7**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**22.11.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -I**
6	Duration of Monitoring	**30 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5619**
9	Analysis Start Date	**23.11.2024**
10	Analysis Completion Date	**25.11.2024**
11	Report Issue Date	**29.11.2024**
12	Environmental Condition at the time of sampling	**30**^{0}C IS-11255(Part 01)
13	Stack Temperature	**84**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**9.02** m/sec
15	Gas flow rate *	**41967.59** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**125 TPH**
18	Unique Lab Report Number	**TC14892240000000228F**

Stack Details

1	Stack attached to	**Cement mill-I**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**24.2**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P.Harika)
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**22.11.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -II**
6	Duration of Monitoring	**31 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5618**
9	Analysis Start Date	**23.11.2024**
10	Analysis Completion Date	**25.11.2024**
11	Report Issue Date	**29.11.2024**
12	Environmental Condition at the time of sampling	**28**^{0}C IS-11255(Part 01)
13	Stack Temperature	**76**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**8.65** m/sec
15	Gas flow rate *	**41204.32** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**130 TPH**
18	Unique Lab Report Number	**TC148922400000000229F**

Stack Details

1	Stack attached to	**Cement mill -II**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**16.7**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**21.11.2024**
4	Sample Type	**Stack Monitoring**
5	**Sampling Location**	**Cement mill -III**
6	Duration of Monitoring	**23 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5615**
9	Analysis Start Date	**23.11.2024**
10	Analysis Completion Date	**25.11.2024**
11	Report Issue Date	**29.11.2024**
12	Environmental Condition at the time of sampling	**28**^{0}C IS-11255(Part 01)
13	Stack Temperature	**87**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**12.15** m/sec
15	Gas flow rate	**400764.33** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**218 TPH**
18	Unique Lab Report Number	**TC1489224000000000230F**

Stack Details

1	Stack attached to	**Cement mill -III**
2	Stack Diameter (mtr)	**3.75**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**26.2**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**20.11.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Lime Stone Crusher Stack**
6	Duration of Monitoring	**39 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5623**
9	Analysis Start Date	**23.11.2024**
10	Analysis Completion Date	**25.11.2024**
11	Report Issue Date	**29.11.2024**
12	Environmental Condition at the time of sampling	**27**^{0}C IS-11255(Part 01)
13	Stack Temperature	**35**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**6.10** m/sec
15	Gas flow rate	**24078.87** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1 %** IS-11255(Part 03)
17	Production rate	**210 TPH**
18	Unique Lab Report Number	**TC148922400000000231F**

Stack Details

1	Stack attached to	**Lime Stone Crusher**
2	Stack Diameter (mtr)	**1.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**11.4**	mg/Nm^3	IS 11255 (Part 01)	**50.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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VERIFIED BY: **(P.Harika)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**22.11.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Captive Power Plant**
6	Duration of Monitoring	-
7	Sample Condition	-
8	Lab Sample code	-
9	Analysis Start Date	-
10	Analysis Completion Date	-
11	Report Issue Date	-
12	Environmental Condition at the time of sampling	-
13	Stack Temperature	-
14	Velocity of Flue Gas	-
15	Mercury	-
16	Gas flow rate	-
17	Moisture	-
18	Production rate	-
19	Unique Lab Report Number	-

Stack Details

1	Stack attached to	**Captive Power Plant**
2	Stack Diameter (mtr)	**3.30**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**SHUT DOWN**	mg/Nm^3	IS 11255 (Part 01)	**50.0**
2	Oxides of Sulphur		mg/Nm^3	CCRL/TOP/06:2016	**600.0**
3	Oxides of Nitrogen		mg/Nm^3	CCRL/TOP/06:2016	**300.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**14.122024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Raw Mill**
6	Duration of Monitoring	**28 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5081**
9	Analysis Start Date	**19.12.2024**
10	Analysis Completion Date	**19.12.2024**
11	Report Issue Date	**30.12.2024**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**116**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**10.74** m/sec
15	Carbon Monoxide	**Nil** ppm CCRL/TOP/06:2016
16	Gas flow rate	**1211524.37** Nm^3/hr IS-11255(Part 03)
17	Moisture	**<1** %
18	Production rate	**423 TPH**
19	Unique Lab Report Number	**TC148922400000000264F**

Stack Details

1	Stack attached to	**Raw Mill**
2	Stack Diameter (mtr)	**7.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**22.3**	mg/Nm^3	IS 11255 (Part 01)	**30.0**
2	Sulphur dioxide (SO2)	**39.8**	mg/Nm^3	CCRL/TOP/06:2016	**100.0**
3	Oxides of Nitrogen (NOX)	**226.2**	mg/Nm^3	CCRL/TOP/06:2016	**800.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist. Bagalkot (Karnataka) India**
3	Date of Sampling	**14.12.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Coal Mill**
6	Duration of Monitoring	**37 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5057**
9	Analysis Start Date	**19.12.2024**
10	Analysis Completion Date	**19.12.2024**
11	Report Issue Date	**30.12.2024**
12	Environmental Condition at the time of sampling	**28**^{0}C IS-11255(Part 01)
13	Stack Temperature	**68**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.30** m/sec
15	Gas flow rate	**35582.27** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**23 TPH**
18	Unique Lab Report Number	**TC148922400000000265F**

Stack Details

1	Stack attached to	**Coal Mill**
2	Stack Diameter (mtr)	**1.40**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1.	Particulate Matter	**16.6**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**15.12.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cooler station**
6	Duration of Monitoring	**45 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5053**
9	Analysis Start Date	**19.12.2024**
10	Analysis Completion Date	**19.12.2024**
11	Report Issue Date	**30.12.2024**
12	Environmental Condition at the time of sampling	**27**^{0}C IS-11255(Part 01)
13	Stack Temperature	**88**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**6.20** m/sec
15	Gas flow rate	**214068.27** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**323 TPH**
18	Unique Lab Report Number	**TC1489224000000000266F**

Stack Details

1	Stack attached to	**Cooler station**
2	Stack Diameter (mtr)	**3.86**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**25.1**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**15.12.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -I**
6	Duration of Monitoring	**35 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5052**
9	Analysis Start Date	**19.12.2024**
10	Analysis Completion Date	**19.12.2024**
11	Report Issue Date	**30.12.2024**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**87**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**8.60** m/sec
15	Gas flow rate *	**39537.09** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**125 TPH**
18	Unique Lab Report Number	**TC1489224000000000267F**

Stack Details

1	Stack attached to	**Cement mill-I**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**24.7**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**15.12.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -II**
6	Duration of Monitoring	**39 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5056**
9	Analysis Start Date	**19.12.2024**
10	Analysis Completion Date	**19.12.2024**
11	Report Issue Date	**30.12.2024**
12	Environmental Condition at the time of sampling	27°C IS-11255(Part 01)
13	Stack Temperature	76°C IS-11255(Part 01)
14	Velocity of Flue Gas	**6.90** m/sec
15	Gas flow rate *	**32486.00** Nm^3/hr IS-11255(Part 03)
16	Moisture *	<1 % IS-11255(Part 03)
17	Production rate*	**130 TPH**
18	Unique Lab Report Number	**TC14892240000000268F**

Stack Details

1	Stack attached to	**Cement mill -II**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**26.4**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**14.12.2024**
4	Sample Type	**Stack Monitoring**
5	**Sampling Location**	**Cement mill -III**
6	Duration of Monitoring	**25 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5055**
9	Analysis Start Date	**19.12.2024**
10	Analysis Completion Date	**19.12.2024**
11	Report Issue Date	**30.12.2024**
12	Environmental Condition at the time of sampling	**28**^{0}C IS-11255(Part 01)
13	Stack Temperature	**90**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**11.21** m/sec
15	Gas flow rate	**365303.76** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**218** **TPH**
18	Unique Lab Report Number	**TC14892240000000269F**

Stack Details

1	Stack attached to	**Cement mill -III**
2	Stack Diameter (mtr)	**3.75**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**9.30**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**13.12.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Lime Stone Crusher Stack**
6	Duration of Monitoring	**46 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5060**
9	Analysis Start Date	**19.12.2024**
10	Analysis Completion Date	**19.12.2024**
11	Report Issue Date	**30.12.2024**
12	Environmental Condition at the time of sampling	27°C IS-11255(Part 01)
13	Stack Temperature	32°C IS-11255(Part 01)
14	Velocity of Flue Gas	**5.15** m/sec
15	Gas flow rate	**20538.46** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1 %** IS-11255(Part 03)
17	Production rate	**210 TPH**
18	Unique Lab Report Number	**TC148922400000000270F**

Stack Details

1	Stack attached to	**Lime Stone Crusher**
2	Stack Diameter (mtr)	**1.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**15.3**	mg/Nm^3	IS 11255 (Part 01)	**50.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**15.12.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Captive Power Plant**
6	Duration of Monitoring	-
7	Sample Condition	-
8	Lab Sample code	-
9	Analysis Start Date	-
10	Analysis Completion Date	-
11	Report Issue Date	-
12	Environmental Condition at the time of sampling	-
13	Stack Temperature	-
14	Velocity of Flue Gas	-
15	Mercury	-
16	Gas flow rate	-
17	Moisture	-
18	Production rate	-
19	Unique Lab Report Number	-

Stack Details

1	Stack attached to	**Captive Power Plant**
2	Stack Diameter (mtr)	**3.30**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**SHUT DOWN**	mg/Nm^3	IS 11255 (Part 01)	**50.0**
2	Oxides of Sulphur		mg/Nm^3	CCRL/TOP/06:2016	**600.0**
3	Oxides of Nitrogen		mg/Nm^3	CCRL/TOP/06:2016	**300.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist. Bagalkot (Karnataka) India**
3	Date of Sampling	**13.12.2024**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**DG 2&3**
6	Duration of Monitoring	**49 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5051**
9	Analysis Start Date	**19.12.2024**
10	Analysis Completion Date	**19.12.2024**
11	Report Issue Date	**21.12.2024**
12	Environmental Condition at the time of sampling	**28**^{0}C IS-11255(Part 01)
13	Stack Temperature	**162**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**6.89** m/sec
15	Gas flow rate	**3358.77** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Unique Lab Report Number	**TC148922400000000232F**

Stack Details

1	Stack attached to	**DG-2 &3**
2	Stack Diameter (mtr)	**0.5**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1.	Particulate Matter	**6.90**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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VERIFIED BY: **(P.Harika)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**07.01.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Raw Mill**
6	Duration of Monitoring	**28 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5067**
9	Analysis Start Date	**11.01.2025**
10	Analysis Completion Date	**11.01.2025**
11	Report Issue Date	**25.01.2025**
12	Environmental Condition at the time of sampling	**31**^{0}C IS-11255(Part 01)
13	Stack Temperature	**115**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**10.5** m/sec
15	Carbon Monoxide	**Nil** ppm CCRL/TOP/06:2016
16	Gas flow rate	**1199833 .68** Nm^3/hr IS-11255(Part 03)
17	Moisture	**<1** %
18	Production rate	**423 TPH**
19	Unique Lab Report Number	**TC14892250000000019F**

Stack Details

1	Stack attached to	**Raw Mill**
2	Stack Diameter (mtr)	**7.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**21.1**	mg/Nm^3	IS 11255 (Part 01)	**30.0**
2	Sulphur dioxide (SO2)	**42.2**	mg/Nm^3	CCRL/TOP/06:2016	**100.0**
3	Oxides of Nitrogen (NOX)	**201.2**	mg/Nm^3	CCRL/TOP/06:2016	**800.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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VERIFIED BY: **(P.Harika)**
Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist. Bagalkot (Karnataka) India**
3	Date of Sampling	**08.01.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Coal Mill**
6	Duration of Monitoring	**35 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5075**
9	Analysis Start Date	**11.01.2025**
10	Analysis Completion Date	**11.01.2025**
11	Report Issue Date	**25.01.2025**
12	Environmental Condition at the time of sampling	**28**^{0}C IS-11255(Part 01)
13	Stack Temperature	**67**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.40** m/sec
15	Gas flow rate	**36069.70** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**23 TPH**
18	Unique Lab Report Number	**TC14892250000000020F**

Stack Details

1	Stack attached to	**Coal Mill**
2	Stack Diameter (mtr)	**1.40**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1.	Particulate Matter	**28.6**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**08.01.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cooler station**
6	Duration of Monitoring	**46 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5069**
9	Analysis Start Date	**11.01.2025**
10	Analysis Completion Date	**11.01.2025**
11	Report Issue Date	**25.01.2025**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**86**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**6.00** m/sec
15	Gas flow rate	**21221559** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1 %** IS-11255(Part 03)
17	Production rate	**323 TPH**
18	Unique Lab Report Number	**TC14892250000000021F**

Stack Details

1	Stack attached to	**Cooler station**
2	Stack Diameter (mtr)	**3.86**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**22.2**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**07.01.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -I**
6	Duration of Monitoring	**32 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5074**
9	Analysis Start Date	**11.01.2025**
10	Analysis Completion Date	**11.01.2025**
11	Report Issue Date	**25.01.2025**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**90**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**8.87**m/sec
15	Gas flow rate *	**40778.37** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**125 TPH**
18	Unique Lab Report Number	**TC14892250000000022F**

Stack Details

1	Stack attached to	**Cement mill-I**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**23.4**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**07.01.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -II**
6	Duration of Monitoring	**34 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5070**
9	Analysis Start Date	**11.01.2025**
10	Analysis Completion Date	**11.01.2025**
11	Report Issue Date	**25.01.2025**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**79**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.90** m/sec
15	Gas flow rate *	**37194.11**Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**130 TPH**
18	Unique Lab Report Number	**TC14892250000000023F**

Stack Details

1	Stack attached to	**Cement mill -II**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**25.4**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**07.01.2025**
4	Sample Type	**Stack Monitoring**
5	**Sampling Location**	**Cement mill -III**
6	Duration of Monitoring	**39 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5073**
9	Analysis Start Date	**11.01.2025**
10	Analysis Completion Date	**11.01.2025**
11	Report Issue Date	**25.01.2025**
12	Environmental Condition at the time of sampling	**31**^{0}C IS-11255(Part 01)
13	Stack Temperature	**92**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**11.0** m/sec
15	Gas flow rate	**362831.90** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**218** **TPH**
18	Unique Lab Report Number	**TC14892250000000024F**

Stack Details

1	Stack attached to	**Cement mill -III**
2	Stack Diameter (mtr)	**3.75**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**12.9**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**07.01.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Lime Stone Crusher Stack**
6	Duration of Monitoring	**43 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-5072**
9	Analysis Start Date	**11.01.2025**
10	Analysis Completion Date	**11.01.2025**
11	Report Issue Date	**25.01.2025**
12	Environmental Condition at the time of sampling	**31**^{0}C IS-11255(Part 01)
13	Stack Temperature	**35**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**5.40** m/sec
15	Gas flow rate	**21535.47** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**210 TPH**
18	Unique Lab Report Number	**TC14892250000000025F**

Stack Details

1	Stack attached to	**Lime Stone Crusher**
2	Stack Diameter (mtr)	**1.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**21.0**	mg/Nm^3	IS 11255 (Part 01)	**50.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
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Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**07.01.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Captive Power Plant**
6	Duration of Monitoring	-
7	Sample Condition	-
8	Lab Sample code	-
9	Analysis Start Date	-
10	Analysis Completion Date	-
11	Report Issue Date	-
12	Environmental Condition at the time of sampling	-
13	Stack Temperature	-
14	Velocity of Flue Gas	-
15	Mercury	-
16	Gas flow rate	-
17	Moisture	-
18	Production rate	-
19	Unique Lab Report Number	-

Stack Details

1	Stack attached to	**Captive Power Plant**
2	Stack Diameter (mtr)	**3.30**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**SHUT DOWN**	mg/Nm^3	IS 11255 (Part 01)	**50.0**
2	Oxides of Sulphur		mg/Nm^3	CCRL/TOP/06:2016	**600.0**
3	Oxides of Nitrogen		mg/Nm^3	CCRL/TOP/06:2016	**300.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
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Analyst

VERIFIED BY:
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AUTHORISED SIGNATORY: (M. Shashikala)
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**23.02.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Raw Mill**
6	Duration of Monitoring	**28 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-09**
9	Analysis Start Date	**25.02.2025**
10	Analysis Completion Date	**26.02.2025**
11	Report Issue Date	**28.02.2025**
12	Environmental Condition at the time of sampling	**30**^{0}C IS-11255(Part 01)
13	Stack Temperature	**115**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**10.50** m/sec
15	Carbon Monoxide	**Nil** ppm CCRL/TOP/06:2016
16	Gas flow rate	**1184451.20** Nm^3/hr IS-11255(Part 03)
17	Moisture	**<1** %
18	Production rate	**423 TPH**
19	Unique Lab Report Number	**TC148922500000000126F**

Stack Details

1	Stack attached to	**Raw Mill**
2	Stack Diameter (mtr)	**7.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**25.5**	mg/Nm^3	IS 11255 (Part 01)	**30.0**
2	Sulphur dioxide (SO2)	**52.3**	mg/Nm^3	CCRL/TOP/06:2016	**100.0**
3	Oxides of Nitrogen (NOX)	**321.2**	mg/Nm^3	CCRL/TOP/06:2016	**800.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist. Bagalkot (Karnataka) India**
3	Date of Sampling	**22.02.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Coal Mill**
6	Duration of Monitoring	**27 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-02**
9	Analysis Start Date	**25.02.2025**
10	Analysis Completion Date	**26.02.2025**
11	Report Issue Date	**28.02.2025**
12	Environmental Condition at the time of sampling	**35**^{0}C IS-11255(Part 01)
13	Stack Temperature	**70**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.70** m/sec
15	Gas flow rate	**37958.49** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**23 TPH**
18	Unique Lab Report Number	**TC14892250000000127F**

Stack Details

1	Stack attached to	**Coal Mill**
2	Stack Diameter (mtr)	**1.40**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1.	Particulate Matter	**25.2**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**21.02.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cooler station**
6	Duration of Monitoring	**46 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-05**
9	Analysis Start Date	**25.02.2025**
10	Analysis Completion Date	**26.02.2025**
11	Report Issue Date	**28.02.2025**
12	Environmental Condition at the time of sampling	**35**^{0}C IS-11255(Part 01)
13	Stack Temperature	**97**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**6.10** m/sec
15	Gas flow rate	**213184.04** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**323 TPH**
18	Unique Lab Report Number	**TC14892250000000128F**

Stack Details

1	Stack attached to	**Cooler station**
2	Stack Diameter (mtr)	**3.86**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**23.8**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**22.02.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -I**
6	Duration of Monitoring	**33 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-04**
9	Analysis Start Date	**25.02.2025**
10	Analysis Completion Date	**26.02.2025**
11	Report Issue Date	**28.02.2025**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**89**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**8.40** m/sec
15	Gas flow rate *	**46527.26** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**125 TPH**
18	Unique Lab Report Number	**TC148922500000000129F**

Stack Details

1	Stack attached to	**Cement mill-I**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**21.1**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**22.02.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -II**
6	Duration of Monitoring	**33 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-03**
9	Analysis Start Date	**25.02.2025**
10	Analysis Completion Date	**26.02.2025**
11	Report Issue Date	**28.02.2025**
12	Environmental Condition at the time of sampling	**29**^{0}C IS-11255(Part 01)
13	Stack Temperature	**88**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**8.60** m/sec
15	Gas flow rate *	**39537.09** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1 %** IS-11255(Part 03)
17	Production rate*	**130 TPH**
18	Unique Lab Report Number	**TC148922500000000130F**

Stack Details

1	Stack attached to	**Cement mill -II**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**21.9**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**22.02.2025**
4	Sample Type	**Stack Monitoring**
5	**Sampling Location**	**Cement mill -III**
6	Duration of Monitoring	**27 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-06**
9	Analysis Start Date	**25.02.2025**
10	Analysis Completion Date	**26.02.2025**
11	Report Issue Date	**28.02.2025**
12	Environmental Condition at the time of sampling	**26**^{0}C IS-11255(Part 01)
13	Stack Temperature	**91**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**10.30** m/sec
15	Gas flow rate	**327462.74** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**218 TPH**
18	Unique Lab Report Number	**TC148922500000000131F**

Stack Details

1	Stack attached to	**Cement mill -III**
2	Stack Diameter (mtr)	**3.75**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**15.6**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**23.02.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Lime Stone Crusher Stack**
6	Duration of Monitoring	**47 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-07**
9	Analysis Start Date	**25.02.2025**
10	Analysis Completion Date	**26.02.2025**
11	Report Issue Date	**28.02.2025**
12	Environmental Condition at the time of sampling	**30**^{0}C IS-11255(Part 01)
13	Stack Temperature	**35**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**5.03** m/sec
15	Gas flow rate	**20059.89** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1 %** IS-11255(Part 03)
17	Production rate	**210 TPH**
18	Unique Lab Report Number	**TC148922500000000132F**

Stack Details

1	Stack attached to	**Lime Stone Crusher**
2	Stack Diameter (mtr)	**1.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**18.9**	mg/Nm^3	IS 11255 (Part 01)	**50.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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VERIFIED BY: **(P.Harika)**
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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**22.02.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Captive Power Plant**
6	Duration of Monitoring	-
7	Sample Condition	-
8	Lab Sample code	-
9	Analysis Start Date	-
10	Analysis Completion Date	-
11	Report Issue Date	-
12	Environmental Condition at the time of sampling	-
13	Stack Temperature	-
14	Velocity of Flue Gas	-
15	Mercury	-
16	Gas flow rate	-
17	Moisture	-
18	Production rate	-
19	Unique Lab Report Number	-

Stack Details

1	Stack attached to	**Captive Power Plant**
2	Stack Diameter (mtr)	**3.30**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**SHUT DOWN**	mg/Nm^3	IS 11255 (Part 01)	**50.0**
2	Oxides of Sulphur		mg/Nm^3	CCRL/TOP/06:2016	**600.0**
3	Oxides of Nitrogen		mg/Nm^3	CCRL/TOP/06:2016	**300.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
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VERIFIED BY: **(P.Harika)**
Technical Manager

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Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**23.03.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Raw Mill**
6	Duration of Monitoring	**28 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-12**
9	Analysis Start Date	**25.03.2025**
10	Analysis Completion Date	**26.03.2025**
11	Report Issue Date	**31.03.2025**
12	Environmental Condition at the time of sampling	**33**^{0}C IS-11255(Part 01)
13	Stack Temperature	**117**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**10.50** m/sec
15	Carbon Monoxide	**Nil** ppm CCRL/TOP/06:2016
16	Gas flow rate	**1199833.68** Nm^3/hr IS-11255(Part 03)
17	Moisture	**<1** %
18	Production rate	**423 TPH**
19	Unique Lab Report Number	**TC14892250000000247F**

Stack Details

1	Stack attached to	**Raw Mill**
2	Stack Diameter (mtr)	**7.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**24.6**	mg/Nm^3	IS 11255 (Part 01)	**30.0**
2	Sulphur dioxide (SO2)	**Nil**	mg/Nm^3	CCRL/TOP/06:2016	**100.0**
3	Oxides of Nitrogen (NOX)	**615.0**	mg/Nm^3	CCRL/TOP/06:2016	**800.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist. Bagalkot (Karnataka) India**
3	Date of Sampling	**23.03.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Coal Mill**
6	Duration of Monitoring	**37 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-15**
9	Analysis Start Date	**25.03.2025**
10	Analysis Completion Date	**26.03.2025**
11	Report Issue Date	**31.03.2025**
12	Environmental Condition at the time of sampling	**34**^{0}C IS-11255(Part 01)
13	Stack Temperature	**69**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.10** m/sec
15	Gas flow rate	**35000.68** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**23 TPH**
18	Unique Lab Report Number	**TC148922500000000248F**

Stack Details

1	Stack attached to	**Coal Mill**
2	Stack Diameter (mtr)	**1.40**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1.	Particulate Matter	**24.7**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**22.03.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cooler station**
6	Duration of Monitoring	**45 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-11**
9	Analysis Start Date	**25.03.2025**
10	Analysis Completion Date	**26.03.2025**
11	Report Issue Date	**31.03.2025**
12	Environmental Condition at the time of sampling	34^{0}C IS-11255(Part 01)
13	Stack Temperature	89^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**6.11** m/sec
15	Gas flow rate	**216106.21** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**323 TPH**
18	Unique Lab Report Number	**TC148922500000000249F**

Stack Details

1	Stack attached to	**Cooler station**
2	Stack Diameter (mtr)	**3.86**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**20.7**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**21.03.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -I**
6	Duration of Monitoring	**28 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-10**
9	Analysis Start Date	**25.03.2025**
10	Analysis Completion Date	**26.03.2025**
11	Report Issue Date	**31.03.2025**
12	Environmental Condition at the time of sampling	**34**^{0}C IS-11255(Part 01)
13	Stack Temperature	**88**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**9.88 m/sec**
15	Gas flow rate *	**45968.93** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**125 TPH**
18	Unique Lab Report Number	**TC1489225000000000250F**

Stack Details

1	Stack attached to	**Cement mill-I**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**23.3**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**21.03.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Cement mill -II**
6	Duration of Monitoring	**38 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-01**
9	Analysis Start Date	**25.03.2025**
10	Analysis Completion Date	**26.03.2025**
11	Report Issue Date	**31.03.2025**
12	Environmental Condition at the time of sampling	34^{0}C IS-11255(Part 01)
13	Stack Temperature	77^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**7.09** m/sec
15	Gas flow rate *	**34165.96** Nm^3/hr IS-11255(Part 03)
16	Moisture *	**<1** % IS-11255(Part 03)
17	Production rate*	**130 TPH**
18	Unique Lab Report Number	**TC148922500000000251F**

Stack Details

1	Stack attached to	**Cement mill -II**
2	Stack Diameter (mtr)	**1.4**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**19.9**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**22.03.2025**
4	Sample Type	**Stack Monitoring**
5	**Sampling Location**	**Cement mill -III**
6	Duration of Monitoring	**28 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-08**
9	Analysis Start Date	**25.03.2025**
10	Analysis Completion Date	**26.03.2025**
11	Report Issue Date	**31.03.2025**
12	Environmental Condition at the time of sampling	**33**^{0}C IS-11255(Part 01)
13	Stack Temperature	**91**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**10.0** m/sec
15	Gas flow rate	**329847.18** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**218** **TPH**
18	Unique Lab Report Number	**TC148922500000000252F**

Stack Details

1	Stack attached to	**Cement mill -III**
2	Stack Diameter (mtr)	**3.75**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**18.1**	mg/Nm^3	IS 11255 (Part 01)	**30.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**21.03.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Lime Stone Crusher Stack**
6	Duration of Monitoring	**45 minutes**
7	Sample Condition	**Satisfactory**
8	Lab Sample code	**ST-13**
9	Analysis Start Date	**25.03.2025**
10	Analysis Completion Date	**26.03.2025**
11	Report Issue Date	**01.04.2025**
12	Environmental Condition at the time of sampling	**34**^{0}C IS-11255(Part 01)
13	Stack Temperature	**36**^{0}C IS-11255(Part 01)
14	Velocity of Flue Gas	**5.20** m/sec
15	Gas flow rate	**20949.47** Nm^3/hr IS-11255(Part 03)
16	Moisture	**<1** % IS-11255(Part 03)
17	Production rate	**210 TPH**
18	Unique Lab Report Number	**TC148922500000000253F**

Stack Details

1	Stack attached to	**Lime Stone Crusher**
2	Stack Diameter (mtr)	**1.20**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**33.5**	mg/Nm^3	IS 11255 (Part 01)	**50.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of Stack Emission

1	Name of the Industry	**M/s. JK Cement Works, Muddapur,**
2	Address	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3	Date of Sampling	**23.03.2025**
4	Sample Type	**Stack Monitoring**
5	Sampling Location	**Captive Power Plant**
6	Duration of Monitoring	-
7	Sample Condition	-
8	Lab Sample code	-
9	Analysis Start Date	-
10	Analysis Completion Date	-
11	Report Issue Date	-
12	Environmental Condition at the time of sampling	-
13	Stack Temperature	-
14	Velocity of Flue Gas	-
15	Mercury	-
16	Gas flow rate	-
17	Moisture	-
18	Production rate	-
19	Unique Lab Report Number	-

Stack Details

1	Stack attached to	**Captive Power Plant**
2	Stack Diameter (mtr)	**3.30**

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	**SHUT DOWN**	mg/Nm^3	IS 11255 (Part 01)	**50.0**
2	Oxides of Sulphur		mg/Nm^3	CCRL/TOP/06:2016	**600.0**
3	Oxides of Nitrogen		mg/Nm^3	CCRL/TOP/06:2016	**300.0**

End of Report

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

COSMO CONSCIOUS RESEARCH LABORATORY
Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892
And Certified by ISO (45001:2018)

AMBIENT NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **October 2024**

I. Noise Locations:

Sl. No.	Sampling Location	Day Leq dB	Night Leq dB
1.	Boundary side	68.5	64.8
2.	Administrative Building	65.2	63.8
3.	Lime Stone gate	71.4	68.5
4.	Despatch gate	68.6	65.2
5.	Near QC Lab.	60.6	58.4
6.	Near Canteen	65.2	62.5
7.	Plant main gate	60.5	58.2
8.	General Store	62.2	60.7

MOEF ambient Noise standards in dB(A) Leq (No.41, Dt.11.01.2010)	Residential Area limits dB(A) Leq		Industrial Area limits dB(A) Leq	
	Day time	Night time	Day time	Night time
	55	45	75	70
Method Adopted	Integrated Sound Level Meter			

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the laboratory

AMBIENT NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **November 2024**

I. Noise Locations:

Sl. No.	Sampling Location	Day Leq dB	Night Leq dB
1.	Boundary side	68.2	65.4
2.	Administrative Building	64.5	62.2
3.	Lime Stone gate	67.3	64.3
4.	Despatch gate	66.5	63.8
5.	Near QC Lab.	62.8	60.3
6.	Near Canteen	60.5	58.5
7.	Plant main gate	62.3	58.2
8.	General Store	60.3	56.4

MOEF ambient Noise standards in dB(A) Leq (No.41, Dt.11.01.2010)	Residential Area limits dB(A) Leq		Industrial Area limits dB(A) Leq	
	Day time	Night time	Day time	Night time
	55	45	75	70
Method Adopted	Integrated Sound Level Meter			

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY: **(G.Dhavaleshwar)**
Analyst

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the laboratory

COSMO CONSCIOUS RESEARCH LABORATORY
Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892
And Certified by ISO (45001:2018)

AMBIENT NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **December 2024**

I. Noise Locations:

Sl. No.	Sampling Location	Day Leq dB	Night Leq dB
1.	Boundary side	66.5	63.6
2.	Administrative Building	62.8	60.7
3.	Lime Stone gate	65.4	63.5
4.	Despatch gate	63.2	61.6
5.	Near QC Lab.	64.5	62.8
6.	Near Canteen	62.8	60.4
7.	Plant main gate	60.6	57.6
8.	General Store	62.5	58.8

MOEF ambient Noise standards in dB(A) Leq (No.41, Dt.11.01.2010)	Residential Area limits dB(A) Leq		Industrial Area limits dB(A) Leq	
	Day time	Night time	Day time	Night time
	55	45	75	70
Method Adopted	Integrated Sound Level Meter			

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: (M. Shashikala)
Head of the laboratory

AMBIENT NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **January 2025**

I. Noise Locations:

Sl. No.	Sampling Location	Day Leq dB	Night Leq dB
1.	Boundary side	65.6	62.5
2.	Administrative Building	61.2	58.6
3.	Lime Stone gate	67.8	65.3
4.	Despatch gate	62.5	60.7
5.	Near QC Lab.	66.8	63.5
6.	Near Canteen	60.7	58.5
7.	Plant main gate	65.5	63.4
8.	General Store	64.6	62.7

MOEF ambient Noise standards in dB(A) Leq (No.41, Dt.11.01.2010)	Residential Area limits dB(A) Leq		Industrial Area limits dB(A) Leq	
	Day time	Night time	Day time	Night time
	55	45	75	70
Method Adopted	Integrated Sound Level Meter			

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the laboratory

AMBIENT NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **February 2025**

I. Noise Locations:

Sl. No.	Sampling Location	Day Leq dB	Night Leq dB
1.	Boundary side	67.5	65.3
2.	Administrative Building	64.8	62.7
3.	Lime Stone gate	70.5	68.5
4.	Despatch gate	68.7	65.6
5.	Near QC Lab.	67.5	64.6
6.	Near Canteen	62.8	60.7
7.	Plant main gate	68.6	66.2
8.	General Store	65.9	63.8

MOEF ambient Noise standards in dB(A) Leq (No.41, Dt.11.01.2010)	Residential Area limits dB(A) Leq		Industrial Area limits dB(A) Leq	
	Day time	Night time	Day time	Night time
	55	45	75	70
Method Adopted	Integrated Sound Level Meter			

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the laboratory

AMBIENT NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **March 2025**

I. Noise Locations:

Sl. No.	Sampling Location	Day Leq dB	Night Leq dB
1.	Boundary side	68.5	62.8
2.	Administrative Building	62.7	60.4
3.	Lime Stone gate	72.5	67.5
4.	Despatch gate	65.5	63.2
5.	Near QC Lab.	63.8	60.7
6.	Near Canteen	64.7	60.1
7.	Plant main gate	67.9	62.6
8.	General Store	62.6	59.5

MOEF ambient Noise standards in dB(A) Leq (No.41, Dt.11.01.2010)	Residential Area limits dB(A) Leq		Industrial Area limits dB(A) Leq	
	Day time	Night time	Day time	Night time
	55	45	75	70
Method Adopted	Integrated Sound Level Meter			

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the laboratory

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Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892
And Certified by ISO (45001:2018)

WORK ZONE NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **October 2024**

II. Noise Locations :

Sl. No.	Sampling Location	Day Leq dB
1.	Lime Stone Crusher	78.6
2.	Kiln/ Cooler	80.5
3.	Kiln Platform	79.6
4.	Power Plant	50.6
5.	Coal Yard	64.3
6.	Slag yard	60.7
7.	Gypsum yard	62.8
8.	Raw mill proporting hopper	70.8
9.	coal mill	72.7
10.	Near silo clinker loading point	74.3
11.	CM-1 weigh feeder	70.4
12.	CM-2 weigh feeder	72.2
13.	Cement silo Packer-1	80.4
14.	Cement silo Packer-2	72.6
15.	Cement silo Packer-3	76.5
16.	Cement silo Packer-4	78.5
17.	Truck Loading point- 1	70
18.	Truck Loading point- 2	72.4
19.	Truck Loading point- 3	75.6
20.	Truck Loading point- 4	73.7

Sl. No.	Sampling Location	dB Leq
21.	Slag mill weigh feeder	68.5

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the laboratory

WORK ZONE NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **November 2024**

II. Noise Locations :

Sl. No.	Sampling Location	dB Leq
1.	Lime Stone Crusher	82.5
2.	Kiln/ Cooler	80.6
3.	Kiln Platform	78.5
4.	Power Plant	50.2
5.	Coal Yard	60.6
6.	Slag yard	62.5
7.	Gypsum yard	63.7
8.	Raw mill proporting hopper	68.5
9.	coal mill	72.8
10.	Near silo clinker loading point	68.5
11.	CM-1 weigh feeder	70.2
12.	CM-2 weigh feeder	73.7
13.	Cement silo Packer-1	80.6
14.	Cement silo Packer-2	72.4
15.	Cement silo Packer-3	73.6
16.	Cement silo Packer-4	80.5
17.	Truck Loading point- 1	73
18.	Truck Loading point- 2	68
19.	Truck Loading point- 3	72.8
20.	Truck Loading point- 4	74.5

Sl. No.	Sampling Location	dB Leq
21.	Slag mill weigh feeder	66.5

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: (M. Shashikala)
Head of the laboratory

WORK ZONE NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **December 2024**

II. Noise Locations :

Sl. No.	Sampling Location	dB Leq
1.	Lime Stone Crusher	84
2.	Kiln/ Cooler	82
3.	Kiln Platform	80
4.	Power Plant	52
5.	Coal Yard	62
6.	Slag yard	64
7.	Gypsum yard	61
8.	Raw mill proporting hopper	70
9.	coal mill	73
10.	Near silo clinker loading point	70
11.	CM-1 weigh feeder	72
12.	CM-2 weigh feeder	75
13.	Cement silo Packer-1	82
14.	Cement silo Packer-2	76
15.	Cement silo Packer-3	78
16.	Cement silo Packer-4	81
17.	Truck Loading point- 1	75
18.	Truck Loading point- 2	70
19.	Truck Loading point- 3	74
20.	Truck Loading point- 4	75

Sl. No.	Sampling Location	dB Leq
21.	Slag mill weigh feeder	68

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the laboratory

WORK ZONE NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **January 2025**

II. Noise Locations :

Sl. No.	Sampling Location	dB Leq
1.	Lime Stone Crusher	82
2.	Kiln/ Cooler	80
3.	Kiln Platform	78
4.	Power Plant	56
5.	Coal Yard	64
6.	Slag yard	66
7.	Gypsum yard	62
8.	Raw mill proporting hopper	74
9.	coal mill	72
10.	Near silo clinker loading point	73
11.	CM-1 weigh feeder	75
12.	CM-2 weigh feeder	78
13.	Cement silo Packer-1	84
14.	Cement silo Packer-2	75
15.	Cement silo Packer-3	80
16.	Cement silo Packer-4	82
17.	Truck Loading point- 1	76
18.	Truck Loading point- 2	72
19.	Truck Loading point- 3	76
20.	Truck Loading point- 4	78

Sl. No.	Sampling Location	dB Leq
21.	Slag mill weigh feeder	70

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:

(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the laboratory

WORK ZONE NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **February 2025**

II. Noise Locations :

Sl. No.	Sampling Location	dB Leq
1.	Lime Stone Crusher	80
2..	Kiln/ Cooler	82
3.	Kiln Platform	76
4.	Power Plant	58
5.	Coal Yard	66
6.	Slag yard	68
7.	Gypsum yard	64
8.	Raw mill proporting hopper	72
9.	coal mill	70
10.	Near silo clinker loading point	71
11.	CM-1 weigh feeder	74
12.	CM-2 weigh feeder	76
13.	Cement silo Packer-1	82
14.	Cement silo Packer-2	73
15.	Cement silo Packer-3	78
16.	Cement silo Packer-4	80
17.	Truck Loading point- 1	78
18.	Truck Loading point- 2	73
19.	Truck Loading point- 3	75
20.	Truck Loading point- 4	77

Sl. No.	Sampling Location	dB Leq
21.	Slag mill weigh feeder	71

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: (M. Shashikala)
Head of the laboratory

WORK ZONE NOISE LEVEL MONITORING DATA

1. Name of the Client : **M/s. JK Cement Works, Muddapur,**
2. Address : **(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3. Sample Collected By : **Cosmo Conscious Research Laboratory**
4. Particulars of Sample Collected : **Noise Monitoring**
5. Sample Condition : **Satisfactory**
6. Month of Monitoring : **March 2025**

II. Noise Locations :

Sl. No.	Sampling Location	dB Leq
1.	Lime Stone Crusher	82
2.	Kiln/ Cooler	80
3.	Kiln Platform	74
4.	Power Plant	60
5.	Coal Yard	64
6.	Slag yard	66
7.	Gypsum yard	68
8.	Raw mill proporting hopper	74
9.	coal mill	72
10.	Near silo clinker loading point	73
11.	CM-1 weigh feeder	78
12.	CM-2 weigh feeder	76
13.	Cement silo Packer-1	80
14.	Cement silo Packer-2	74
15.	Cement silo Packer-3	76
16.	Cement silo Packer-4	73
17.	Truck Loading point- 1	77
18.	Truck Loading point- 2	75
19.	Truck Loading point- 3	78
20.	Truck Loading point- 4	76

Sl. No.	Sampling Location	dB Leq
21.	Slag mill weigh feeder	73

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:
(G.Dhavaleshwar)
Analyst

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the laboratory

COSMO CONSCIOUS RESEARCH LABORATORY
Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017)
vide certificate No : TC-14892 and Certified by ISO (45001:2018)

FUGITIVE EMISSION AIR QUALITY MONITORING DATA

1.	Name of the Industry	:	**M/s. JK Cement Works, Muddapur,**
2.	Address	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample Collected By	:	**Cosmo Conscious Research Laboratory**
4.	Particulars of Sample Collected	:	**Fugitive Emission Air Quality Monitoring**
5.	Sample Condition	:	**Satisfactory**
6.	Analysis Start Date	:	**19.12.2024**
7.	Analysis Completion Date	:	**20.12.2024**
8.	Report Issue Date	:	**30.12.2024**
9.	Month of Monitoring	:	**December 2024**
10.	Environmental condition at the time of sampling	:	**29.2°C**
11.	Method adopted (Sampling & Analysis)	:	**IS 5182 (Part 4) :2006**

Sl. No.	Date of Sample Collection	Name of the Station	Lab Sample Code	SPM (mg/m^3)	IBM Standard (mg/m^3)
Fugitive Locations for Cement Plant					
1.	13.12.2024	Lime Stone Crushing Site	523008	**1.01**	5.0
2.	13.12.2024	Fly ash Yard	523015	**1.08**	5.0
3.	14.12.2024	Gypsum Yard	523007	**0.94**	5.0
4.	14.12.2024	Slag Yard	523005	**0.98**	5.0
5.	14.12.2024	Cement Mill	523009	**0.93**	5.0
6.	15.12.2024	Lime Stone unloading hopper	523017	**0.89**	5.0
7.	14.12.2024	Coal Yard	523013	**0.84**	5.0
8.	15.12.2024	Packing Plant	523010	**0.86**	5.0

END OF REPORT

Note: 1. SPM – Suspended Particulate Matter.
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P.Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M. Shashikala)
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

COSMO CONSCIOUS RESEARCH LABORATORY
Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892
And Certified by ISO (45001:2018)

FUGITIVE EMISSION AIR QUALITY MONITORING DATA

1.	Name of the Industry	:	M/s. JK Cement Works, Muddapur,
2.	Address	:	(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India
3.	Sample Collected By	:	Cosmo Conscious Research Laboratory
4.	Particulars of Sample Collected	:	Fugitive Emission Air Quality Monitoring
5.	Sample Condition	:	Satisfactory
6.	Analysis Start Date	:	25.03.2025
7.	Analysis Completion Date	:	26.03.2025
8.	Report Issue Date	:	31.03.2025
9.	Month of Monitoring	:	March 2025
10.	Environmental condition at the time of sampling	:	33.2°C
11.	Method adopted (Sampling & Analysis)	:	IS 5182 (Part 4) :2006

Sl. No.	Date of Sample Collection	Name of the Station	Lab Sample Code	SPM (mg/m³)	IBM Standard (mg/m³)
Fugitive Locations for Cement Plant					
1.	20.03.2025	Lime Stone Crushing Site	514492	0.97	5.0
2.	20.03.2025	Fly ash Yard	514488	1.04	5.0
3.	21.03.2025	Gypsum Yard	514493	0.95	5.0
4.	21.03.2025	Slag Yard	514484	0.85	5.0
5.	21.03.2025	Cement Mill	514482	1.05	5.0
6.	21.03.2025	Lime Stone unloading hopper	514487	0.91	5.0
7.	22.03.2025	Coal Yard	514481	0.86	5.0
8.	22.03.2025	Packing Plant	514491	0.93	5.0

END OF REPORT

Note: 1. SPM – Suspended Particulate Matter.
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P.Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M. Shashikala)
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COSMO CONSCIOUS RESEARCH LABORATORY
Environmental laboratory, Recognized by MoEF & CC, and Certified by ISO (45001:2018)

Analysis Report of STP Treated Sewage Water

1.	Name of the Industry	:	**M/s. JK Cement Works, Muddapur,**
2.	Address	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Industry Premises**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW2**
7.	Lab Sample Code	:	**CCRL W 9838**
8.	Date of sample collection	:	**30.10.2024**
9.	Date of sample Received	:	**31.10.2024**
10.	Date of sample Analyzed	:	**31.10.2024 to 04.11.2024**
11.	Report Issue Date	:	**04.11.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**
13.	Environmental condition at the time of sampling	:	**29.2°C**

Sl. No	Parameters	Protocol	Unit of Measurement	Results Oct.'-24	As per GSR 1265 E
PHYSICAL					
1.	pH	IS:3025 (part 11)-1983, RA-2022, Electrometric method	-	**7.29**	6.50-9.0
2.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017 Gravimetric method	mg/L	**3770**	-
3.	Total Suspended Solids	IS:3025 (part 17)-1984, , RA-2021, Gravimetric Method	mg/L	**10**	<50
CHEMICAL					
4.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, RA-2019, Three days BOD at 27°C	mg/L	**5.80**	20
5.	Chemical Oxygen Demand as O_2	APHA 23rd Edition 5220-B Closed reflux method	mg/L	**24**	30
6.	Oil & Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-

End of Report

Note: **1. RA:** Reaffirmed. **BDL-** Below detectable limit (Oil & Grease <4.0).
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY: **(G.Bhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of STP Treated Sewage Water

1.	Name of the Industry	:	**M/s. JK Cement Works, Muddapur,**
2.	Address	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Guest House**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW3**
7.	Lab Sample Code	:	**CCRL W 9839**
8.	Date of sample collection	:	**30.10.2024**
9.	Date of sample Received	:	**31.10.2024**
10.	Date of sample Analyzed	:	**31.10.2024 to 04.11.2024**
11.	Report Issue Date	:	**04.11.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**
13.	Environmental condition at the time of sampling	:	**29.2°C**

Sl. No	Parameters	Protocol	Unit of Measurement	Results Sept.'-24	As per GSR 1265 E
PHYSICAL					
1.	pH	IS:3025 (part 11)-1983, RA-2022, Electrometric method	-	7.44	6.50-9.0
2.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017 Gravimetric method	mg/L	737	-
3.	Total Suspended Solids	IS:3025 (part 17)-1984, , RA-2021, Gravimetric Method	mg/L	12	<50
CHEMICAL					
4.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, RA-2019, Three days BOD at 27°C	mg/L	6.20	20
5.	Chemical Oxygen Demand as O_2	APHA 23rd Edition 5220-B Closed reflux method	mg/L	24	30
6.	Oil & Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	BDL	-

End of Report

Note: **1. RA:** Reaffirmed. **BDL-** Below detectable limit (Oil & Grease <4.0).
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

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Analysis Report of STP Treated Sewage Water

1.	Name of the Industry	:	**M/s. JK Cement Works, Muddapur,**
2.	Address	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Industry Premises**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW2**
7.	Lab Sample Code	:	**CCRL W 9873**
8.	Date of sample collection	:	**22.11.2024**
9.	Date of sample Received	:	**22.11.2024**
10.	Date of sample Analyzed	:	**23.11.2024 to 28.11.2024**
11.	Report Issue Date	:	**29.11.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**
13.	Environmental condition at the time of sampling	:	**29.4°C**
14.	Unique Lab Report Number	:	**TC1489224000000000219F**

Sl. No	Parameters	Protocol	Unit of Measurement	Results Nov.'-24	As per GSR 1265 E
PHYSICAL					
1.	pH	IS:3025 (part 11)-1983, RA-2022, Electrometric method	-	**7.96**	6.50-9.0
2.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017 Gravimetric method	mg/L	**494**	-
3.	Total Suspended Solids	IS:3025 (part 17)-1984, , RA-2021, Gravimetric Method	mg/L	**12**	<50
CHEMICAL					
4.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, RA-2019, Three days BOD at 27°C	mg/L	**2.80**	20
5.	Chemical Oxygen Demand as O_2	APHA 23rd Edition 5220-B Closed reflux method	mg/L	**24**	30
6.	Oil & Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-

End of Report

Note: **1. RA:** Reaffirmed. **BDL-** Below detectable limit (Oil & Grease <4.0).
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of STP Treated Sewage Water

1.	Name of the Project	:	M/s. JK Cement Works, Muddapur, (Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India
2.	Name of the Client	:	
3.	Sample collected by	:	Cosmo Conscious Research Laboratory
4.	Name of the Location	:	Near Industry Premises
5.	Particulars of sample collected	:	STP Treated Sewage Water
6.	Field Sample code	:	JKSW2
7.	Lab Sample Code	:	CCRL W 9873
8.	Date of sample collection	:	22.11.2024
9.	Date of sample Received	:	22.11.2024
10.	Date of sample Analyzed	:	23.11.2024 to 28.11.2024
11.	Report Issue Date	:	29.11.2024
12.	Method of Sampling	:	IS:17614 (Part-I) 2021

Sl. No.	Parameters	Protocol	Unit of Measure ment	Results Nov.'24	Standard General Standards for Inland Surface water Schedule-VI (EPA-'86)
MICROBIOLOGICAL					
1.	Fecal Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	Absent	Shall not be detectable in any 100 ml sample

END OF REPORT

Note: 1. **BDL:** Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**

2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P. Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M.Shashikala)
Head of the Laboratory

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Analysis Report of STP Treated Sewage Water

1.	Name of the Industry	:	**M/s. JK Cement Works, Muddapur,**
2.	Address	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Guest House**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW4**
7.	Lab Sample Code	:	**CCRL W 9875**
8.	Date of sample collection	:	**22.11.2024**
9.	Date of sample Received	:	**22.11.2024**
10.	Date of sample Analyzed	:	**23.11.2024 to 28.11.2024**
11.	Report Issue Date	:	**29.11.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**
13.	Environmental condition at the time of sampling	:	**29.4°C**
14.	Unique Lab Report Number	:	**TC148922400000000221F**

Sl. No	Parameters	Protocol	Unit of Measurement	Results Nov.'-24	As per GSR 1265 E
PHYSICAL					
1.	pH	IS:3025 (part 11)-1983, RA-2022, Electrometric method	-	**7.25**	6.50-9.0
2.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017 Gravimetric method	mg/L	**523**	-
3.	Total Suspended Solids	IS:3025 (part 17)-1984, , RA-2021, Gravimetric Method	mg/L	**6**	<50
CHEMICAL					
4.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, RA-2019, Three days BOD at 27°C	mg/L	**3.20**	20
5.	Chemical Oxygen Demand as O_2	APHA 23rd Edition 5220-B Closed reflux method	mg/L	**16**	30
6.	Oil & Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-

End of Report

Note: **1. RA:** Reaffirmed. **BDL-** Below detectable limit (Oil & Grease <4.0).
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of STP Treated Sewage Water

1.	Name of the Project	:	M/s. JK Cement Works, Muddapur,
2.	Name of the Client	:	(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India
3.	Sample collected by	:	Cosmo Conscious Research Laboratory
4.	Name of the Location	:	Near Guest House
5.	Particulars of sample collected	:	STP Treated Sewage Water
6.	Field Sample code	:	JKSW4
7.	Lab Sample Code	:	CCRL W 9875
8.	Date of sample collection	:	22.11.2024
9.	Date of sample Received	:	22.11.2024
10.	Date of sample Analyzed	:	23.11.2024 to 28.11.2024
11.	Report Issue Date	:	29.11.2024
12.	Method of Sampling	:	IS:17614 (Part-I) 2021

Sl. No.	Parameters	Protocol	Unit of Measure ment	Results	Standard
				Nov.'24	General Standards for Inland Surface water Schedule-VI (EPA-'86)
MICROBIOLOGICAL					
1.	Fecal Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	Absent	Shall not be detectable in any 100 ml sample

END OF REPORT

Note: 1. **BDL:** Below detectable limit . (Mercury <0.001) **RA: Reaffirmed.**

2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY: (G.Dhavaleshwar) Analyst

VERIFIED BY: (P. Harika) Technical Manager

AUTHORISED SIGNATORY: (M. Shashikala) Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

Analysis Report of STP Treated Sewage Water

1.	Name of the Industry	:	**M/s. JK Cement Works, Muddapur,**
2.	Address	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Guest House**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW4**
7.	Lab Sample Code	:	**CCRL W 9901**
8.	Date of sample collection	:	**17.12.2024**
9.	Date of sample Received	:	**17.12.2024**
10.	Date of sample Analyzed	:	**17.12.2024 to 26.12.2024**
11.	Report Issue Date	:	**30.12.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**
13.	Environmental condition at the time of sampling	:	**29.2°C**
14.	Unique Lab Report Number	:	**TC148922400000000251F**

Sl. No	Parameters	Protocol	Unit of Measurement	Results Dec.'-24	As per GSR 1265 E
PHYSICAL					
1.	pH	IS:3025 (part 11)-1983, RA-2022, Electrometric method	-	**7.14**	6.50-9.0
2.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017 Gravimetric method	mg/L	**945**	-
3.	Total Suspended Solids	IS:3025 (part 17)-1984,, RA-2021, Gravimetric Method	mg/L	**11**	<50
CHEMICAL					
4.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, RA-2019, Three days BOD at 27°C	mg/L	**2.10**	20
5.	Chemical Oxygen Demand as O_2	APHA 23rd Edition 5220-B Closed reflux method	mg/L	**16**	30
6.	Oil & Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-

End of Report

Note: **1. RA:** Reaffirmed. **BDL-** Below detectable limit (Oil & Grease <4.0).
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

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Analysis Report of STP Treated Sewage Water

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Guest House**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW4**
7.	Lab Sample Code	:	**CCRL W 9901**
8.	Date of sample collection	:	**17.12.2024**
9.	Date of sample Received	:	**17.12.2024**
10.	Date of sample Analyzed	:	**17.12.2024 to 26.12.2024**
11.	Report Issue Date	:	**30.12.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Standard
				Dec.'24	General Standards for Inland Surface water Schedule-VI (EPA-'86)
MICROBIOLOGICAL					
1.	Fecal Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample

END OF REPORT

Note: 1. **BDL:** Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**
2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P. Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M. Shashikala)
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Analysis Report of STP Treated Sewage Water

1.	Name of the Industry	:	**M/s. JK Cement Works, Muddapur,**
2.	Address	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Guest House**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW4**
7.	Lab Sample Code	:	**CCRL W 9932**
8.	Date of sample collection	:	**09.01.2025**
9.	Date of sample Received	:	**09.01.2025**
10.	Date of sample Analyzed	:	**10.01.2025 to 24.01.2025**
11.	Report Issue Date	:	**25.01.2025**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**
13.	Environmental condition at the time of sampling	:	**29.3°C**
14.	Unique Lab Report Number	:	**TC14892250000000012F**

Sl. No	Parameters	Protocol	Unit of Measurement	Results Jan.'-25	As per GSR 1265 E
PHYSICAL					
1.	pH	IS:3025 (part 11)-1983, RA-2022, Electrometric method	-	**7.16**	6.50-9.0
2.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017 Gravimetric method	mg/L	**2170**	-
3.	Total Suspended Solids	IS:3025 (part 17)-1984,, RA-2021, Gravimetric Method	mg/L	**9**	<50
CHEMICAL					
4.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, RA-2019, Three days BOD at 27°C	mg/L	**3.00**	20
5.	Chemical Oxygen Demand as O_2	APHA 23rd Edition 5220-B Closed reflux method	mg/L	**24**	30
6.	Oil & Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-

End of Report

Note: **1. RA:** Reaffirmed. **BDL**- Below detectable limit (Oil & Grease <4.0).
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
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Analysis Report of STP Treated Sewage Water

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Guest House**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW4**
7.	Lab Sample Code	:	**CCRL W 9932**
8.	Date of sample collection	:	**09.01.2025**
9.	Date of sample Received	:	**09.01.2025**
10.	Date of sample Analyzed	:	**10.01.2025 to 24.01.2025**
11.	Report Issue Date	:	**25.01.2025**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Standard
				Jan.'25	General Standards for Inland Surface water Schedule-VI (EPA-'86)
MICROBIOLOGICAL					
1.	Fecal Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample

END OF REPORT

Note: 1. **BDL:** Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**
2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P. Harika)
Technical Manager

AUTHORISED SIGNATORY:
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Analysis Report of STP Treated Sewage Water

1.	Name of the Industry	:	**M/s. JK Cement Works, Muddapur,**
2.	Address	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Guest House**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW4**
7.	Lab Sample Code	:	**CCRL W 9977**
8.	Date of sample collection	:	**24.02.2025**
9.	Date of sample Received	:	**24.02.2025**
10.	Date of sample Analyzed	:	**24.02.2025 to 27.02.2025**
11.	Report Issue Date	:	**28.02.2025**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**
13.	Environmental condition at the time of sampling	:	**32.1°C**
14.	Unique Lab Report Number	:	**TC148922500000000125F**

Sl. No	Parameters	Protocol	Unit of Measurement	Results Feb.'-25	As per GSR 1265 E
PHYSICAL					
1.	pH	IS:3025 (part 11)-1983, RA-2022, Electrometric method	-	**7.10**	6.50-9.0
2.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017 Gravimetric method	mg/L	**760**	-
3.	Total Suspended Solids	IS:3025 (part 17)-1984, , RA-2021, Gravimetric Method	mg/L	**7**	<50
CHEMICAL					
4.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, RA-2019, Three days BOD at 27°C	mg/L	**2.80**	20
5.	Chemical Oxygen Demand as O_2	APHA 23rd Edition 5220-B Closed reflux method	mg/L	**16**	30
6.	Oil & Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-

End of Report

Note: **1. RA:** Reaffirmed. **BDL-** Below detectable limit (Oil & Grease <4.0).
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

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Analysis Report of STP Treated Sewage Water

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Guest House**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW4**
7.	Lab Sample Code	:	**CCRL W 9977**
8.	Date of sample collection	:	**24.02.2025**
9.	Date of sample Received	:	**24.02.2025**
10.	Date of sample Analyzed	:	**24.02.2025 to 27.02.2025**
11.	Report Issue Date	:	**28.02.2025**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Standard
				Feb.'25	General Standards for Inland Surface water Schedule-VI (EPA-'86)
MICROBIOLOGICAL					
1.	Fecal Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample

END OF REPORT

Note: 1. **BDL:** Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**
2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P. Harika)
Technical Manager

AUTHORISED SIGNATORY:
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Head of the Laboratory

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Analysis Report of STP Treated Sewage Water

1.	Name of the Industry	:	**M/s. JK Cement Works, Muddapur,**
2.	Address	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Industry Premises**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW2**
7.	Lab Sample Code	:	**CCRL W 9991**
8.	Date of sample collection	:	**23.03.2025**
9.	Date of sample Received	:	**24.03.2025**
10.	Date of sample Analyzed	:	**24.03.2025 to 29.03.2025**
11.	Report Issue Date	:	**31.03.2025**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**
13.	Environmental condition at the time of sampling	:	**33.1°C**
14.	Unique Lab Report Number	:	**TC14892240000000245F**

Sl. No	Parameters	Protocol	Unit of Measurement	Results
				Mar.'-25
PHYSICAL				
1.	pH	IS:3025 (part 11)-1983, RA-2022, Electrometric method	-	7.26
2.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017 Gravimetric method	mg/L	2210
3.	Total Suspended Solids	IS:3025 (part 17)-1984, , RA-2021, Gravimetric Method	mg/L	11
CHEMICAL				
4.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, RA-2019, Three days BOD at 27°C	mg/L	1.90*
5.	Chemical Oxygen Demand as O_2	APHA 23rd Edition 5220-B Closed reflux method	mg/L	8
6.	Oil & Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	BDL

End of Report

Note: **1. RA:** Reaffirmed. **BDL-** Below detectable limit (Oil & Grease <4.0).
2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY: **(G.Dhavaleshwar)**
Analyst

VERIFIED BY: **(P.Harika)**
Technical Manager

AUTHORISED SIGNATORY: **(M. Shashikala)**
Head of the Laboratory

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Analysis Report of STP Treated Sewage Water

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Industry Premises**
5.	Particulars of sample collected	:	**STP Treated Sewage Water**
6.	Field Sample code	:	**JKSW2**
7.	Lab Sample Code	:	**CCRL W 9991**
8.	Date of sample collection	:	**23.03.2025**
9.	Date of sample Received	:	**24.03.2025**
10.	Date of sample Analyzed	:	**24.03.2025 to 29.03.2025**
11.	Report Issue Date	:	**31.03.2025**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**

Sl. No.	Parameters	Protocol	Unit of Measurement	Results
				Mar.'25
MICROBIOLOGICAL				
1.	Fecal Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**

END OF REPORT

Note: 1. BDL: Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**
2. The above results are related only to the samples collected & tested on the particular Date and time.

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
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Technical Manager

AUTHORISED SIGNATORY:
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WATER QUALITY MONITORING DATA

(GROUND WATER)

1.	Name of the Project	:	M/s. JK Cement Works, Muddapur,
2.	Name of the Client	:	(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India
3.	Sample collected by	:	Cosmo Conscious Research Laboratory
4.	Name of the Location	:	Near Main Gate
5.	Particulars of sample collected	:	Bore well
6.	Field Sample code	:	JKGW11
7.	Lab Sample Code	:	CCRL W 9870
8.	Date of sample collection	:	22.11.2024
9.	Date of sample Received	:	22.11.2024
10.	Date of sample Analyzed	:	23.11.2024 to 28.11.2024
11.	Report Issue Date	:	29.11.2024
12.	Method of Sampling	:	IS:17614 (Part-I) 2021
13.	Environmental condition at the time of sampling	:	29.4°C
14.	Unique Lab Report Number	:	TC1489224000000000222F

Sl. No.	Parameters	Protocol	Unit of Measure ment	Results	Drinking water specification Std. as per IS:10500:2012	
				Nov.'24	Desirable Limits	Permissible Limits
PHYSICAL						
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<1	5	15
2.	Temperature	IS:3025 (PART 9)-1984, RA-2023, Thermometer	ºC	25.0	-	-
3.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	µs/cms	683	-	-
4.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2023, Gravimetric method	mg/L	475	500	2000
5.	pH	IS:3025 (part 11)-1983, RA-2012, Electrometric method	-	8.09	6.5 to 8.5	No relaxation
6.	Turbidity (NTU)	IS:3025 (part 10)-1984, RA-2023, Nephelometric method	NTU	0.90	1	5
7.	Total Suspended Solids	IS:3025 (part 17)-1984, RA-2022, Gravimetric Method	mg/L	10	-	-
CHEMICAL						
8.	Dissolved Oxygen	IS:3025 (part 38)-1989, RA-2019, Winkler titrimetric azide modification	mg/L	6.30	-	-
9.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, , RA-2023 Three days BOD at 27°C	mg/L	<1	-	-
10.	Chemical Oxygen Demand	APHA 24th Edition 5220-B Open reflux method	mg/L	<1	-	-
11.	Phosphorous as P	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.224	-	-
12.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	66.10	-	-
13.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	0.40	-	-
14.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	56.91	75	200

Cont'd...

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Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Nov.'24	Desirable Limits	Permissible Limits
15.	Magnesium as Mg	APHA 24th Edition 350-B-Mg By calculation	mg/L	**44.66**	30	100
16.	Total Hardness as $CaCO_3$	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	**326**	300	600
17.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	**64.97**	250	1000
18.	Sulphate as SO_4	APHA 24th Edition 4500-SO_4^{2-}-E Turbidimetric method	mg/L	**40.74**	200	400
19.	Fluoride as F	APHA 24th Edition 4500-F^- D. SPADNS Method	mg/L	**0.86**	1	1.50
20.	Nitrate Nitrogen as NO_3	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	**2.33**	45	No relaxation
21.	Total Alkalinity as $CaCO_3$	IS:3025 (part 23)-1986, RA-2023 Indicator method	mg/L	**180**	200	600
22.	Acidity as $CaCO_3$	IS:3025 (part 22)-1986, RA-2019 Indicator method	mg/L	**Nil**	-	-
23.	Oil &Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-	-
TRACE METALS						
24.	Total Iron as Fe	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.30	No relaxation
25.	Nickel as Ni	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.02	No relaxation
26.	Manganese as	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	0.30
27.	Copper as Cu	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	1.50
28.	Zinc as Zn	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	5	15
29.	Lead as Pb	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.01	No relaxation
30.	Silver as Ag	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	No relaxation
31.	Chromium as Cr	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	No relaxation

END OF REPORT

Note: 1. BDL: Below detectable limit. .(Oil & Grease <4, for trace metals <0.1)
RA: Reaffirmed.
2. The above results are related only to the samples collected & tested on the particular Date and time.

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P. Harika)
Technical Manager

AUTHORISED SIGNATORY:
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WATER QUALITY MONITORING DATA

(GROUND WATER)

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Near Main Gate**
5.	Particulars of sample collected	:	**Bore well**
6.	Field Sample code	:	**JKGW11**
7.	Lab Sample Code	:	**CCRL W 9870**
8.	Date of sample collection	:	**22.11.2024**
9.	Date of sample Received	:	**22.11.2024**
10.	Date of sample Analyzed	:	**23.11.2024 to 28.11.2024**
11.	Report Issue Date	:	**29.11.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Nov.'24	Desirable Limits	Permissible Limits
TRACE METALS						
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	**BDL**	0.001	No relaxation
MICROBIOLOGICAL						
2.	Total Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample	-
3.	E.Coli count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample	-

END OF REPORT

Note: 1. **BDL:** Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**

2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P. Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M. Shashikala)
Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka)
Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com

WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1.	Name of the Project	:	M/s. JK Cement Works, Muddapur,
2.	Name of the Client	:	(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India
3.	Sample collected by	:	Cosmo Conscious Research Laboratory
4.	Name of the Location	:	VIP Guest House RO Water
5.	Particulars of sample collected	:	RO Water
6.	Field Sample code	:	JKGW2
7.	Lab Sample Code	:	CCRL W 9889
8.	Date of sample collection	:	17.12.2024
9.	Date of sample Received	:	17.12.2024
10.	Date of sample Analyzed	:	17.12.2024 to 26.12.2024
11.	Report Issue Date	:	30.12.2024
12.	Method of Sampling	:	IS:17614 (Part-I) 2021
13.	Environmental condition at the time of sampling	:	29.2°C
14.	Unique Lab Report Number	:	TC148922400000000252F

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
PHYSICAL						
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<1	5	15
2.	Temperature	IS:3025 (PART 9)-1984, RA-2023, Thermometer	ºC	25.00	-	-
3.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	µs/cms	183.8	-	-
4.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2023, Gravimetric method	mg/L	127.8	500	2000
5.	pH	IS:3025 (part 11)-1983, RA-2012, Electrometric method	-	7.76	6.5 to 8.5	No relaxation
6.	Turbidity (NTU)	IS:3025 (part 10)-1984, RA-2023, Nephelometric method	NTU	0.00	1	5
7.	Total Suspended Solids	IS:3025 (part 17)-1984, RA-2022, Gravimetric Method	mg/L	1	-	-
CHEMICAL						
8.	Dissolved Oxygen	IS:3025 (part 38)-1989, RA-2019, Winkler titrimetric azide modification	mg/L	6.30	-	-
9.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, , RA-2023 Three days BOD at 27°C	mg/L	<1	-	-
10.	Chemical Oxygen Demand	APHA 24th Edition 5220-B Open reflux method	mg/L	<1	-	-
11.	Phosphorous as P	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.340	-	-
12.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	28.70	-	-
13.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	0.40	-	-
14.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	16.03	75	200

Cont'd...

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Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
15.	Magnesium as Mg	APHA 24th Edition 350-B-Mg By calculation	mg/L	**14.08**	30	100
16.	Total Hardness as $CaCO_3$	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	**98**	300	600
17.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	**30.99**	250	1000
18.	Sulphate as SO_4	APHA 24th Edition 4500-SO_4^{2-}-E Turbidimetric method	mg/L	**1.22**	200	400
19.	Fluoride as F	APHA 24th Edition 4500-F^- D. SPADNS Method	mg/L	**1.02**	1	1.50
20.	Nitrate Nitrogen as NO_3	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	**0.639**	45	No relaxation
21.	Total Alkalinity as $CaCO_3$	IS:3025 (part 23)-1986, RA-2023 Indicator method	mg/L	**95**	200	600
22.	Acidity as $CaCO_3$	IS:3025 (part 22)-1986, RA-2019 Indicator method	mg/L	**Nil**	-	-
23.	Oil &Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-	-
TRACE METALS						
24.	Total Iron as Fe	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.30	No relaxation
25.	Nickel as Ni	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.02	No relaxation
26.	Manganese as	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	0.30
27.	Copper as Cu	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	1.50
28.	Zinc as Zn	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	5	15
29.	Lead as Pb	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.01	No relaxation
30.	Silver as Ag	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	No relaxation
31.	Chromium as Cr	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	No relaxation

END OF REPORT

Note: 1. BDL: Below detectable limit. .(Oil & Grease <4, for trace metals <0.1)
RA: Reaffirmed.
2. The above results are related only to the samples collected & tested on the particular Date and time.

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P. Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M. Shashikala)
Head of the Laboratory

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WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1.	Name of the Project	:	M/s. JK Cement Works, Muddapur,
2.	Name of the Client	:	(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India
3.	Sample collected by	:	Cosmo Conscious Research Laboratory
4.	Name of the Location	:	VIP Guest House RO Water
5.	Particulars of sample collected	:	RO Water
6.	Field Sample code	:	JKGW2
7.	Lab Sample Code	:	CCRL W 9889
8.	Date of sample collection	:	17.12.2024
9.	Date of sample Received	:	17.12.2024
10.	Date of sample Analyzed	:	17.12.2024 to 26.12.2024
11.	Report Issue Date	:	30.12.2024
12.	Method of Sampling	:	IS:17614 (Part-I) 2021

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
TRACE METALS						
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	BDL	0.001	No relaxation
MICROBIOLOGICAL						
2.	Total Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	Absent	Shall not be detectable in any 100 ml sample	-
3.	E.Coli count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	Absent	Shall not be detectable in any 100 ml sample	-

END OF REPORT

Note: 1. **BDL:** Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**
2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
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WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

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2.	Name of the Client	:	(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India
3.	Sample collected by	:	Cosmo Conscious Research Laboratory
4.	Name of the Location	:	General Guest House RO Water
5.	Particulars of sample collected	:	RO Water
6.	Field Sample code	:	JKGW3
7.	Lab Sample Code	:	CCRL W 9890
8.	Date of sample collection	:	17.12.2024
9.	Date of sample Received	:	17.12.2024
10.	Date of sample Analyzed	:	17.12.2024 to 26.12.2024
11.	Report Issue Date	:	30.12.2024
12.	Method of Sampling	:	IS:17614 (Part-I) 2021
13.	Environmental condition at the time of sampling	:	29.2°C
14.	Unique Lab Report Number	:	TC148922400000000253F

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
PHYSICAL						
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<1	5	15
2.	Temperature	IS:3025 (PART 9)-1984, RA-2023, Thermometer	ºC	25.30	-	-
3.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	µs/cms	79.40	-	-
4.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2023, Gravimetric method	mg/L	56.70	500	2000
5.	pH	IS:3025 (part 11)-1983, RA-2012, Electrometric method	-	7.79	6.5 to 8.5	No relaxation
6.	Turbidity (NTU)	IS:3025 (part 10)-1984, RA-2023, Nephelometric method	NTU	0.00	1	5
7.	Total Suspended Solids	IS:3025 (part 17)-1984, RA-2022, Gravimetric Method	mg/L	2	-	-
CHEMICAL						
8.	Dissolved Oxygen	IS:3025 (part 38)-1989, RA-2019, Winkler titrimetric azide modification	mg/L	6.10	-	-
9.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, , RA-2023 Three days BOD at 27°C	mg/L	<1	-	-
10.	Chemical Oxygen Demand	APHA 24th Edition 5220-B Open reflux method	mg/L	<1	-	-
11.	Phosphorous as P	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.244	-	-
12.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	2.90	-	-
13.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	0.10	-	-
14.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	9.61	75	200

Cont'd...

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Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
15.	Magnesium as Mg	APHA 24th Edition 350-B-Mg By calculation	mg/L	**14.57**	30	100
16.	Total Hardness as $CaCO_3$	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	**84**	300	600
17.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	**13.49**	250	1000
18.	Sulphate as SO_4	APHA 24th Edition 4500-SO_4^{2-}-E Turbidimetric method	mg/L	**1.31**	200	400
19.	Fluoride as F	APHA 24th Edition 4500-F^- D. SPADNS Method	mg/L	**0.85**	1	1.50
20.	Nitrate Nitrogen as NO_3	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	**0.405**	45	No relaxation
21.	Total Alkalinity as $CaCO_3$	IS:3025 (part 23)-1986, RA-2023 Indicator method	mg/L	**100**	200	600
22.	Acidity as $CaCO_3$	IS:3025 (part 22)-1986, RA-2019 Indicator method	mg/L	**Nil**	-	-
23.	Oil &Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-	-
TRACE METALS						
24.	Total Iron as Fe	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.30	No relaxation
25.	Nickel as Ni	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.02	No relaxation
26.	Manganese as	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	0.30
27.	Copper as Cu	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	1.50
28.	Zinc as Zn	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	5	15
29.	Lead as Pb	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.01	No relaxation
30.	Silver as Ag	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	No relaxation
31.	Chromium as Cr	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	No relaxation

END OF REPORT

Note: 1. BDL: Below detectable limit. .(Oil & Grease <4, for trace metals <0.1)
RA: Reaffirmed.
2. The above results are related only to the samples collected & tested on the particular Date and time.

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P. Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M. Shashikala)
Head of the Laboratory

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WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**General Guest House RO Water**
5.	Particulars of sample collected	:	**RO Water**
6.	Field Sample code	:	**JKGW3**
7.	Lab Sample Code	:	**CCRL W 9890**
8.	Date of sample collection	:	**17.12.2024**
9.	Date of sample Received	:	**17.12.2024**
10.	Date of sample Analyzed	:	**17.12.2024 to 26.12.2024**
11.	Report Issue Date	:	**30.12.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
TRACE METALS						
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	**BDL**	0.001	No relaxation
MICROBIOLOGICAL						
2.	Total Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample	-
3.	E.Coli count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample	-

END OF REPORT

Note: 1. **BDL:** Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**
2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

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AUTHORISED SIGNATORY:
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WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1.	Name of the Project	:	M/s. JK Cement Works, Muddapur,
2.	Name of the Client	:	(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India
3.	Sample collected by	:	Cosmo Conscious Research Laboratory
4.	Name of the Location	:	Packing Plant RO Water
5.	Particulars of sample collected	:	RO Water
6.	Field Sample code	:	JKGW6
7.	Lab Sample Code	:	CCRL W 9891
8.	Date of sample collection	:	17.12.2024
9.	Date of sample Received	:	17.12.2024
10.	Date of sample Analyzed	:	17.12.2024 to 26.12.2024
11.	Report Issue Date	:	30.12.2024
12.	Method of Sampling	:	IS:17614 (Part-I) 2021
13.	Environmental condition at the time of sampling	:	29.2°C
14.	Unique Lab Report Number	:	TC148922400000000254F

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
PHYSICAL						
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<1	5	15
2.	Temperature	IS:3025 (PART 9)-1984, RA-2023, Thermometer	ºC	25.20	-	-
3.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	µs/cms	114.6	-	-
4.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2023, Gravimetric method	mg/L	81.70	500	2000
5.	pH	IS:3025 (part 11)-1983, RA-2012, Electrometric method	-	7.30	6.5 to 8.5	No relaxation
6.	Turbidity (NTU)	IS:3025 (part 10)-1984, RA-2023, Nephelometric method	NTU	0.00	1	5
7.	Total Suspended Solids	IS:3025 (part 17)-1984, RA-2022, Gravimetric Method	mg/L	2	-	-
CHEMICAL						
8.	Dissolved Oxygen	IS:3025 (part 38)-1989, RA-2019, Winkler titrimetric azide modification	mg/L	6.0	-	-
9.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, , RA-2023 Three days BOD at 27°C	mg/L	<1	-	-
10.	Chemical Oxygen Demand	APHA 24th Edition 5220-B Open reflux method	mg/L	<1	-	-
11.	Phosphorous as P	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.248	-	-
12.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	8.60	-	-
13.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	0.10	-	-
14.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	16.83	75	200

Cont'd...

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Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
15.	Magnesium as Mg	APHA 24th Edition 350-B-Mg By calculation	mg/L	**25.25**	30	100
16.	Total Hardness as $CaCO_3$	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	**146**	300	600
17.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	**18.49**	250	1000
18.	Sulphate as SO_4	APHA 24th Edition 4500-SO_4^{2-}-E Turbidimetric method	mg/L	**4.18**	200	400
19.	Fluoride as F	APHA 24th Edition 4500-F^- D. SPADNS Method	mg/L	**0.99**	1	1.50
20.	Nitrate Nitrogen as NO_3	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	**0.616**	45	No relaxation
21.	Total Alkalinity as $CaCO_3$	IS:3025 (part 23)-1986, RA-2023 Indicator method	mg/L	**20**	200	600
22.	Acidity as $CaCO_3$	IS:3025 (part 22)-1986, RA-2019 Indicator method	mg/L	**Nil**	-	-
23.	Oil &Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-	-
TRACE METALS						
24.	Total Iron as Fe	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.30	No relaxation
25.	Nickel as Ni	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.02	No relaxation
26.	Manganese as	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	0.30
27.	Copper as Cu	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	1.50
28.	Zinc as Zn	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	5	15
29.	Lead as Pb	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.01	No relaxation
30.	Silver as Ag	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	No relaxation
31.	Chromium as Cr	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	No relaxation

END OF REPORT

Note: 1. **BDL:** Below detectable limit. .(Oil & Grease <4, for trace metals <0.1)
RA: Reaffirmed.
2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
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VERIFIED BY:
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Technical Manager

AUTHORISED SIGNATORY:
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WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Packing Plant RO Water**
5.	Particulars of sample collected	:	**RO Water**
6.	Field Sample code	:	**JKGW6**
7.	Lab Sample Code	:	**CCRL W 9891**
8.	Date of sample collection	:	**17.12.2024**
9.	Date of sample Received	:	**17.12.2024**
10.	Date of sample Analyzed	:	**17.12.2024 to 26.12.2024**
11.	Report Issue Date	:	**30.12.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
TRACE METALS						
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	**BDL**	0.001	No relaxation
MICROBIOLOGICAL						
2.	Total Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample	-
3.	E.Coli count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample	-

END OF REPORT

Note: 1. BDL: Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**

2. The above results are related only to the samples collected & tested on the particular Date and time.

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P.Harika)
Technical Manager

AUTHORISED SIGNATORY:
(M. Shashikala)
Head of the Laboratory

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WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Canteen RO Water**
5.	Particulars of sample collected	:	**RO Water**
6.	Field Sample code	:	**JKGW7**
7.	Lab Sample Code	:	**CCRL W 9892**
8.	Date of sample collection	:	**17.12.2024**
9.	Date of sample Received	:	**17.12.2024**
10.	Date of sample Analyzed	:	**17.12.2024 to 26.12.2024**
11.	Report Issue Date	:	**30.12.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**
13.	Environmental condition at the time of sampling	:	**29.2°C**
14.	Unique Lab Report Number	:	**TC148922400000000255F**

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
PHYSICAL						
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<1	5	15
2.	Temperature	IS:3025 (PART 9)-1984, RA-2023, Thermometer	ºC	25.40	-	-
3.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	µs/cms	432	-	-
4.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2023, Gravimetric method	mg/L	303	500	2000
5.	pH	IS:3025 (part 11)-1983, RA-2012, Electrometric method	-	7.73	6.5 to 8.5	No relaxation
6.	Turbidity (NTU)	IS:3025 (part 10)-1984, RA-2023, Nephelometric method	NTU	0.10	1	5
7.	Total Suspended Solids	IS:3025 (part 17)-1984, RA-2022, Gravimetric Method	mg/L	3	-	-
CHEMICAL						
8.	Dissolved Oxygen	IS:3025 (part 38)-1989, RA-2019, Winkler titrimetric azide modification	mg/L	6.30	-	-
9.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, , RA-2023 Three days BOD at 27°C	mg/L	<1	-	-
10.	Chemical Oxygen Demand	APHA 24th Edition 5220-B Open reflux method	mg/L	<1	-	-
11.	Phosphorous as P	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.260	-	-
12.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	61.20	-	-
13.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	0.20	-	-
14.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	48.89	75	200

Cont'd...

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Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
15.	Magnesium as Mg	APHA 24th Edition 350-B-Mg By calculation	mg/L	**14.07**	30	100
16.	Total Hardness as $CaCO_3$	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	**180**	300	600
17.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	**61.98**	250	1000
18.	Sulphate as SO_4	APHA 24th Edition 4500-SO_4^{2-}-E Turbidimetric method	mg/L	**21.19**	200	400
19.	Fluoride as F	APHA 24th Edition 4500-F^- D. SPADNS Method	mg/L	**0.96**	1	1.50
20.	Nitrate Nitrogen as NO_3	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	**1.36**	45	No relaxation
21.	Total Alkalinity as $CaCO_3$	IS:3025 (part 23)-1986, RA-2023 Indicator method	mg/L	**145**	200	600
22.	Acidity as $CaCO_3$	IS:3025 (part 22)-1986, RA-2019 Indicator method	mg/L	**Nil**	-	-
23.	Oil &Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	**BDL**	-	-
TRACE METALS						
24.	Total Iron as Fe	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.30	No relaxation
25.	Nickel as Ni	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.02	No relaxation
26.	Manganese as	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	0.30
27.	Copper as Cu	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	1.50
28.	Zinc as Zn	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	5	15
29.	Lead as Pb	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.01	No relaxation
30.	Silver as Ag	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.10	No relaxation
31.	Chromium as Cr	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	**BDL**	0.05	No relaxation

END OF REPORT

Note: 1. **BDL:** Below detectable limit. .(Oil & Grease <4, for trace metals <0.1)
RA: Reaffirmed.
2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
(G.Dhavaleshwar)
Analyst

VERIFIED BY:
(P. Harika)
Technical Manager

AUTHORISED SIGNATORY:
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Head of the Laboratory

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WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1.	Name of the Project	:	**M/s. JK Cement Works, Muddapur,**
2.	Name of the Client	:	**(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India**
3.	Sample collected by	:	**Cosmo Conscious Research Laboratory**
4.	Name of the Location	:	**Canteen RO Water**
5.	Particulars of sample collected	:	**RO Water**
6.	Field Sample code	:	**JKGW7**
7.	Lab Sample Code	:	**CCRL W 9892**
8.	Date of sample collection	:	**17.12.2024**
9.	Date of sample Received	:	**17.12.2024**
10.	Date of sample Analyzed	:	**17.12.2024 to 26.12.2024**
11.	Report Issue Date	:	**30.12.2024**
12.	Method of Sampling	:	**IS:17614 (Part-I) 2021**

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
TRACE METALS						
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	**BDL**	0.001	No relaxation
MICROBIOLOGICAL						
2.	Total Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample	-
3.	E.Coli count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	**Absent**	Shall not be detectable in any 100 ml sample	-

END OF REPORT

Note: 1. **BDL:** Below detectable limit. . (Mercury <0.001) **RA: Reaffirmed.**
2. **The above results are related only to the samples collected & tested on the particular Date and time.**

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WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1.	Name of the Project	:	M/s. JK Cement Works, Muddapur,
2.	Name of the Client	:	(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India
3.	Sample collected by	:	Cosmo Conscious Research Laboratory
4.	Name of the Location	:	CCR RO Water (Industry)
5.	Particulars of sample collected	:	RO Water
6.	Field Sample code	:	JKGW7
7.	Lab Sample Code	:	CCRL W 9893
8.	Date of sample collection	:	17.12.2024
9.	Date of sample Received	:	17.12.2024
10.	Date of sample Analyzed	:	17.12.2024 to 26.12.2024
11.	Report Issue Date	:	30.12.2024
12.	Method of Sampling	:	IS:17614 (Part-I) 2021
13.	Environmental condition at the time of sampling	:	29.2°C
14.	Unique Lab Report Number	:	TC148922400000000256F

Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
PHYSICAL						
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<1	5	15
2.	Temperature	IS:3025 (PART 9)-1984, RA-2023, Thermometer	ºC	25.0	-	-
3.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	µs/cms	278	-	-
4.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2023, Gravimetric method	mg/L	193	500	2000
5.	pH	IS:3025 (part 11)-1983, RA-2012, Electrometric method	-	7.48	6.5 to 8.5	No relaxation
6.	Turbidity (NTU)	IS:3025 (part 10)-1984, RA-2023, Nephelometric method	NTU	0.00	1	5
7.	Total Suspended Solids	IS:3025 (part 17)-1984, RA-2022, Gravimetric Method	mg/L	5	-	-
CHEMICAL						
8.	Dissolved Oxygen	IS:3025 (part 38)-1989, RA-2019, Winkler titrimetric azide modification	mg/L	6.70	-	-
9.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, , RA-2023 Three days BOD at 27°C	mg/L	<1	-	-
10.	Chemical Oxygen Demand	APHA 24th Edition 5220-B Open reflux method	mg/L	<1	-	-
11.	Phosphorous as P	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.136	-	-
12.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	24.4	-	-
13.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	0.30	-	-
14.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	56.11	75	200

Cont'd...

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Sl. No.	Parameters	Protocol	Unit of Measurement	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
15.	Magnesium as Mg	APHA 24th Edition 350-B-Mg By calculation	mg/L	3.86	30	100
16.	Total Hardness as $CaCO_3$	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	156	300	600
17.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	26.49	250	1000
18.	Sulphate as SO_4	APHA 24th Edition 4500-SO_4^{2-}-E Turbidimetric method	mg/L	16.77	200	400
19.	Fluoride as F	APHA 24th Edition 4500-F^- D. SPADNS Method	mg/L	0.84	1	1.50
20.	Nitrate Nitrogen as NO_3	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	0.51	45	No relaxation
21.	Total Alkalinity as $CaCO_3$	IS:3025 (part 23)-1986, RA-2023 Indicator method	mg/L	90	200	600
22.	Acidity as $CaCO_3$	IS:3025 (part 22)-1986, RA-2019 Indicator method	mg/L	Nil	-	-
23.	Oil &Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	BDL	-	-
TRACE METALS						
24.	Total Iron as Fe	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.30	No relaxation
25.	Nickel as Ni	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.02	No relaxation
26.	Manganese as	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	0.30
27.	Copper as Cu	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.05	1.50
28.	Zinc as Zn	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	5	15
29.	Lead as Pb	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.01	No relaxation
30.	Silver as Ag	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	No relaxation
31.	Chromium as Cr	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.05	No relaxation

END OF REPORT

Note: 1. **BDL:** Below detectable limit. .(Oil & Grease <4, for trace metals <0.1)
RA: Reaffirmed.
2. **The above results are related only to the samples collected & tested on the particular Date and time.**

ANALYZED BY:
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Annexure-10

EXPENDITURE ON THE ENVIRONMENTAL MANAGEMENT PLAN FOR PERIOD FROM OCTOBER- 2024 TO MARCH- 2025

DESCRIPTION	Expenditure (Rs 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	708.04
Fly ash Silo's and ash handling systems	22.40
Emission Monitoring equipment (including online emission monitoring equipment (CEMS) at sources and ambient air quality in the vicinity) and laboratory	14.64
Green Belt Development, Sewage Treatment plant and Water Harvesting Schemes for plant	9.61
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	4721.69
Other environmental management costs (AFR system operation, Odour control, environmental training/Award, SNCR system CPP, Environmental License Fees)	783.69
TOTAL (Rs in Lakhs)	**6260.09**

Annexure -II

Details of CSR Expenditure for 2024-25			
Sr.No	**Focus area**	**Particulars**	**Amount (Rs)**
1	Health	Support for Health care, Training and Medical Aid	1,96,500.00
2	Education	Education aid and Support for Schools	49,57,563.00
3	Rural Transformation	Rural Development & Other Welfare Activities	31,15,969.20
4	Other	Miscellaneous Activities	6,71,100.00
		Grand Total	**89,41,132.20**