

JK Cement Works, Muddapur

A Unit of JK Cement Ltd. CIN: L17229UP1994PLC017199

Works: P.O. Muddapur - 587 122 Distt. Bagalkot (Karnataka) India

😂 +91 - 8350-289954, 289607

No. JK-MIU/EC-COM/2025-26/89/\$3

Date- 26-05-2025

To

The Deputy Director Ministry of Environment, Forest and Climate Change (MoEFCC) Govt. of India, Indira Paryavaran Bhavan Aligani, 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 Pariha

(Unit Head)

Enclosures: As above

Corporate Office

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- **\$** +0124-6919000
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JK STPER CEMENT

CEMENT

BUILD SAFE

WCILMCIX

White Cement Wall Putty

Manufacturing Units at : Nimbahera, Mangrol, Gotan (Rajasthan) | Muddapur (Karnataka) Jharli (Haryana) | Katni, Panna (M.P.) | Aligarh, Hamirpur (U.P.) Balasinor (Gujarat) | Fujairah

JK CEMENT





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	
.Sr, No	Annexure	Particular Agencia	Page No
1	Annexure-1	EC.NO: J-11011/489/2006-1A. II (I)/dtd.14-09-2007, EC Compliance Status	1-8
2	Annexure-2	EC.NO: F.No. J-11011/263/2009-IA II (I) dated 26-06-2010, EC Compliance Status	9-14
3	Annexure-3	EC.NO: J-11011/263/2009-IA II (I) dated 26-09-2012, EC Compliance Status	15
4	Annexure- I	AAQ Monitoring Reports	16-21
5	Annexure-5	Stack Emission Monitoring Reports	22-70
6	Annexure-6	Noise Level Monitoring Reports	71-76
7	Annexure-7	Work Zone Noise Monitoring Report	77-88
8	Annexure-8	Fugitive emission Monitoring Reports	89-90
9	Annexure-9	Water Quality Monitoring Reports	91-121
10	Annexure-10	Details of Environmental expenditures	122
11	Annexure-11	Details of CSR expenditures Report	123

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:

	CITIC CONDITIONS:	
	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.
11.	The total water requirement from Ghatprabha River source shall not exceed 1046.4 m³/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	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

stipulated in the fly ash notification of in the fly ash notification of September,

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

	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 / reprocessor 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.
Y -(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.
istalen seciend ost olina anbet os beta		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.
2006-1044 	General Condition :	
1	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 LATPA) 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

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EC Compliance Report for the period October- 2024 to March- 2025			
Tell Jessey	sitati Parance Pulvanteriar da sastrare Gronad Melaye pintelead from Aprimapja vistoppo	production capacity from MoEF via F. No. J 11011/263/2009- IA II (I) dated 26 September 2012.	
	The gaseous and particulate matter emission from various units shall confirm	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. 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.	
	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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EC Compliance Report for the period October- 2024 to March- 2025:

1 s - 244 co	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 ecodevelopment 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:	The Art St. 19 May are the South St. St. 19 St.
· Mage	 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/Nm³ 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/Nm³ for particulate matter emissions	The emission level of particulate matter is maintaining below 30 mg/Nm³ for kiln/raw mill as per the prescribed standards.
4	CPCB will evolve load-based standards by December 2003	MoEF & CC has released notification on load-based standards on 10 th May 2016, for cement plants with co-processing for rotary kiln (Raw mill, kiln and precalciner system put together) not exceeding 0.125kg/tonne of clinker and complying the same.
5	CPCB and NCBM will evolve 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.

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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	
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

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

	taken up.	are being taken up.
xii.	A separate Environmental Management	Complied, a separate Environmental
	cell to carry out various management and	Management cell has been established
	monitoring function shall be set up under	headed by Unit Head to carry out
	control of Sr. Executive.	Environmental monitoring and various
	Harris State Control of the Control	management function.
xiii.	Rs.8.70 crores earmarked for	Complied, expenditure incurred on
	environmental pollution measures shall	environmental pollution control measures
	be suitable used to implement the	taken up on environment management plan
	condition stipulated by the Ministry of	and the details of expenditure are enclosed
A de de man estado.	Environment and Forest as well as the	as Annexure-10.
	State Government. The fund so provided	Grand Andrews (Andrews Angeles (1994) Andrews (1994)
	shall not be diverted for any other	The Asia Control of the Control of t
	purpose.	
xiv.	The Regional of this Ministry at Bangalore	Complying, six monthly compliance report
	/ CPCB / KSPCB shall monitor the	along with statistical interpretation of
Tak a Y	stipulated condition. A six-monthly	environmental monitoring data is submitting
Service Services	compliance report and monitor data	regularly to The Regional office of Ministry
4	along with statistical interpretation shall	at Bangalore, CPCB & KSPCB.
•	be submitted to them regularly.	arandering both titrat signification. Out
xv.	The project authorities shall inform the	Complied, The Project has been successfully
	regional office as well as the Ministry, the	commissioned and informed to the regional
	date of financial closure and final	office of Ministry.
	approval of the project by concerned	
	authorities and the date of commencing	The state of the s
	the land development work.	
xvi.	The project proponent shall inform the	Complied, we had informed to the public that
	public that the project has been accorded	the project has been accorded
	environmental clearance by Ministry and	environmental clearance by Ministry and
	copies of the clearance letter are	copies of the clearance letter are available
	available with the Karnataka Pollution	with the Karnataka Pollution Control Board /
	Control Board / committee and may be	committee and may be seen at website of
100	seen at website of the Ministry of	the Ministry of Environment and Forests at
	Environment and Forests at http:	http: www.envfor.nic.in.
	www.envfor.nic.in. This should be	
	advertised within seven days from the	
W. Jak	date of issues of clearance letter at least	
	in two local newspapers that are widely	

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). (b)Garered Stored show

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	circulated in the region of which one shall	:Qu 649507
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l francista	locality concerned and a copy of the same	
	shall be forwarded to the regional office	
Lawstine)	at Bangalore.	existence is not be invised.
6.0	The Ministry or any other competent	Noted.
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	condition(s) on receiving reports from the	- Language Community of Community Co

	at Bangalore.	qui ter est tierts redisnet gandressen () () () () () () () () () (
6.0	The Ministry or any other competent	Noted.
	authority may stipulate any further	The second representation of the second seco
1 23/11/21	condition(s) on receiving reports from the	Southern andules termenting of
l land	project authorities. The above conditions	Lamphami og þezo skábítus og illi illi
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	of this Ministry located of Bangalore.	New as today's fees destrooked in the
7.0	The Ministry may revoke or suspend the	Noted.
	clearance if implementation of any of the	yas poi pestevilo ed stell-lierte (
	above condition is not satisfactory.	
. Presenting	Any other condition or alteration in the	Noted.
8.0	above conditions shall to be implemented	manin tega sistem (1-18040 N 1-1. []
	by the project authorities in a time bound	n xiz A (xielifaro) (beselvatio) () (
	manner.	settabah kiba: Karasa, Kaballarsas (1997)
	The above conditions shall be enforced,	Noted.
9.0	inter-alia under the provisions of The	i generale mest of before doubte.
yübles	Water (Prevention and control of	salva Reggy sees resultante acceptante de la la la con-
i kanda	pollution) Act, 1974, the Air Act. 1981,	retained enter an Brazilian entitle Generalizati (U.S. 1919)
	The Environment Protection Act 1986 and	trad autoto laboración da arise de com
	The Public Liability Insurance Act, 1991	and the Savering and the Bearing on the 1966
	along with their amendments and rules.	observations reports, with a rose that they have

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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
1).	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/Nm³. At no time, particulate emissions from the grinding unit shall exceed 50 mg/Nm³. 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/Nm³ 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.

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

	EC Compliance Report for the perio	
	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 m³/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

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

100 1 10 No. 2010	<u> </u>	
•		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. GEI	NERAL CONDITION:	La transfer to the termination of the transfer to
1)	The project authorities must strictly adhere to the stipulations made by the Karnataka State Pollution Control Board and the State Government.	Noted. All is a considerate disconstant and responding to be a considerate and considerate an
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.

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

	EC Compliance Report for the perio	<u>d October - 2024 to March - 2025</u>
	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.	trinoise bee gracesissins regord elektriciscosis per dilektriciscosiscino elektricis productioner electricis
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.

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

	EC Compliance Report for the period	d October = 2024 to Warch = 2025
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 .
•	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.
xiı)	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	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.
	the company in the public domain.	Complied we are submitting six monthly
xiii)	The project proponent shall also submit six	Complied, we are submitting six monthly

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

	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 email) 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 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (protection) Rules, 19086, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective regional Office of the MoEF at 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.

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.	conditions stipulated vide Ministry's
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 competant authority.	Noted.



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/	1	Particulars of Sample Collected			
Date of Sample Collection	Lab Sample Code	\$O₂ (µg/m³)	NO ₂ (µg/m³)	PM ₁₀ (µg/m³)	PM _{2.5} (µg/m³)
				dards 2009	
AAQM Locations for Ce	ment Plant	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)
Al- Admin Building	And the second s				
25.10.2024	434, 434, C04, 241	11	15	50	14
All- Guest House					
25.10.2024	437, 437, C01, 239	13	12	56	17
AllI-Muddapur Village		1			
24.10.2024	431, 431, C06, 242	17	20	54	12
AIV- Bomanbudhini Vill	age				
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 μ m), PM2.5 – Particulate Matter (size less than 2.5 μ m).

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. Shastikala) Head of the Laboratory

1 of 16







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AIR QUALITY MONITORING DATA

1. Name of the Project M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, 2. Name of the Client

Dist.Bagalkot (Karnataka) India

Cercannis I s to an increasing ince Esperies

3. Sample Collected By **Cosmo Conscious Research Laboratory**

4. Source Emission Air Quality Monitoring Particulars of Sample Collected

5. Sample Condition Satisfactory

6. 21.11.2024 **Analysis Start Date**

7. **Analysis Completion Date** 23.11.2024

8. Report Issue Date 29.11.2024

9. Month of Monitoring November 2024

Environmental condition at the time 10.

of sampling

11. Unique Lab Report Number TC148922400000000216F

Name of the Station/		Particulars of Sample Collected				
Date of Sample Collection	Lab Sample Code	\$O₂ (μg/m³)	NO ₂ (μg/m³)	PM ₁₀ (μg/m³)	PM _{2.5} (µg/m³)	
	System () Factor medicinal medicinal system () () () () () () () () () (NAAQ stan	dards 2009		
AAQM Locations for Cement Plant		80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)	
Al- Admin Building		And the second of the second o				
21.11.2024	530, 530, C19, 794	11	10	50	12	
All- Guest House						
21.11.2024	529, 529, C18, 795	15	13	52	15	
AllI-Muddapur Village	bendungan dan dan dan dan dan dan dan dan dan d				4	
20.11.2024	526, 526, C14, 791	20	19	55	21	
AIV- Bomanbudhini Vill	age					
20.11.2024	524, 524, C16, 792	14	18	59	23	

29.6°C

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
Γ	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



1 of 26

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





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AIR QUALITY MONITORING DATA

1. Name of the Project M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, 2. Name of the Client

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

Environmental condition at the time 10. of sampling

29.1°C

11. Unique Lab Report Number

TC148922400000000247F

Name of the Station/	Lab Sample Code	Particulars of Sample Collected			
Date of Sample Collection		\$O₂ (μg/m³)	NO₂ (µg/m³)	PM ₁₀ (µg/m³)	PM _{2.5} (µg/m³)
	30-50-50-10-10-10-10-10-10-10-10-10-10-10-10-10		NAAQ stan	dards 2009	
AAQM Locations for Ce	ment Plant	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)
Al- Weigh bridge		2			
13.12.2024	589, 589, C34, 533	15	11	50	12
All- Guest House					
13.12.2024	590, 590, C35, 534	10	14	55	15
Alli-Muddapur Village	medicitit entitionentississentississentississen			- The state of the	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
13.12.2024	588, 588, C33, 544	12	15	59	19
AIV- Bomanbudhini Ville	age				
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:

Analyst

VERIFIED BY:

Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

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18



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AIR QUALITY MONITORING DATA

1. Name of the Project M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, 2. Name of the Client

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

Environmental condition at the time 10.

of sampling

28.9°C

11. Unique Lab Report Number

TC1489225000000009F

Name of the Station/		Particulars of Sample Collected				
Date of Sample Collection	Lab Sample Code	\$O ₂ (µg/m³)	NO₂ (µg/m³)	PM ₁₀ (µg/m³)	PM _{2.5} (µg/m³)	
			NAAQ stan	dards 2009		
AAQM Locations for Ce	ment Plant	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)	
Al- Weigh bridge	domina nataonina na Pompo e endana menara a a a a persona de describada de esperancia de esperancia de esperan	pagada, Wanangarana ya 1991 wa	Aug 2.13	Salah Maranan salah		
08.01.2025	667, 667, C15, 056	11	13	50	14	
All- Guest House				11. 21.5 12.22.5 **		
08.01.2025	668, 668, C13, 059	15	10	54	19	
AllI-Muddapur Village			*.	en e	ayaya Albasa	
08.01.2025	666, 666, C11, 007	18	14	60	22	
AIV- Bomanbudhini Vill	age				ool saa	
07.01.2025	664, 664, C12, 065	14	21	55	12	

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:

Analyst

VERIFIED BY

Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

1 of 31

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11.

COSMO CONSCIOUS RESEARCH LABORATORY

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

Unique Lab Report Number

of sampling

: TC148922500000000122F

32.2°C

Name of the Station/		Pa	rticulars of So	ample Collec	ted
Date of Sample Collection	Lab Sample Code	SO ₂ (μg/m³)	NO ₂ (μg/m³)	PM ₁₀ (µg/m³)	PM _{2.5} (μg/m³)
			NAAQ stan	dards 2009	
AAQM Locations for Ce	ment Plant	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)
Al- Weigh bridge	istory (m. 1901). Pour le suit de 1917 <u>e 1934 linguiste receive designée automité désignée</u>		maminian kan sa		ar Santa Markaran Barana Santa Barana
20.02.2025	804, 804, C12, 124	15	12	50	17
All- Guest House					(1.49.2 (1.49.2
20.02.2025	803, 803, C11, 125	10	15	55	. 13
AllI-Muddapur Village					
21.02.2025	806, 806, C06, 128	20	21	49	14
AIV- Bomanbudhini Ville	age		4. ; .		
20.02.2025	805, 805, C07, 123	13	16	56	1 5

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:

(M. Shashikala) Head of the Laboratory

1 of 13









Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892 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 : 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 : 33.2°C

of sampling

11. Unique Lab Report Number : TC14892250000000242F

Name of the Station/	Lab	Pa	rticulars of Sc	imple Collec	cted
Date of Sample Collection	Sample Code	\$O₂ (µg/m³)	NO ₂ (µg/m³)	PM ₁₀ (µg/m³)	PM _{2.5} (µg/m³)
		NAAQ stand	dards 2009	:	
AAQM Locations for Ce	ment Plant	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)
Al- Weigh bridge			The second second second second	urs obligation	A Section of Sections
20.03.2025	878, 878, C20, 704	11	14	52	17
All- Guest House				9/44 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
20.03.2025	879, 879, C23, 847	16	17	49	11
AllI-Muddapur Village					
19.03.2025	874, 874, C15, 844	13	20	57	24
AIV- Bomanbudhini Villa	ige .				
20.03.2025	877, 877, C21, 843	15	16	56	21

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) echnical Mena

Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory



1 of 22

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





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

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°C IS-11255(Part 01)
13	Stack Temperature	96 °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 t	20	Raw Mill	 Secretary and the secretary an	
2 Stack Diameter	(mtr)	7.20		

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	15.7	mg/Nm³	IS 11255 (Part 01)	30.0
2	Sulphur dioxide (SO2)	20.6	mg/Nm³	CCRL/TOP/06:2016	100.0
3	Oxides of Nitrogen (NOX)	16.5	mg/Nm³	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:

Y: (M. Shakhikala) Head of the Laboratory

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





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

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°C IS-11255(Part 01)
13	Stack Temperature	56°C IS-11255(Part 01)
14	Velocity of Flue Gas	7.43 m/sec
15	Gas flow rate	37450.57Nm³/hr IS-11255(Part 03)
16	Moisture	<1 % IS-11255(Part 03)
17	Production rate	23 TPH

Stack Details

1 1	Charle attached to		
1 1	Stack attached to	Coal Mill	
	0. 1 D		
1 2	Stack Diameter (mtr)	1.40	4

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1.	Particulate Matter	10.2	mg/Nm³	IS 11255 (Part 01)	30.0

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

MONITORED BY:

(G.Dhavaleshwar) Analyst

Head of the Laboratory





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

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°C IS-11255(Part 01)
13	Stack Temperature	170°C IS-11255(Part 01)
14	Velocity of Flue Gas	7.50 m/sec
15	Gas flow rate	214741.97Nm³/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	Augusta es April August situa	A CONTRACTOR OF THE PROPERTY O	

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	18.8	mg/Nm³	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:

Analyst

VERIFIED BY:

AUTHORISED SIGNATORY:

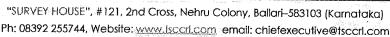
(M. Shashikala)

Head of the Laboratory













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

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 12: 10; 1
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°C IS-11255(Part 01)
13	Stack Temperature	76°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 sees TPH Audign

Stack Details

1 Stack attached to	Cement mill-I			
2 Stack Diameter (mtr)	1.4	3/1,1		

Emission Details

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	8.70	mg/Nm³	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:

Y: (M. Šhashikala) Head of the Laboratory



12 of 16

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





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

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	ate 04.11.2024		
11	Report Issue Date	04.11.2024		
12	Environmental Condition at the time of sampling	29 °C IS-11255(Part 01)		
13	Stack Temperature	79 °C IS-11255(Part 01)		
14	Velocity of Flue Gas	7.22 m/sec		
15	Gas flow rate *	33992.59 Nm³/hr IS-11255(Part 03)		
16	Moisture *	<1% IS-11255(Part 03)		
17	Production rate*	130 TPH		

Stack Details

Ĩ	1	Stack attached to	Cement mill -II	anidamaniamin amanamaniamin amananiamin amananiamin amananiamin amananiamin amananiamin amananiamin amananiami	1
I	2	Stack Diameter (mtr)	1.4		

Emission Details

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	19.2	mg/Nm³	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)

Y: (M. Shashikala) Head of the Laboratory





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

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°C IS-11255(Part 01)
13	Stack Temperature	90°C IS-11255(Part 01)
14	Velocity of Flue Gas	11.78 m/sec
15	Gas flow rate	397922.87 Nm³/hr IS-11255(Part 03)
16	Moisture	<1 % IS-11255(Part 03)
17	Production rate	218 TPH

Stack Details

	2°		***************************************	
- 1	1 Stack attached to	Cement mill -l	III	
	2 Stack Diameter (mtr)		And the programme transport of the second se	

Emission Details

Sl. No	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	12.8	mg/Nm³	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:

Y: (M. Shashfkala) Head of the Làboratory









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

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			
1 1	Report Issue Date	04.11.2024			
12	Environmental Condition at the time of sampling	30 °C IS-11255(Part 01)			
13	Stack Temperature	42°C IS-11255(Part 01)			
14	Velocity of Flue Gas	6.04 m/sec			
15	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	and the second s
2 Stack Diameter (mtr)	1.20	

Emission Details

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	11.3	mg/Nm³	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:

Analyst

AUTHORISED SIGNATORY:

Head of the Laboratory

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





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

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	The state of the s
7	Sample Condition	The second of th
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	
-					200000000000000000000000000000000000000
	1	Stack attached to	Capti	tive Power Plant	
Γ	2	Stack Diameter (mtr)	3.30		4

Emission Details

SI. No.	Parameters	Result	Unit	Method ****	Permissible Limit
1	Particulate Matter		mg/Nm³	IS 11255 (Part 01)	50.0
2	Oxides of Sulphur	SHUT DOWN	mg/Nm³	CCRL/TOP/06:2016	600.0
3	Oxides of Nitrogen		mg/Nm³	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:

Analyst

VERIFIED BY:

Technical Manager

AUTHORISED SIGNATORY:

(M. Shasbakala) Head of the Laboratory







DNSCIOUS RESEARCH LABORATORY



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°C IS-11255(Part 01)
13	Stack Temperature	95°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 Nm³/hr IS-11255(Part 03)
17	Moisture	<1 %
18	Production rate	423 TPH
19	Unique Lab Report Number	TC14892240000000225F

1	Stack attached t	0	Raw Mill	
2	Stack Diameter	(mtr)	7.20	

Emission Details

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	23.2	mg/Nm³	IS 11255 (Part 01)	30.0
2	Sulphur dioxide (SO2)	41.2	mg/Nm³	CCRL/TOP/06:2016	100.0
3	Oxides of Nitrogen (NOX)	28.5	mg/Nm³	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

Analyst

Technical Manager

AUTHORISED SIGNATORY:

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	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°C IS-11255(Part 01)		
13	Stack Temperature	56 °C IS-11255(Part 01)		
14	Velocity of Flue Gas	7.37 m/sec		
15	Gas flow rate	37148.14 Nm³/hr IS-11255(Part 03)		
16	Moisture	<1 % IS-11255(Part 03)		
17	Production rate	23 TPH		
18	Unique Lab Report Number	TC14892240000000226F		

Stack Details

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

Emission Details

Sl. No.		Result	Unit	Method	Permissible Limit
 1.	Particulate Matter	24.7	mg/Nm³	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:

Analyst

Technical Manager

AUTHORISED SIGNATORY:

Head of the Laboratory

31



"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka) Ph: 08392 255744, Website: www.tsccrt.com email: chiefexecutive@tsccrt.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	21.11.2024
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 °C IS-11255(Part 01)
13	Stack Temperature	140°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	TC14892240000000227F

Stack Details

1	Stack attached to	Cooler station		
2	Stack Diameter (mtr)	3.86	97. s	

Emission Details

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	23.7	mg/Nm³	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 RY

(P.Harika) hnical Manager

AUTHORISED SIGNATORY:

Head of the Laboratory

ANAB (G)

21 of 26

"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	22.11.2024
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 °C IS-11255(Part 01)
13	Stack Temperature	84ºC 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 ТРН
18	Unique Lab Report Number	TC148922400000000228F

Stack Details

1	Stack attached to	Cement mill-I	The second secon
2	Stack Diameter (mtr)	1.4	Land of the second of the seco

Emission Details

SI. No.	Parameters	Result	Unit	Method	Permiŝsible Limit
1	Particulate Matter	24.2	mg/Nm³	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:

Head of the Laboratory



22 of 26

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Analysis Report of Stack Emission

1	Name of the Industry	M/s. JK Cement Works, Muddapur,		
2	Address of the assemble of the	(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°C IS-11255(Part 01)		
13	Stack Temperature	76 °C IS-11255(Part 01)		
14	Velocity of Flue Gas	8.65 m/sec		
15	Gas flow rate *	41204.32 Nm³/hr IS-11255(Part 03)		
16	Moisture *	<1 % IS-11255(Part 03)		
17	Production rate*	130 TPH		
18	Unique Lab Report Number	TC14892240000000229F		

Stack Details

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

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permišsible Limit
1	Particulate Matter	16.7	mg/Nm³	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) echnical Managei

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory











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°C IS-11255(Part 01)
13	Stack Temperature	87°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	TC14892240000000230F

Stack Details

1	Stack attached to	Cement mill -III		
2	Stack Diameter (mtr)	3.75	dangan ayan ayan da	

Emission Details

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	26.2	mg/Nm³	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:

Y: (М. Snasnikala) 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	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 °C IS-11255(Part 01)				
13	Stack Temperature	35°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	TC14892240000000231F				

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/Nm³	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) nical Manager

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory

25 of 26









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	- 1
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

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter		mg/Nm³	IS 11255 (Part 01)	50.0
2	Oxides of Sulphur	SHUT DOWN	mg/Nm³	CCRL/TOP/06:2016	600.0
3	Oxides of Nitrogen		mg/Nm³	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:

Y: (M. Shashikala) Head of the Laboratory

26 of 26



"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: www.lsccrl.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	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°C IS-11255(Part 01)
13	Stack Temperature	116°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	TC14892240000000264F

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/Nm³	IS 11255 (Part 01)	30.0
2	Sulphur dioxide (SO2)	39.8	mg/Nm³	CCRL/TOP/06:2016	100.0
3	Oxides of Nitrogen (NOX)	226.2	mg/Nm³	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) 'echnical Manage

AUTHORISED SIGNATORY:

Y: (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





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



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°C IS-11255(Part 01)	
13	Stack Temperature	68 °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	٦
2	Stack Diameter (mtr)	1.40]

Emission Details

- Africa - S	Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
	1.	Particulate Matter	16.6	mg/Nm³	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.Dhavalëshwar) Analyst **VERIFIED BY:**

(P.Harika)

Technical Manager

AUTHORISED SIGNATORY:

M.Shashikala)

Head of the Laboratory

48 of 59







39



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



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°C IS-11255(Part 01)
13	Stack Temperature	88°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	TC14892240000000266F

Stack Details

1 Stack attached to	Cooler statio	n		
2 Stack Diameter (mtr)	3.86		and the company of the Alberta Company of the Compa	strantona, granana

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	25.1	mg/Nm³	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 RV

Technical Manager

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory



49 of 59

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





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



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°C IS-11255(Part 01)
13	Stack Temperature	87°C IS-11255(Part 01)
14	Velocity of Flue Gas	8.60 m/sec
15	Gas flow rate *	39537.09 Nm³/hr IS-11255(Part 03)
16	Moisture *	<1 % IS-11255(Part 03)
17	Production rate*	125 TPH
18	Unique Lab Report Number	TC148922400000000267F

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
	Particulate Matter	24.7	mg/Nm³	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**

(P.Harika) Technical Manager

AUTHORISED SIGNATORY:

Head of the Laboratory

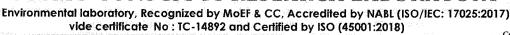


"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)

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	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 Nm³/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

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I I Stack attached to	Coment mill III
1 1 DIALN ALIACHEU LU	Control of the state of the sta
	10 T C T T T T T T T T T T T T T T T T T
1 / Stack Hamatar (mtr)	1. 4.
1 L JUGUN DIGHILULI HILLI	
1 2 Stack Diameter [inti]	Links To the Control of the Control

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	26.4	mg/Nm³	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) ical Mañagei

Technical Manager

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory

Head of

51 of 59











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°C IS-11255(Part 01)			
13	Stack Temperature	90°C IS-11255(Part 01)			
14	Velocity of Flue Gas	11.21 m/sec			
15	Gas flow rate	365303.76 Nm³/hr IS-11255(Part 03)			
16	Moisture	<1 % IS-11255(Part 03)			
17	Production rate	218 ТРН			
18	Unique Lab Report Number	TC148922400000000269F			

Stack Details

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A CARLO CARL	C	
1 Stack attached to	Cement mill -III	
2 Stack Diameter (mtr)	OD 7E AT AND AND AND A SECOND OF A SECOND OF THE	The first of the common problem of the problem of the common problem of the common problem of the common problem.
4 Stack Dialifeter (IIIII)	grafin a figure and the firm of the contraction of the firm of the	response programme (1986년 1988년

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	9.30	mg/Nm³	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:

Y: (M. Shashikala) Head of the 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)

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	TC14892240000000270F				

Stack Details

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

Emission Details

SI. No		Parameters	Result	Unit	Method	Permissible Limit
1	7 (ii)	Particulate Matter	15.3	mg/Nm³	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.Harikà)

Technical Manager

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory

53 of 59







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



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		mg/Nm³	IS 11255 (Part 01)	50.0
2	Oxides of Sulphur	SHUT DOWN	mg/Nm³	CCRL/TOP/06:2016	600.0
3	Oxides of Nitrogen		mg/Nm³	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

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DQS Inc.

CCRL

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



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-58712 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°C IS-11255(Part 01)	
13	Stack Temperature	162°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	TC14892240000000232F	

Stack Details

ناننشششس	·		٦
1	Stack attached to	DG-2 &3	4
2	Stack Diameter (mtr)	0.5	

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1.	Particulate Matter	6.90	mg/Nm³	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:

Analyst

VERIFIED BY:

(P.Harika)

Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala)

Head of the Laboratory

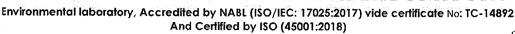
55 of 59



"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka) Ph: 08392 255744, Website: www.isccrl.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	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°C IS-11255(Part 01)
13	Stack Temperature	115°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 Nm³/hr IS-11255(Part 03)
17	Moisture	<1 %
18	Production rate	423 TPH
19	Unique Lab Report Number	TC1489225000000019F

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/Nm³	IS 11255 (Part 01)	30.0
2	Sulphur dioxide (SO2)	42.2	mg/Nm³	CCRL/TOP/06:2016	100.0
3	Oxides of Nitrogen (NOX)	201.2	mg/Nm³	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:

AUTHORISED SIGNATORY:

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	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°C IS-11255(Part 01)
13	Stack Temperature	67°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/Nm³	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

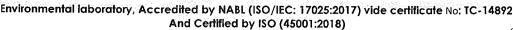
Head of the Laboratory













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 °C IS-11255(Part 01)
13	Stack Temperature	86°C IS-11255(Part 01)
14	Velocity of Flue Gas	6.00 m/sec
15	Gas flow rate	21221559 Nm³/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	r station	CONTRACTOR A	A CALL THE WAY IN THE CALL THE	
2	Stack Diameter (mtr)	3.86			or sulfarentes for a contest of featibility and business of the force of	

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	22.2	mg/Nm³	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

Analyst

AUTHORISED SIGNATORY:

(M. Shashikala)

Head of the Laboratory



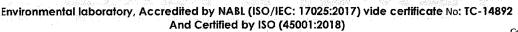
26 of 31

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OHSAS 18001:2007







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°C IS-11255(Part 01)
13	Stack Temperature	90°C IS-11255(Part 01)
14	Velocity of Flue Gas	8.87m/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 t	0	Cement mill-I			
2	Stack Diameter	(mtr)	1.4	111111111111111111111111111111111111111	on i simon i i i i i i i i i i i i i i i i i i i	

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1 Partio	culate Matter	23.4	mg/Nm³	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.Dhavateshwar) Analyst VERIFIED BY:

(P.Harika) Technical Manager

AUTHORISED SIGNATORY: (M. Shashikala)

Y: (M. Shashikala) Head of the Laboratory



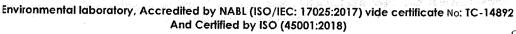
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Ph: 08392 255744, Website: www.isccrl.com email: chiefexecutive@tsccrl.com

DQS Inc.

CCRL

OHSAS 18001:2007







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 °C IS-11255(Part 01)
13	Stack Temperature	79 °C IS-11255(Part 01)
14	Velocity of Flue Gas	7.90 m/sec
15	Gas flow rate *	37194.11Nm 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

I Juan	t attached to	Cement mill -II	a a managana
2 Stack	Diameter (mtr)	1.4	America

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	25.4	mg/Nm³	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:**

Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala)

Head of the Laboratory

.....



"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
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Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892

And Certified by ISO (45001:2018)



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°C IS-11255(Part 01)				
13	Stack Temperature	92°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

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	12.9	mg/Nm³	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

Y: (M. Sbashikala) Head of the Laboratory

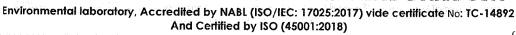
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Ph: 08392 255744, Website: www.isccrl.com email: chiefexecutive@tsccrl.com









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	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°C IS-11255(Part 01)
13	Stack Temperature	35 °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	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/Nm³	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:**

Technical Manager

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory

30 of 31

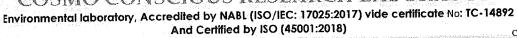


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OHSAS 18001:2007







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	- And the second of the second
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	[- <u> </u>
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/Nm³	IS 11255 (Part 01)	50.0
2	Oxides of Sulphur		mg/Nm³	CCRL/TOP/06:2016	600.0
3	Oxides of Nitrogen		mg/Nm³	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.Dhavateshwar) Analyst **VERIFIED BY:**

Technical Manager

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

31 of 31



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Ph: 08392 255744, Website: www.tsccrl.com email: chiefexecutive@tsccrl.com





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



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 °C IS-11255(Part 01)
13	Stack Temperature	115°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

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	25.5	mg/Nm³	IS 11255 (Part 01)	30.0
2	Sulphur dioxide (SO2)	52.3	mg/Nm³	CCRL/TOP/06:2016	100.0
3	Oxides of Nitrogen (NOX)	321.2	mg/Nm³	CCRL/TOP/06:2016	800.0
***************************************		End of R	eport		.1

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) Techniçal Manager

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory

6 of 13

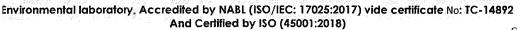


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Analysis Report of Stack Emission

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°C IS-11255(Part 01)
13	Stack Temperature	70 °C IS-11255(Part 01)
14	Velocity of Flue Gas	7.70 m/sec
15	Gas flow rate	37958.49 Nm³/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

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
 1.	Particulate Matter	25.2	mg/Nm³	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 Madager

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of≮he Laboratory

ANAB (G)

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Ph: 08392 255744, Website: www.iscarl.com email: chiefexecutive@tscarl.com

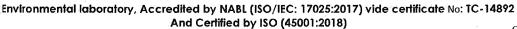
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DOS Inc.

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OHSAS 18001:2007







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°C IS-11255(Part 01)
13	Stack Temperature	97°C IS-11255(Part 01)
14	Velocity of Flue Gas	6.10 m/sec
15	Gas flow rate	213184.04 Nm³/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/Nm³	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

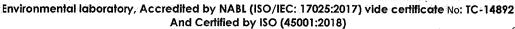
VERIFIED BY:

AUTHORISED SIGNATORY: (M. Shashikala)

Head of the Laboratory

OHSAS 18001:2007







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 °C IS-11255(Part 01)
13	Stack Temperature	89°C IS-11255(Part 01)
14	Velocity of Flue Gas	8.40 m/sec
15	Gas flow rate *	46527.26 Nm³/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)	14

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	21.1	mg/Nm³	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:

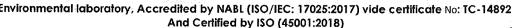
Head of the Laboratory

ANAE (G)

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

DOS Inc.







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°C IS-11255(Part 01)			
13	Stack Temperature	88°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	TC14892250000000130F			

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/Nm³	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) Fechnical Manager

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory

LO of 13



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





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

And Certified by ISO (45001:2018)



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°C IS-11255(Part 01)			
13	Stack Temperature	91°C IS-11255(Part 01)			
14	Velocity of Flue Gas	10.30 m/sec			
15	Gas flow rate	327462.74 Nm³/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

Eurona non non non non non non non non non	Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
	1	Particulate Matter	15.6	mg/Nm³	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.Harikà) Technical Manager

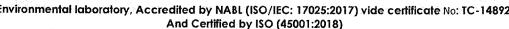
AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory











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°C IS-11255(Part 01)
13	Stack Temperature	35°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
	AND A DETECT OF THE WORLD MANAGES AND A DESCRIPTION AND			A A A A A A A A A A A A A A A A A A A	
1	Particulate Matter	18.9	mg/Nm³	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:

Technical Manager

AUTHORISED SIGNATORY:

Head of the Laboratory

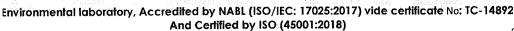


"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka) Ph: 08392 255744, Website: www.iscori.com email: chiefexecutive@tsccrl.com



OHSAS 18001:2007







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
1 Stack attached to	Captive Fower Faint
2 Stack Diameter (mtr)	3.30

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	SHUT DOWN	mg/Nm³	IS 11255 (Part 01)	50.0
2	Oxides of Sulphur		mg/Nm³	CCRL/TOP/06:2016	600.0
3	Oxides of Nitrogen		mg/Nm³	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:

Y: (M. Shashikala)

Head of the Laboratory

13 of 13







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



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°C IS-11255(Part 01)
13	Stack Temperature	117°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 Nm³/hr IS-11255(Part 03)
17	Moisture	<1 %
18	Production rate	423 TPH
19	Unique Lab Report Number	TC148922500000000247F

Stack Details

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

Emission Details

SI. No.	Parameters Parameters	Result	Unit	Method	Permissible Limit
1 :	Particulate Matter	24.6	mg/Nm³	IS 11255 (Part 01)	30.0
2	Sulphur dioxide (SO2)	Nil	mg/Nm³	CCRL/TOP/06:2016	100.0
3	Oxides of Nitrogen (NOX)	615.0	mg/Nm³	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:

Analyst

VERIFIED BY:

Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

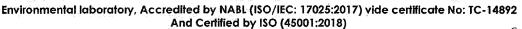


"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka) -Ph; 08392 255744, Website: www.tscort.com email: chiefexecutive@tsccrt.com



OHSAS 18001:2007







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°C IS-11255(Part 01)
13	Stack Temperature	69 °C IS-11255(Part 01)
14	Velocity of Flue Gas	7.10 m/sec
15	Gas flow rate	35000.68 Nm³/hr IS-11255(Part 03)
16	Moisture	<1 % IS-11255(Part 03)
1 7	Production rate	23 TPH
18	Unique Lab Report Number	TC148922500000000248F

Stack Details

[1	Stack attached to	Coal Mill		
2	Stack Diameter (mtr)	1.40	and the supply of the supply o	annia annia annia annia annia annia

Emission Details

	Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
The second second second	1.	Particulate Matter	24.7	mg/Nm³	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

12 of 22



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





And Certified by ISO (45001:2018)



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 °C IS-11255(Part 01)
13	Stack Temperature	89°C IS-11255(Part 01)
14	Velocity of Flue Gas	6.11 m/sec
15	Gas flow rate	216106.21 Nm³/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	and the second s
2 Stack Diameter (mtr)	3.86	

Emission Details

Sl. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	20.7	mg/Nm³	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

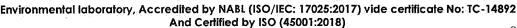
AUTHORISED SIGNATORY:

Head of the Laboratory

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka) Ph: 08392 255744, Website: www.tsccn.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 18 19 1
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 °C IS-11255(Part 01)
13	Stack Temperature	88°C IS-11255(Part 01)
14	Velocity of Flue Gas	9.88 m/sec
15	Gas flow rate *	45968.93 Nm³/hr IS-11255(Part 03)
16	Moisture *	<1 % IS-11255(Part 03)
17	Production rate*	125 TPH
18	Unique Lab Report Number	TC148922500000000250F

Stack Details

VICE CONTRACTOR CONTRA	
1 1 Craharrahadan 1	Cement mill-I
I I Stack attached to	- 看上記者等面配表記載,直看自己發展一直
7 Cta ala Diana atau (matu)	######################################
A STACK DIAMETER HULL	- Ref 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
- Couch Diameter (mile)	

Emission Details

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	23.3	mg/Nm³	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) Fechnical Manager

AUTHORISED SIGNATORY:

Head of the Laboratory

14 of 22







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



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 °C IS-11255(Part 01)
13	Stack Temperature	77°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 ТРН
18	Unique Lab Report Number	TC148922500000000251F

Stack Details

1 Stack attached t	Cement mill-II	
2 Stack Diameter	mtr) 1.4	

Emission Details

Sl. No.	Parameters	Result		Method	Permissible Limit
1	Particulate Matter	19.9	mg/Nm³	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 Manaker

AUTHORISED SIGNATORY:

Y: (M. Shashikala) Head of the Laboratory

15 of 22



"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
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Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-1489: And Certified by ISO (45001:2018)



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°C IS-11255(Part 01)
13	Stack Temperature	91°C IS-11255(Part 01)
14	Velocity of Flue Gas	10.0 m/sec
15	Gas flow rate	329847.18 Nm³/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

SI. No.	Parameters	Result	Unit	Method	Permissible Limit
1	Particulate Matter	18.1	mg/Nm³	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)

VERIFIED BY

(P.Harika) Technical Manager

AUTHORISED SIGNATORY

Head of the Laboratory

16 of 22



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



OHSAS 18001:2007



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



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°C IS-11255(Part 01)
13	Stack Temperature	36°C IS-11255(Part 01)
14	Velocity of Flue Gas	5.20 m/sec
15	Gas flow rate	20949.47 Nm³/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	1
2 Stack Diameter (mtr)	1.20	1

Emission Details

				E caire Ate -	
SI. No.	Parameters	Result	tunit	Method	Permissible Limit
1	Particulate Matter	33.5	mg/Nm³	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. Snasnikala)

Head of the Laboratory

17 of 22









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



And Certified by ISO (45001:2018)

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/Nm³	IS 11255 (Part 01)	50.0
2	Oxides of Sulphur		mg/Nm³	CCRL/TOP/06:2016	600.0
3	Oxides of Nitrogen		mg/Nm³	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 Mahag

AUTHORISED SIGNATORY:

Head of the Laboratory

18 of 22



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





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:

Sampling Location	Day Leq dB	Night Leq dB
Boundary side	68.5	64.8
Administrative Building	65.2	63.8
Lime Stone gate	71.4	68.5
Despatch gate	68.6	65.2
Near QC Lab.	60.6	58.4
Near Canteen	65.2	62.5
Plant main gate	60.5	58.2
General Store	62.2	60.7
	Boundary side Administrative Building Lime Stone gate Despatch gate Near QC Lab. Near Canteen Plant main gate	Sampling LocationLeq dBBoundary side68.5Administrative Building65.2Lime Stone gate71.4Despatch gate68.6Near QC Lab.60.6Near Canteen65.2Plant main gate60.5

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

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

MONITORED BY:

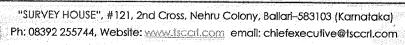
(G.Dhavaleshwar) Analyst

AUTHORISED SIGNATORY:















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 : November 2024

I. Noise Locations:

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

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

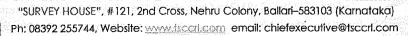
MONITORED BY:

(G.Dhavaleshwar) Analyst

AUTHORISED SIGNATORY:









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 th : 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	Residential Area limits dB(A) Leq		Industrial Area limits dB(A) Leq	
standards in dB(A) Leq (No.41,	Day time	Night time	Day time	Night time
Dt.11.01.2010) `	55	45	75	70
Method Adopted		Integrated Sour	1d 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:









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 : January 2025

I. Noise Locations:

SI. 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	Residential Area	limits dB(A) Leq	Industrial Area	limits dB(A) Leq
standards in dB(A) Leg (No.41,	Day time	Night time	Day time	Night time
Dt.11.01.2010)	55	45	75	70
Method Adopted		Integrated Sour	id 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:









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 : February 2025

I. Noise Locations:

SI. 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	Residential Area	limits dB(A) Leq	Industrial Area	limits dB(A) Leq
standards in dB(A) Leq (No.41,	Day time	Night time	Day time	Night time
Dt.11.01.2010)	55	45	75	70
Method Adopted		Integrated Sour	nd Level Meter	. Paganta hari

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:









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 Cordition : Satisfactory

6. Month of Monitoring : March 2025

I. Noise Locations:

SI. 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	Residential Area	limits dB(A) Leq	Industrial Area	limits dB(A) Leq
standards in dB(A) Leq (No.41,	Day time	Night time	Day time	Night time
Dt.11.01.2010)	55	45	75	70
Method Adopted		Integrated Sou	nd 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:











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:

SI. 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









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

	21.	Slag mill wei	gh feeder		68.5
10000 · ·	Sl. No.	Samplin	g Location	1	Leq
			-		dR

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

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MONITORED BY:

(G.Dhavaleshwar) Analyst

AUTHORISED SIGNATORY:

(M. Shashikala)

Head of the laboratory













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 : 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
50 E	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









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

SI. No.	Sampling Location	dB Leq	- Control of the Cont
21.	Slag mill weigh feeder	66.5	

dB Leq

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









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 : December 2024

II. Noise Locations:

SI. 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







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

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

ng Location dB Leq eigh feeder 68

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

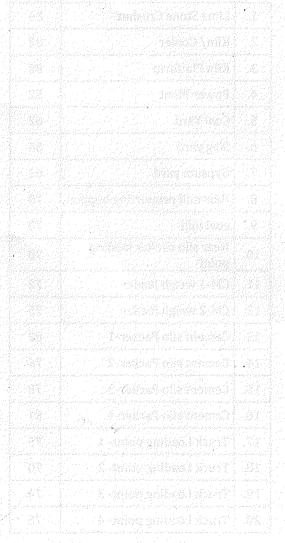
MONITORED BY:

(G.Dhavateshwar) Analyst

AUTHORISED SIGNATORY:

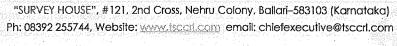
(M. Shashikala) Head of the laboratory

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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 : January 2025

II. Noise Locations:

SI. 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









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

21.	Slag mill weigh feeder	70	
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.Dhavāleshwar) Analyst

AUTHORISED SIGNATORY:

(M: Shashikala) Head of the laboratory

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"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
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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 : February 2025

II. Noise Locations:

SI. 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.	Gypşum 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







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

	21.	Slag mill weigh feeder	71
The state of the s	Sl. No.	Sampling Location	dB Leq

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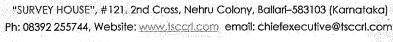
Note: 1. The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:

(G.Dhavaleshwar) Analyst

AUTHORISED SIGNATORY:









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 : March 2025

II. Noise Locations:

SI. 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







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

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

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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









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

Particulars of Sample Collected 4.

Fugitive Emission Air Quality Monitoring

5. Sample Condition Satisfactory

6. **Analysis Start Date** 7.

19.12.2024

Analysis Completion Date 8. Report Issue Date

20.12.2024 30.12.2024

9. Month of Monitoring

December 2024

Environmental condition at the time of 10.

29.2°C

sampling

Method adopted (Sampling & Analysis) 11.

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	e Locations for Cer	ment 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

Technical Manager

AUTHORISED SIGNATORY:

Head of the Laboratory



4 of 59

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





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

Name of the Industry 1.

M/s. JK Cement Works, Muddapur,

Address 2.

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Sample Collected By 3.

Cosmo Conscious Research Laboratory

Particulars of Sample Collected 4.

Fugitive Emission Air Quality Monitoring Satisfactory

Sample Condition 5.

25.03.2025

Analysis Start Date 6. **Analysis Completion Date** 7.

26.03.2025

Report Issue Date 8.

31.03.2025

Month of Monitoring

March 2025

Environmental condition at the time of

10. sampling 33.2°C

Method adopted (Sampling & Analysis) 11.

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	e Locations for Cer	nent Plant			
	20.03.2025	Lime Stone Crushing Site	514492	0.97	5.0
1.	20.03.2025	Fly ash Yard	514488	1.04	5.0
2.	1	Gypsum Yard	514493	0.95	5.0
3.	21.03.2025	m + 200 in	514484	0.85	5.0
4.	21.03.2025	Slag Yard	514482	1.05	5.0
5.	21.03.2025	Cement Mill	317702		
6.	21.03.2025	Lime Stone unloading hopper	514487	0.91	5.0
7	22.03.2025	Coal Yard	514481	0.86	5.0
7. 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.Dhàvaleshwar) **Analyst**

VERIFIED BY:

Technical Manager

AUTHORISED SIGNATORY:

ashikala) Head of the Laboratory







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

Analysis Report of STP Treated Sewage Water

Name of the Industry 1.

M/s. JK Cement Works, Muddapur.

2. Address (Unit: I.K.Cement Ltd), P.O.Muddapur-587122.

Dist.Bagalkot (Karnataka) India Cosmo Conscious Research Laboratory

3. Sample collected by

4. Name of the Location **Near Industry Premises**

5. Particulars of sample collected

STP Treated Sewage Water

6. Field Sample code IKSW2 **CCRL W 9838**

7. Lab Sample Code 8.

30.10.2024

Date of sample collection 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

Environmental condition at the 13.

time of sampling

29.2°C

Sl. No	Parameters	Protocol	Unit of Measurement	Results Oct.'-24	As per GSR 1265 E
PHYSI	CAL		-		
1.	рН	IS:3025 (part 11)-1983, RA-2022, Electrometric method	- asm	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
CHEM	ICAL *				Assa.
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 O2	APHA 23 rd 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:

aleshwar) **Analyst**

VERIFIED BY:

Technical Manager

AUTHORISED SIGNATORY:

Head of the 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,

Address Dis

Dist.Bagalkot (Karnataka) India

3. Sample collected by4. Name of the Location

: Cosmo Conscious Research Laboratory

5. Particulars of sample collected

: Near Guest House

6. Field Sample code

STP Treated Sewage Water

6. Fleid Sample code

IKSW3

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 Analyzed11. Report Issue Date

31.10.2024 to 04.11.2024

12. Method of Sampling

: 04.11.2024

Environmental condition at the

: IS:17614 (Part-I) 2021

time of sampling

: 29.2℃

Sl. No		D-oto col	Unit of	Results	As per GSR 1265 E
21.140	Parameters	Protocol	Measurement	Sept.'-24	
PHYSI	CAL	***			
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	<u>-</u>
3.	Total Suspended Solids	IS:3025 (part 17)-1984, , RA-2021, Gravimetric Method	mg/L	12	<50
CHEM	ICAL *				
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 O2	APHA 23 rd 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:

Y: (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

2. Address

3. Sample collected by 4. Name of the Location

5. Particulars of sample collected

Field Sample code 6.

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

Environmental condition at the . 13.

time of sampling

Unique Lab Report Number 14.

M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

Near Industry Premises

STP Treated Sewage Water

IKSW2

CCRL W 9873

22.11.2024

22.11.2024

23.11.2024 to 28.11.2024

29.11.2024

IS:17614 (Part-I) 2021

29.4°C

TC148922400000000219F

Sl. No	Parameters	Protocol	Unit of Measurement	Results Nov.'-24	As per GSR 1265 E
PHYSI	CAL				
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
CHEM	ICAL	The second secon		2.648	
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 O2	APHA 23 rd 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

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:

Analyst

VERIFIED BY:

AUTHORISED SIGNATORY:







vide certificate No. 11. (MEY) and Certificator 50 (4500) 2016.

Analysis Report of STP Treated Sewage Water

1. Name of the Project

2. Name of the Client

Sample collected by 3.

Name of the Location 4.

Particulars of sample collected 5.

Field Sample code 6.

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

Date of sample Analyzed 10.

Report Issue Date 11.

12. Method of Sampling M/s. JK Cement Works, Muddapur,

(Unit: I.K.Cement Ltd).P.O.Muddapur-587122.

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

Near Industry Premises

STP Treated Sewage Water

IKSW2

CCRL W 9873

22.11.2024

22.11.2024

23.11.2024 to 28.11.2024

29.11.2024

IS:17614 (Part-I) 2021

		The state of the s		Results	Standard
Sl. No.	Parameters	Protocol	Unit of Measure ment	Nov.'24	General Standards for Inland Surface water Schedule- VI (EPA-'86)
MICE	ROBIOLOGICAL				10 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m
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.Diravaleshwar) Analyst

(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.iscarl.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**

Field Sample code 6.

IKSW4

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

Environmental condition at the . 13. time of sampling

29.4°C

Unique Lab Report Number 14.

TC148922400000000221F

Sl. No	Parameters	Protocol	Unit of Measurement	Results Nov.'-24	As per GSR 1265 E
PHYSI	CAL	tarian di manananan mananan ma	Anno antinio a		SI CONTRACTOR OF THE PROPERTY
1.	рН	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
CHEM	ICAL	Diamong and Agriculture and the School of the Commission of the Co		erak estekkelkar	
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 O2	APHA 23 rd 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:

AUTHORISED SIGNATORY:

Head of the Laboratory

8 of 26







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Analysis Report of STP Treated Sewage Water

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Near Guest House

: STP Treated Sewage Water

: JKSW4

: CCRL W 9875

: 22.11.2024

: 22.11.2024

: 23.11.2024 to 28.11.2024

: 29.11.2024

: IS:17614 (Part-I) 2021

<u> </u>			I	Results	Standard
Sl. No.	Parameters	Protocol	Unit of Measure ment	Nov.'24	General Standards for Inland Surface water Schedule- VI (EPA-'86)
MICI	ROBIOLOGICAL		e let an establication de la company de la c		* (* · · ·
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:







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



Certificate No:TC14892

Analysis Report of STP Treated Sewage Water

1. Name of the Industry

2. Address

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the

time of sampling

14. Unique Lab Report Number

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Near Guest House

: STP Treated Sewage Water

: IKSW4

: CCRL W 9901

: 17.12.2024

: 17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

: IS:17614 (Part-I) 2021

: 29.2°C

TC148922400000000251F

Sl. No	Parameters	Protocol	Unit of Measurement	Results Dec.'-24	As per GSR 1265 E
PHYSI	CAL	***************************************	+		
1.	рН	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
CHEM	ICAL				***************************************
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 O2	APHA 23 rd 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:

Y: (Mr.Shashikala) Head of the Laboratory

of 59







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

Analysis Report of STP Treated Sewage Water

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Near Guest House

: STP Treated Sewage Water

: IKSW4

CCRL W 9901

17.12.2024

: 17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

: IS:17614 (Part-I) 2021

	e manualite e e e e e e e e e e e e e e e e e e		*************************************	Results	Standard
Sl. No.	Parameters	Protocol	Unit of Measure ment	Dec.'24	General Standards for Inland Surface water Schedule- VI (EPA-'86)
MICI	ROBIOLOGICAL				**************************************
1.	Fecal Coliform count	APHA 24 th 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:











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

Analysis Report of STP Treated Sewage Water

1. Name of the Industry

2. Address

Sample collected by 3.

Name of the Location 4.

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

Method of Sampling 12.

Environmental condition at the 13.

time of sampling

Unique Lab Report Number 14.

M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

Near Guest House

STP Treated Sewage Water

IKSW4

CCRL W 9932

09.01.2025

09.01.2025

10.01.2025 to 24.01.2025

25.01.2025

IS:17614 (Part-I) 2021

29.3°C

TC14892250000000012F

Sl. No	Parameters	Protocol	Unit of Measurement	Results Jan.'-25	As per GSR 1265 E
PHYSI	CAL		Armania de la compañía de la compañí	**	
1. ,	рН	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
CHEM	ICAL				
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 O2	APHA 23 rd 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:

eshwar) **Analyst**

VERIFIED BY:

AUTHORISED SIGNATORY:

Head of the Laboratory



4 of 31

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



OHSAS 18001:2007



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

Analysis Report of STP Treated Sewage Water

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

Near Guest House

: STP Treated Sewage Water

: IKSW4

: CCRL W 9932

: 09.01.2025

: 09.01.2025

: 10.01.2025 to 24.01.2025

: 25.01.2025

: IS:17614 (Part-I) 2021

				Results	Standard
SI. No.	Parameters	Protocol	Unit of Measure ment	Jan.'25	General Standards for Inland Surface water Schedule- VI (EPA-'86)
MIC	ROBIOLOGICAL		Altari, Commission Parkers		Samuel Commencer
1.	Fecal Coliform count	APHA 24 th 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:







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



Analysis Report of STP Treated Sewage Water

Name of the Industry

2. Address

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

Method of Sampling 12.

Environmental condition at the 13.

time of sampling

Unique Lab Report Number 14.

M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

Near Guest House

STP Treated Sewage Water

IKSW4

CCRL W 9977

24.02.2025

24.02.2025

24.02.2025 to 27.02.2025

28.02.2025

IS:17614 (Part-I) 2021

32.1°C

TC148922500000000125F

Sl. No	Parameters	Protocol	Unit of Measurement	Results Feb.'-25	As per GSI 1265 E
PHYSI	CAL				
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
CHEM	ICAL				· ·
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 O2	APHA 23 rd 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:

Analyst

VERIFIED BY:

Technical Manager

AUTHORISED SIGNATORY:

(M. Shasbikala) Head of the Laboratory

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



OHSAS 18001:2007



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

Analysis Report of STP Treated Sewage Water

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Near Guest House

: STP Treated Sewage Water

JKSW4

: CCRL W 9977

: 24.02.2025

: 24.02.2025

: 24.02.2025 to 27.02.2025

: 28.02.2025

: IS:17614 (Part-I) 2021

			:	Results	Standard	
SI. No.	Parameters	Protocol	Unit of Measure ment	Feb.'25	General Standards for Inland Surface water Schedule- VI (EPA-'86)	
MICI	ROBIOLOGICAL			a de Argon de la companya de la comp La companya de la co		
1.	Fecal Coliform count	APHA 24 th 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.

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



DQS Inc.





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

Analysis Report of STP Treated Sewage Water

1. Name of the Industry

2. Address

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

Environmental condition at the

time of sampling

14. Unique Lab Report Number

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Near Industry Premises

: STP Treated Sewage Water

: IKSW2

: CCRL W 9991

: 23.03.2025

24.03.2025

: 24.03.2025 to 29.03.2025

: 31.03.2025

: IS:17614 (Part-I) 2021

: 33.1°C

TC148922400000000245F

Sl. No	Parameters	Protocol	Unit of	Results Mar.'-25	
			Measurement		
PHYSI	CAL				
1.	рн •	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	
CHEM	ICAL			······································	
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 O2	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	

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:





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

Analysis Report of STP Treated Sewage Water

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Near Industry Premises

: STP Treated Sewage Water

: IKSW2

: CCRL W 9991

23.03.2025

24.03.2025

: 24.03.2025 to 29.03.2025

: 31.03.2025

: IS:17614 (Part-I) 2021

Sl. Parameters	Protocol	Unit of Measure ment	Results Mar.'25
MICROBIOLOGICAL		1 18 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Control of the Contro
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.

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:







WATER QUALITY MONITORING DATA

(GROUND WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the time of sampling

14. Unique Lab Report Number

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

Near Main Gate

: Bore well

IKGW11

: CCRL W 9870

: 22.11.2024

: 22.11.2024

: 23.11.2024 to 28.11.2024

: 29.11.2024

: IS:17614 (Part-I) 2021

29.4°C

TC148922400000000222F

SI. No.	Parameters	Protocol	Unit of Measure	Results	specifica	ng water tion Std. as 0500:2012
			ment	Nov.'24	Desirable Limits	Permissible Limits
PHY	'SICAL			23 (1.8)		
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	ъС	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.	рН	IS:3025 (part 11)-1983, RA-2012, Electrometric method	<u>.</u>	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		-
CHE	MICAL		***************************************			
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	-	<u>-</u>
10.	Chemical Oxygen Demand	APHA 24 th 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
	L	1	L	<u> </u>	Co	nt'd

Cont'd...



10 of 26

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







SI. No.	Parameters	Protocol	Unit of Measure ment	Results	Drinking water specification Std. as per IS:10500:2012	
110.				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 24 th Edition 4500-SO4 ² -E Turbidimetric method	mg/L	40.74	200	400
19.	Fluoride as F	APHA 24 th 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		-
TRAC	E METALS		····	40/datil-40/00/00/00/00/00/00/00/00/00/00/00/00/0	······································	<u> </u>
24.	Total Iron as Fe	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.30	No relaxation
25.	Nickel as Ni	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.02	No relaxation
26.	Manganese as	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	0.30
27.	Copper as Cu	APHA 24 th 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 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.04	No relaxation
30.	Silver as Ag	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	No relaxation
31.	Chromium as Cr	APHA 24 th 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.Dhavateshwar) Analyst VERIFIED BY:

(P. Harika) Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

11 of 26



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





WATER QUALITY MONITORING DATA

(GROUND WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Near Main Gate

: Bore well

: JKGW11

: CCRL W 9870

: 22.11.2024

: 22.11.2024

: 23.11.2024 to 28.11.2024

: 29.11.2024

: IS:17614 (Part-I) 2021

SI.	Parameters Protocol Measure —	Protocol		Results	Drinking water specification Std. as per IS:10500:2012		
No.		Nov.'24	Desirable Limits	Permissible Limits			
TRA	CE METALS			Messey Madage Statement			
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	BDL	0.001	No relaxation	
MICI	ROBIOLOGICAL	Statistical Control of the Control o	n and an and an an an and an			Hannan and Company of the Company of	
2.	Total Coliform count	APHA 24 th Edition 9222-B Membrane filter technique	CFU/ 100 ml	Absent	Shall not be detectable in any 100 ml sample	ď.	
3.	E.Coli count	APHA 24 th 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:**

Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

12 of 26



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





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



WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the time of sampling

14. Unique Lab Report Number

M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

: VIP Guest House RO Water

RO Water

: IKGW2

CCRL W 9889

17.12.2024

17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

IS:17614 (Part-I) 2021

29.2°C

TC148922400000000252F

Sl. No.	Parameters	Parameters Protocol		Results	Drinking water specification Std. as per IS:10500:2012	
			ment	Dec.'24	Desirable Limits	Permissible Limits
PHY	/SICAL		aeminingsinaan proporties teen see	odiko Sirakosia in mira		Van 1000 11 11 11 11 11 11 11 11 11 11 11 1
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	aC.	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.	рН	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		-
CHE	MICAL		Patronia de la companya de la compa	<u>Laboration de la constitución d</u>	<u> </u>	<u> </u>
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 24 th 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 Emission photometric 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...





OHSAS 18001:2007



Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017)

vide certificate No : TC-14892 and Certified by ISO (45001:2018)

Sl. No.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012	
IVU.			ment	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 24 th Edition 4500-SO4 ² -E Turbidimetric method	mg/L	1.22	200	400
19.	Fluoride as F	APHA 24 th 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	-	-
TRAC	E METALS				Andrew Park	I
24.	Total Iron as Fe	APHA 24 th 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 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.05	1.50
28.	Zinc as Zn	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	5	15
29.	Lead as Pb	APHA 24 th 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 24 th 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**



12 of 59

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



OHSAS 18001:2007



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

WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: VIP Guest House RO Water

RO Water

: IKGW2

: CCRL W 9889

: 17.12.2024

17.12.2024

17.12.2024 to 26.12.2024

: 30.12.2024

: IS:17614 (Part-I) 2021

SI.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012		
No.	Talameters Lovery Control Con		ment	Dec.'24	Desirable Limits	Permissible Limits	
TRA	CE METALS						
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	BDL	0.001	No relaxation	
MICE	ROBIOLOGICAL		and the second s	ana Milatana	· · · · · · · · · · · · · · · · · · ·	Halinen i alla alla alla alla alla alla alla a	
2.	Total Coliform count	APHA 24 th 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.

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

ANALYZED BY:

(G.Dhavaleshwar) Analyst VERIFIED BY: 1/8

(P. Harika) Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

ANAB (B)

13 of 59

"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
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Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No : TC-14892 and Certified by ISO (45001:2018)



WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the time of sampling

14. Unique Lab Report Number

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: General Guest House RO Water

: RO Water

IKGW3

: CCRL W 9890

: 17.12.2024

17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

IS:17614 (Part-I) 2021

29.2°C

TC148922400000000253F

SI. No.	Parameters	- 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2		Results	Drinking water specification Std. as per IS:10500:2012	
	The state of the s		ment	Dec.'24	Desirable Limits	Permissible Limits
PHY	YSICAL					
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	°C	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	- 1.27 (2.27)	-
CHE	MICAL		t			
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	Ī	<u> </u>
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...









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

SI. No.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012	
	and the second of the second o		ment	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 SO4	APHA 24 th Edition 4500-SO4 ² -E Turbidimetric method	mg/L	1.31	200	400
19.	Fluoride as F	APHA 24 th 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	•	-
TRAC	E METALS		ki mamana mamana maka	90000000000000000000000000000000000000	<u> </u>	<u> </u>
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 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.02	No relaxation
26.	Manganese as	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	0.30
27.	Copper as Cu	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.05	1.50
28.	Zinc as Zn	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	5	15 `
29.	Lead as Pb	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.01	No relaxation
30.	Silver as Ag	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	No relaxation
31.	Chromium as Cr	APHA 24 th 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: 1

(P. Harika) **Technical Manager**

AUTHORISED SIGNATORY:

(Mashikala) **Head of the Laboratory**

15 of 59

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





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

WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

: General Guest House RO Water

: RO Water

: JKGW3

: CCRL W 9890

: 17.12.2024

: 17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

: IS:17614 (Part-I) 2021

Sl.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012		
No.			ment	Dec.'24	Desirable Limits	Permissible Limits	
TRA	CE METALS						
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	BDL	0.001	No relaxation	
MICE	ROBIOLOGICAL	4 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		;	d hood, in the world house have been a suited and the second		
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	. zom Rei	
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

16 of 59









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



WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the time of sampling

14. Unique Lab Report Number

M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

: Packing Plant RO Water

RO Water

: IKGW6

CCRL W 9891

17.12.2024

17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

JU.12.202 T

IS:17614 (Part-I) 2021

29.2°C

TC148922400000000254F

SI. No.	Parameters	Parameters Protocol		Results	Drinking water specification Std. as per IS:10500:2012	
			ment	Dec.'24	Desirable Limits	Permissible Limits
PHY	SICAL	Programme Hamman and Bental Control of the Control	×	and the second second second	4.4.4.4	minnennilli
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	ъС	25.20	-	- -
3.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	μs/cms	114.6	and the second second second	-
4.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2023, Gravimetric method	mg/L	81.70	500	2000
5.	рН	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		<u>-</u>
CHE	MICAL	Sylvania ya sana ana ana ana ana ana ana ana ana a	and bend fidely in any 1225 years		Alexander of the second	
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

Conf'd...



"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
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CCRL ** OHSAS 18001:2007

17 of 59



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vide certificate No : TC-14892 and Certified by ISO (45001:2018)

Sl. No.	Parameters	Parameters Protocol		Results	Drinking water specification Std. as per IS:10500:2012	
140.	Branchine Commence of the second second second second		ment	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 24 th Edition 4500-SO4 ² -E Turbidimetric method	mg/L	4.18	200	400
19.	Fluoride as F	APHA 24 th 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	-	-
TRAC	E METALS					
24.	Total Iron as Fe	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.30	No relaxation
25.	Nickel as Ni	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.02	No relaxation
26.	Manganese as	APHA 24 th 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 24 th 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 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	No relaxation

Direct Air Acetylene Flame Method **END OF REPORT**

Note: 1. BDL: Below detectable limit. (Oil & Grease <4, for trace metals <0.1)

Chromium as Cr

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

Direct Air Acetylene Flame Method

APHA 24th Edition 3111B

ANALYZED BY:

31.

Analyst

VERIFIED BY: Newlo

mg/L

(P. Harika) **Technical Manager**

BDL

AUTHORISED SIGNATORY:

(M. Shashikala) **Head of the Laboratory**

18 of 59





No

relaxation

0.05



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WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

Name of the Location 4.

5. Particulars of sample collected

Field Sample code 6.

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122.

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

Packing Plant RO Water

RO Water

IKGW6

CCRL W 9891

17.12.2024

17.12.2024

17.12.2024 to 26.12.2024

30.12.2024

IS:17614 (Part-I) 2021

Sl.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012		
No.			ment	Dec.'24	Desirable Limits	Permissible Limits	
TRAC	CE METALS					***************************************	
1,	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	BDL	0.001	No relaxation	
MICE	OBIOLOGICAL		ggggggggaaaaaaaaaaaaaaa				
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	arpa _aya	
3.	E.Coli count	APHA 24 th 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









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



WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the time of sampling

14. Unique Lab Report Number

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Canteen RO Water

: RO Water

: JKGW7

: CCRL W 9892

17.12.2024

17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

IS:17614 (Part-I) 2021

29.2°C

TC148922400000000255F

Sl. No.	Parameters	Protocol	Unit of Measure	Results	specifica per IS:10	ng water tion Std. as 0500:2012
			ment	Dec.'24	Desirable Limits	Permissible Limits
PHY	SICAL	on the control of the	A Maria da Cara da Car Cara da Cara d	gara Pist P Jawa wa Li Rampinson		
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	°C	25.40		<u>-</u>
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	• • • • • • • • • • • • • • • • • • •	
CHE	MICAL			·		
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	-	<u>-</u>
10.	Chemical Oxygen Demand	APHA 24 th 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 Emission Photometric 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...



20 of 59
"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)

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

-	<u></u> ;
Certificate	No:TC14892
	aniareo marrenamene

SI. No.	Parameters	Protocol	Unit of Measure	Results Dec.'24	Drinking water specification Std. as per IS:10500:2012	
NO.			ment		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 SO4	APHA 24 th Edition 4500-SO4 ² -E Turbidimetric method	mg/L	21.19	200	400
19.	Fluoride as F	APHA 24 th 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	-	-
TRAC	E METALS			Septiment of the second		*******
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 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.02	No relaxation
26.	Manganese as	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	0.30
27.	Copper as Cu	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.05	1.50
28.	Zinc as Zn	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	5	15
29.	Lead as Pb	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.01	No relaxation
30.	Silver as Ag	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	No ∢relaxation
31.	Chromium as Cr	APHA 24 th 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: 1/200

(P. Harika) Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

ANAB (G)

21 of 59

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





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

WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Canteen RO Water

: RO Water

: JKGW7

: CCRL W 9892

: 17.12.2024

: 17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

: IS:17614 (Part-I) 2021

Sl.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012		
No.	1 ar ameters			Dec.'24	Desirable Limits	Permissible Limits	
TRA	CE METALS				(SEP STREET STRE		
1.	Mercury as Hg	APHA 24 th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	BDL	0.001	No relaxation	
MICE	ROBIOLOGICAL				Sarillin man dan dan dan dan dan dan dan dan dan d		
2.	Total Coliform count	APHA 24 th Edition 9222-B Membrane filter technique	CFU/ 100 ml	Absent	Shall not be detectable in any 100 ml sample		
3.	E.Coli count	APHA 24 th 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

ANAE (G)

22 of 59

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



WATER QUALITY MONITORING DATA

(RO DRINKING WATER)

Name of the Project 1.

2. Name of the Client

3. Sample collected by

Name of the Location 4.

5. Particulars of sample collected

Field Sample code 6.

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the time of sampling

14. **Unique Lab Report Number** M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

CCR RO Water (Industry)

RO Water

IKGW7

CCRL W 9893

17.12.2024

17.12.2024

17.12.2024 to 26.12.2024

30.12.2024

IS:17614 (Part-I) 2021

29.2°C

TC148922400000000256F

Sl. No.	Parameters	Protocol	Unit of Measure ment	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
PHY	SICAL	Secretaria in the secretaria and sec	kantai ja	administration of the		
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	°C	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.	рĦ	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		-
CHE	MICAL			om magazine et e e e e e e e e e e e e e e e e e	yan da inga salah da inga s Salah da inga salah da ing	
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...





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

Sl.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012	
NO.	. kga sidenga ja akka pilaganan	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ment	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 24 th Edition 4500-SO4 ² -E Turbidimetric method	mg/L	16.77	200	400
19.	Fluoride as F	APHA 24 th Edition 4500-F ⁻ D. SPADNS Method	mg/L	0.84	1 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 CaCO3	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	•	•
TRAC	E METALS		Prantingski			!
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 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.02	No relaxation
26.	Manganese as	APHA 24 th 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 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	5	15
29.	Lead as Pb	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.01	No relaxation
30.	Silver as Ag	APHA 24 th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	No relaxation
31.	Chromium as Cr	APHA 24 th 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:

Analyst

VERIFIED BY: (4)

(P. Harika) **Technical Manager**

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

24 of 59



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



121

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	114 J
LS crusher (main equipment) including stacks, Bag filters along with ventilation system for the control of fugitive dust emissions	708.04
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	
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

	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			