JKLCL/ENVT/MOEF/ ) Date: 28.11.2019

To,

Regional Director,
Ministry of Environment, Forests and Climatic Change
Regional Office (Central Region).Kendriya Bhawan,
5th Floor, Sector "H" Aliganj,
Lucknow – 226024 (UP)

Sub: Submission of Six Monthly EC Compliance Report (April- 2019 – September 2019) by M/s JK Lakshmi Cement Ltd., Village – Jaykapuram, Tehsil – Pindwara, Dist. Sirohi, Rajasthan

Ref: Environment Clearance No: J-11011/306/2013-I-A-II/ (I) dated, 28.10.2016

Dear Sir,

Please find enclosed herewith point wise Six Monthly EC Compliance status for the period from April- 2019 – September 2019 of Environment Clearance condition stipulated by MoEF&CC vide letter no. J-11011/306/2013-I-A-II/ (I) dated 28.10.2016.

We hope you will find the above in order.

Thanking you. Yours Faithfully,

FOR JK LAKSHMI CEMENT LTD.

(Rajpal Singh Shekhawat) General Manger (Production)

CC TO:

- Regional Director, Central Pollution Control Board 4th Floor, Sahkar Bhawan North T.T. Nagar Bhopal 462003
- The Member Secretary, Rajasthan State Pollution Control Board, 4 Institutional Area, Jhalana Doongari, Jaipur 302004
- 3) Regional Officer, Rajasthan State Pollution Control Board, SA-6, Mandia Road Industrial Area, Pali) (Rajasthan) 306401



Regd. & Works Office: P.O. Jaykaypuram-307019, Dist. Sirohi (Raj.), Phone: 02971-244409/244410, Fax: 02971-2444 E-mail: lakshmi\_cement@lc.jkmail.com Website: www.jklakshmi.com

Admn. Office: Nehru House, 4, Bahadur Shah Zafar Marg, New Delhi-110002, Phone: 330011422/33001112.

Fax: 91-11-23722251/23722021, E-Mail: lcit@jkmail.com; C I N L74999RJ1938PLC019511

# COMPLIANCE OF CONDITIONS OF ENVIRONMENTAL CLEARANCE LETTER NO. F.NO. J -11011/306/2013-IA/II(I) DATED 28.10.2016 OF

M/s JK LAKSHMI CEMENT Ltd., JAYKAYPURAM, TEHSIL PINDWARA, DISTT. SIROHI (RAJ.)

S.No.	CONDITIONS	COMPLIANCE STATUS					
A.	SPECIFIC CONDITION	33 III.1132 3111133					
1	The project proponent should install 24x7 air monitoring device to monitor emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.	Continuous Ambient Air Quality Monitoring System has been installed for 24X7 monitoring parameters PM <sub>10</sub> , PM <sub>2.5</sub> , NOx, SO2 & CO. <b>Monitoring Report enclosed as Annexure-I.</b>					
2	The Standards issued by the Ministry vide G.S.R. No. 612(E) dated 25 <sup>th</sup> August 2014 regarding cement plants with respect to particulate matter, SO2 and NOx shall be followed.	It is being followed and we are maintaining the emission level of particulate matter, SO2 and NOx, as per the standards issued by MoEF&CC notification G.S.R No. 612 (E) dated 25 <sup>th</sup> August 2014 and as amended by MoEF&CC dated 9 <sup>th</sup> and 10 <sup>th</sup> May 2016 regarding cement plants. <b>Stack Monitoring Report is attached as Annexure-II.</b>					
3	Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control viz. Electrostatic precipitators to Clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill. Low NOx burners shall be provided to control NOx emissions. Regular calibration of the instrument must be ensured.	Continuous Emission Monitoring Systems (CEMS) to monitor gaseous emissions (SO2 & NOx) installed for Kiln/VRM Stacks. At present we are not going for expansion project. We have installed adequate pollution control equipment systems for existing plant viz. Electrostatic Precipitators (ESP) to clinker cooler, Reverse Air Bag House (RABH), Pulse Jet Bag House to Raw Mill/Kilns and Pulse Jet Bag House to coal mill and cement mills. We had installed Low NOx Burner in Kiln 2. Moreover; JKLC was the first among the Indian Cement Plants to adopt SNCR technology for DeNOx from Kiln 1. Further, we have installed SNCR in Kiln 2 & Kiln 3 also. At present we have SNCR in all three Kilns.					
4	The project proponent shall take all precautionary measures during construction/operation of the project for conservation and protection of endangered fauna namely sloth bear, leopard etc. found in the project area and its surroundings. Mitigation measures including rescue and rehabilitation of wild animals coming in conflict with humans will form part of overall conservation strategy etc. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of fund for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific conservation plan shall be submitted to the Ministry of Environment and Forest and its Regional Office, Lucknow.	At present we are not going for expansion project, The conservation plan has been made and submitted to DFO, Sirohi vide letter no. JKLC/Env/ToR/B77/10336 dt. 13/01/2016. Subsequent communication for approval vide letter no JKLC letter no - JKLC/ENV/Limestone/EC dated 11.11.2016.  And we are pursuing the matter vide letter no: JKLC/Env/Cons/Mine/90293 dated 12/09/2019 with Dy. Conservator of Forest (Wildlife), Mount Abu, District Sirohi (Raj)					

г	Efforts shall be made to address.	We are continuously mutting affect towards and
5	Efforts shall be made to achieve power consumption of 70 units/tone for Portland Pozzolona Cement (PPC) and 95 units/tone for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.	We are continuously putting effort towards reducing the power consumption through process optimization. We have received Energy Efficiency Awards from reputed institute. This is continuously improvement process, we will definitely strive to achieve power consumption as prescribed in the condition.
6	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November 2009 shall be followed.	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November 2009 is being followed.  Monitoring Report enclosed as Annexure-I
7	AAQ Modeling shall be carried out based on the specific mitigative measures taken in the existing project and proposed for the expansion project to keep the emissions well below prescribed standards.	At present we are not going for expansion project. However, we are complying with emissions standards as notified by MoEFCC vide Notification dt. 09 <sup>th</sup> May 2016 and 10 <sup>th</sup> May 2016 (with co-processing). Emissions are well within norms. CEMS are installed for all major stacks for 24x7 monitoring. Online monitoring data are being transferred to CPCB and RSPCB servers.
8	Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guideline/Code of Practice issued by the CPCB in this regard shall be followed.	We have provided adequate pollution control systems for all sources. We have covered stock pile Limestone, Coal and other raw materials. Conveyor belts are covered. Transfer towers are well equipped with bag filters. Water spray systems are provided with transfer tower at suitable locations. We are complying with CPCB fugitive dust emission guideline.
9	Arsenic and Mercury shall be monitored in emissions, ambient air and water.	Arsenic and Mercury parameters are being monitored from MoEFCC and NABL recognized lab.  Report is being attached as annexure IV
10	The coal yard shall be lined and covered.	We have Coal Stock Pile properly covered by shade and paved by impervious concrete floor. It is being complied.
11	Efforts shall be made to reduce impact of the transporter of the raw materials and end products on the surrounding environment including agricultural land by use of conveyors/rail mode of transport wherever feasible. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.	We have Captive Limestone Mines adjacent to Cement Plant. Crushed limestone is being conveyed through covered conveyor belts to cement plant. Raw materials are being received through both road and rails. All the roads inside and outside of the plant premises of factory boundary are paved and we are strictly maintaining speed limit restrictions to avoid spillage of materials. Company has provided separate truck parking area and periodic PUC camps are being organized to monitor vehicular emissions.
12	Efforts shall be made further to reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.	Water in cement plant is used only for industrial cooling purpose and it is recycled and reused. We are already operating air cooled condenser in our Waste Heat Recovery based power plant and Coal Based Captive Thermal Power Plants. We are continuously striving to reduce water consumption for sustainable growth. We are maintaining ZLD from factory premises. Domestic sewage is being treated in STP (Cap. 400 m3/day). Treated water is being recycled and reused in industrial cooling in own cement plant.
13	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	We have constructed artificial groundwater recharge structures with various rainwater harvesting techniques in colony area to collect rain water and augmentation of ground water table. We have two water reservoirs of capacity 12500 m3 and 16500 m3

14	Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office, SPCB and CPCB.	constructed in colony area for rain water harvesting. Moreover, we have channelized storm rain water into nearby artificial ponds constructed and developed by JKLC. Recently we have constructed 20 Nos. of more ground water recharge structures in the colony. We have also constructed 08 nos. MPit under Mukhya Mantri Jal Swavlamban Yojna in Rampura village.  We have dry manufacturing for cement. Water is only used for cooling purposes in cement plant. Hence, there is no generation of effluent from cement manufacturing process. In CTPPs waste water is being used in industrial cooling in own cement plant after necessary treatment. We are maintaining zero liquid discharge. Monitoring of ground water is being done periodically as per Ground Water NOC condition. Annual report is also being submitted with competent authorities.  We have STP (Cap. 400 m3/day) for treatment of domestic sewage. Treated water is being used in industrial cooling in own cement plant. Treated water analysis is being done by approved lab. Periodically. Analysis report is being submitted with RSPCB.
15	All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorize recyclers/re-processors only.	All dust from pollution control equipments is being recycled and reused in the process for cement manufacturing. Used oil and Lead Acid Batteries are being sold to authorized recyclers only.
16	The kiln shall be provided with a flexible fuel feeding system to enable use of hazardous wastes and other wastes including biomass etc.	We have separate AFR feeding system for all lines. We are utilizing AFR and Biomass for Co-processing into cement kiln.
17	The proponent shall examine and prepare a plan for utilization of high calorific wastes such as chemical waste, distillation residues, refuse derived fuels, etc. as alternate fuels based on availability and composition. For this, the proponent shall identify suitable industries with such wastes and enter into an MOU for long term utilization of such wastes as per the Environment (Protection) Rules, 1986 and with necessary approvals.	We are already utilizing alternate fuels based on availability and composition such as Biomass, RDF Fluff, De-oiled cake, Pulp waste, plastic waste, TDI Tar, Waste mix solids etc. We had obtained requisite authorization from RSPCB in this regard.
18	Efforts shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly. The PP shall enter into an MOU with units with potential for generating hazardous waste and in accordance with Hazardous Waste Regulations and prior approval of the PCB.	We are already utilizing preprocessed hazardous more than 15 nos. of waste such as Distillation residue, process waste, ETP Sludge, Plastic Waste, TDI Tar and Waste mix solids as fuel for co-processing into Kiln after obtained authorization from Rajasthan State Pollution Control Board.
19	Green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines.	We are continuously developing Green belt area along with 10 meter wide green belt on suitable sides along the periphery of the factory premise and road side by planting native species as per guideline.

20	The project proponent shall provide for salar	We have installed roof top color papels for electricity						
20	The project proponent shall provide for solar light system for all common areas, street lights,	We have installed roof top solar panels for electricity in our school building, guest house, married hostel,						
	villages, parking around project area and	field hostel and Manoranjan Kendra located in colony						
	maintain the same regularly.	premises. Presently we have insallted solar panels with						
	maintain the same regularly.	generation capacity of 264 KW.						
21	The project proponent shall provide for LED	We have replaced CFL with LED lights in most of the						
	lights in their offices and residential areas.	offices of cement plant, mines, captive power plant,						
		and in residential areas.						
22	All the recommendations made in the Charter	CREP for the Cement Plant is being followed.						
	on Corporate Responsibility for Environment	Compliance of CREP guideline for cement plant is						
	Protection (CREP) for the Cement Plants shall	enclosed as Annexure-V.						
	be implemented.							
23	At least 2.5% of the total cost of the project	At present we are not going for expansion project.						
	shall be earmarked towards the Enterprise	We are doing CSR towards local needs viz. Health -						
	Social Commitment (ESC) based on local needs	Integrated family welfare programmes under						
	and action plan with financial and physical	NayaSavera, SwacchaKishori – SwathaKishori, Dental						
	breakup/details shall be prepared and	Check up Camp, HIV/Aids and Silicosis Awareness						
	submitted to the Ministry's Regional Office,	Programme, Nand Ghar Yojana (Adoption of 05 Anganwadi Centres), Education Project (Adult Literacy						
	Implementation of such program shall be	, ,						
	ensured accordingly in a time bound manner.	Programme, Aarambh (Admission of new & dropout children), Sponsoring Teachers in nearby govt.						
		Schools, Scholarship for students), Skill Development						
		Programme (Computer Operator, Sewing, Mobile						
		Repairing & Beautician Training Programme),						
		Livelihood Enhancement Project (Vegetable Seeds						
		Distribution programme), Rural Development						
		Developing Rampura as a model village, Infrastructure						
		Development in nearby Villages, Promotion of Sports						
		and Games, Drinking Water facility in rural areas, Need						
		based help to the nearby community etc.						
24	The proponent shall prepare a detailed CSRT	At present we are not going for expansion project.						
	Plan for every year for the next 5 years for the	During the April-2019 to September-2019 the						
	existing – cum –expansion project, which							
	includes village-wise, sector-wise (Health,	following broad areas:						
	Education, Sanitation, Health, Skill Development and Infrastructure requirements							
	such as strengthening of village roads, avenue	S.No Particulars Actual (						
	plantation etc) activities in consultation with	Lakhs)						
	the local communities and administration. The	1 Health Care 11.60						
	CSR Plan will include the amount of 2% retain	2 Drinking Water 6.5						
	annual profits as provided for in Clause 135 of	3 Education Promotion 0.12						
	the Companies Act, 2013 which provides for 2%	4 Skill Development 0.41						
	of the average net profits of previous 3 years	5 Livelihood Initiatives 0.37						
	towards CSR activities for life of the project. A	6 Rural Development 2.10						
	separate budget head shall be created and the	Total 21.07						
	annual capital and revenue expenditure on							
	various activities of the plan shall be submitted							
	as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded							
	on the company website and shall also be							
	provided in the Annual Report of the company.							
25	A Risk Assessment Study and Disaster	Risk Assessment Study and Disaster Preparedness and						
23	Preparedness and Management Plan along with	Management Plan along with mitigation measures has						
	the mitigation measures shall be prepared with	already been submitted with the previous compliance						
	a focus of Disaster Prevention and a copy	report vide letter no. JKLCL/ENVT/MOEF/60003						
1								
	submitted to the Ministry's Regional Office,	dt.31/05/2017.						

	SPCB and CPCB within 03 months of issue of environment clearance letter.	
26	To educate the workers, all the work places where dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.	Noted. Signage boards are mounted at suitable locations. It is being followed.
27	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	At present we are not going for expansion project. Pre- placement medical examination is being carried out at the time of recruitment and records are being maintained. At present we are not going for expansion project but we will surely carry out periodical medical examination of the workers going to be engaged in the project with proper scheduling of health examination of the workers.
28	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Shall be complied. At present no expansion project work started.
C NI-	COMPLETIONS	CONADUANCE CTATUC
S.No.	CONDITIONS  GENERAL CONDITIONS:	COMPLIANCE STATUS
1	The project authorities must strictly adhere to	Noted We are complying time to time with order
'	the stipulation made by the Rajasthan Pollution Control Board and the State Government.	Noted. We are complying time to time with order published from RSPCB as applicable with us.
2	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).	Noted. We will not carry out any further expansion or modification without prior approval of the MoEFCC.
3	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> 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 Lucknow and the SPCB/CPCB once in six months.	It is being complied. Third Party Ambient Air & Stack Monitoring Reports are attached as <b>annexure IV</b> .
4	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Cement manufacturing is a dry process. Our process does not generate Industrial wastewater from factory premises. The treated water generated from STP is only recycled and reused in industrial cooling in own cement plant.  Wastewater generated from captive power plant is recycled and reused for industrial cooling purposes after necessary treatment. We are maintaining ZLD.
5	The overall noise level in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosure etc. on all sources of noise generation. The ambient noise levels should conform to the	The overall noise level in and around the plant area is maintained well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosure etc. on all sources of noise generation.  Efforts are made to confirm the standards within 75 dB

	standards prescribed under EPA Rules, 1989 viz. 75 dB A (day time) and 70 dB A (nighttime).	A (day time) and 70 dB A (night time).  Noise Monitoring Report is enclosed <b>Annexure-III.</b>
6	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	It is being complied.
7	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	We are harvesting rain water through various techniques & we have developed different rain water harvesting structures solely to recharge the ground water table as per hydrogeology of area. We have channelized storm rain water from hillocks into artificial ponds (support and constructed by JKLC) in nearby villages. Moreover, we had constructed 08 nos. MPIT in Rampura village under Mukhya Mantri Jal Swavlamban Yojna. We have received 2 <sup>nd</sup> position National Water Excellence Award – 2018 from QCFI.
8	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 surroundings villages like community development programmes, educational programmes, drinking water supply and health care etc.	Noted. At present we are not going for expansion project. We will comply all the environmental protection measures and safeguards recommended in the EIA/EMP report. JKLC is doing CSR activities in nearby villages under different verticals.
9	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environmental pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) 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 Lucknow. The funds so provided shall not be diverted for any other purpose.	Noted. At present we are not going for expansion project.
10	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/representation, 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.	The public notice was notified in the two local news papers viz. Dainik Bhaskar& Rajasthan Patrika dt. 5th November 2016 and copies of the same were submitted to RO, MOEFCC, Lucknow.  The Environmental Clearance letter was submitted to concern authorities vide letter dated 22.11.2016. It is also put on the company's Official website which is accessible to everyone
11	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 MoEFCC at Lucknow. The respective Zonal	We are periodically uploading compliance of the stipulated environmental clearance conditions including monitoring data report to our website. It is being submitted periodically to MoEFCC, Lucknow office.  AAQMs and Stack CEMS data are being monitored and

12	Office of CPCB and the SPCB. The criteria pollutant levels namely; PM <sub>10</sub> , SO <sub>2</sub> , NOx (ambient levels as well as stack emission) or critical sectoral parameters, indicating for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.  The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEFCC, the respective Zonal Office of this Ministry at Lucknow/CPCB/SPCB shall monitor the stipulated conditions.	We are submitting six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEFCC, the respective Zonal Office of CPCB and the SPCB without delay.
13	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form – V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MoEFCC at Lucknow by e-mail.	Environmental statement for each financial year ending 31 <sup>st</sup> March in Form – V as is mandated is timely submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 and also sent to the respective Regional Office of the MoEFCC at Lucknow by e-mail.  As amended subsequently, We also put the same on the website of the company along with the status of compliance of environmental conditions and shall be complied.
14	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, Forests and Climate Change (MoEFCC) at <a href="http://envfornic.in">http://envfornic.in</a> . 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 Lucknow.	The public notice was notified in the two local news papers viz. Dainik Bhaskar& Rajasthan Patrika dt. 5th November 2016 and copies of the same were submitted to RO, MOEFCC, Lucknow.
15	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.	At present expansion project yet not started. As soon as we implement expansion project same will be submitted to your good office.

## JK Lakshmi Cement Ltd.,Sirohi,Rajasthan

## AMBIENT AIR QUALITY MONITORING RESULTS: APRIL-2019 to SEPTEMBER-2019

S. NO	MONITORING STATIONS	Month	PM 10	PM 2.5	Month		Month	PM 10	PM 2.5	SO <sub>2</sub>	NOX
			AVG	AVG	AVG	AVG		AVG	AVG	AVG	AVG
		Apr-19	81	32	10	14	Jul-19	69	29	10	10
1	Near mine Magizne Area	May-19	78	32	10	14	Aug-19	47	17	10	10
		Jun-19	62	27	8	10	Sep-19	63	24	13	11
		Apr-19	76.0	28.0	10.0	12.0	Jul-19	58	26	7	9
2	Field Hostel	May-19	80.0	29.0	9.0	14.0	Aug-19	39	14	7	9
		Jun-19	58.0	24.0	7.0	12.0	Sep-19	48	17	18	13
		Apr-19	75	28	9	13	Jul-19	71	24	14	17
3	Up Hill( Near Ply Ground)	May-19	72	30	11	11	Aug-19	52	18	16	19
		Jun-19	67	26	8	13	Sep-19	46	17	22	14
		Apr-19	69	26	8	11	Jul-19	65	22	12	13
4	Near New Colony	May-19	76	34	11	13	Aug-19	46	15	12	12
		Jun-19	62	29	5	8	Sep-19	47	18	12	11

### JK LAKSHMI CEMENT LTD, JAYKAYPURAM

### STACK MONITORING REPORT (April 2019 to September 2019)

							]	Kiln 1						
C/NI	Stack Attached to	Emission (mg/Nm3)												
S/N	Stack Attached to	Parameter	April 2	019	May 20	19	June 20	June 2019		19	August 2	2019	September 2019	
		r at afficier	Date	Result	Date	Date	Result	Date	Date	Result	Date	Result	Date	Result
1.	Kiln – RM Hybrid	PM	04.04.2019	21.6	14.05.2019	13.4	28.06.2019	13.8	08.07.2019	25.1	03.08.2019	13.36	09.09.2019	16.13
		PM		18.7		14.1		13.1		14.7		6.0		19.5
2.	Kiln – VRM RABH	SO2	03.04.2019	BDL	15.05.2019	BDL	28.06.2019	19.4	12.07.2019	9.8	06.08.2019	41.59	29.09.2019	BDL
		NOx		352.4		458.7		348.6		300.7		547.91		384.8
3.	Cooler ESP 1	PM	09.04.2019	22.3	19.05.2019	16.7	01.06.2019	13.2	10.07.2019	14.5	02.08.2019	48.25	05.09.2019	10.02
4.	Coal Mill 1	PM	03.04.2019	12.8	15.05.2019	9.4	02.06.2019	13.8	21.07.2019	BDL	05.08.2019	6.05	12.09.2019	15.2
5.	Cement Mill 1	PM	05.04.2019	11.2	25.05.2019	4.1	29.06.2019	8.6	21.07.2019	10.0	07.08.2019	5.3	3.09.2019	6.4
6.	Cement Mill 3	PM	13.04.2019	2.7	18.05.2019	6.8	30.06.2019	3.8	29.07.2019	8.6	13.08.2019	6.3	19.09.2019	6.96

							]	Kiln 2						
S/N	Stack Attached to	Emission (mg/Nm3)												
5/19	Stack Attached to	Parameter	April 2	019	May 20	19	June 20	June 2019		)19	August 2	2019	September 2019	
		rarameter	Date	Result	Date	Date	Result	Date	Date	Result	Date	Result	Date	Result
	1. Kiln – VRM RABH SO2 NOx	PM		23.6		26.0		20.2		11.1		17.7		9.72
1.		SO2	02.04.2019	BDL	03.05.2019	52.4	17.00.2017	126.8	00.07.2019	28.8	10.00.2017	46.8	24.09.2019	56.9
		NOx		482.3		538.4		480.3		575.71		670		664.9
2.	Cooler ESP	PM	10.04.2019	14.9	04.05.2019	14.9	20.06.2019	24.0	22.07.2019	8.16	18.08.2019	15.8	18.09.2019	9.9
3.	Coal Mill 2	PM	02.04.2019	13.6	12.05.2019	10.3	22.06.2019	8.5	22.07.2019	9.07	19.08.2019	14.55	16.09.2019	7.36
4.	Cement Mill 2	PM	11.04.2019	8.2	09.05.2019	7.2	17.06.2019	6.3	23.07.2019	10.24	23.08.2019	12.89	11.09.2019	20.1
3.	Cement Mill 4	PM	-	-	-	-	17.06.2019	4.3	25.07.2019	8.25	-	-	17.09.2019	5.9

							]	Kiln 3												
S/N	Stack Attached to	Emission (mg/Nm3)																		
5/11	Stack Attached to	Parameter	April 2	019	May 20	19	June 20	June 2019		19	August 2	2019	September 2019							
		rarameter	Date	Result	Date	Date	Result	Date	Date	Result	Date	Result	Date	Result						
	1. Kiln – VRM RABH SC	PM		18.1		16.5		15.0	24.07.2019 17.1 147.5 590	17.1		26.9		14.4						
1.		SO2	01.04.2019	52.4	11.05.2019	151.4	20.00.2017	103.4		147.5	13.08.2019 164.1 595.63	18.09.2019	94.9							
		NOx		360.7	682.4	682.4		418.7		590		595.63		683.2						
2.	Cooler ESP	PM	08.04.2019	28.1	13.05.2019	18.2	20.06.2019	12.4	24.07.2019	20.0	13.08.2019	24.5	20.09.2019	17.4						
3.	Coal Mill 3	PM	01.04.2019	12.8	06.05.2019	22.0	27.06.2019	8.8	25.07.2019	9.1	07.08.2019	9.1	23.09.2019	15.06						
4.	Cement Mill 5	PM	13.04.2019	14.0	21.05.2019	4.3	28.06.2019	10.2	17.07.2019	28.1	13.08.2019	13.2	1	-						
3.	Cement Mill 6	PM	14.04.2019	13.6	12.05.2019	8.7	22.06.2019	9.7	27.07.2019	11.7	07.08.2019	8.5	19.09.2019	10.4						

		Captive Power Plant (40 MW & 18 MW) April 2019 - September 2019										
S/N	Stack Attached to	Emission (mg/Nm3)										
		Parameter	Date	Result	Date	Result						
		PM		35.83		26.72						
1.	18 MW	SO2	15.06.2019	562	19.09.2019	528						
		NOx		237		264						
		PM		31.63		18.14						
2.	40 MW	SO2	15.06.2019	561	19.09.2019	555						
		NOx		252		269						

### JK LAKSHMI CEMENT LTD, JAYKAYPURAM

## AMBIENT NOISE MONITORING REPORT (April 2019 - September 2019)

PERIOD	April	2019	May	2019	June	2019	July	2019	Augus	st 2019	Septeml	ber 2019
LOCATION	Day Time	Night Time										
Near Play ground.	64.6	52.8	61.4	41.9	62.3	55.5	61.3	47.8	58.9	49.8	62.6	50.6
Near New C Type Colony	55.8	48.6	52.4	49.6	57.4	50.4	56.2	48.3	59.1	52.9	54.5	41.5
Near Mine Magazine.	62.4	44.1	62.3	38.4	63.2	57.7	66.4	48.7	64.1	49.2	60.2	53.3
Near CPP	64.1	51.7	64.3	57.5	65.6	57.7	69.4	55.6	68.4	59.1	60.2	53.3



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E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com

TEST REPORT

Report No./ULR No.:	TC502519500001273F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit:	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	13-09-2019
Point of Collection	Cement Mill No.1 [24*41'31"N 73*0'12"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis:	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By:	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Particulate matter [mg/Nm3]	17.39	IS 11255 (Part 1):1985 Reaffirmed 2014	30

#### Notes :-

- Parameter No. 1 covered under NABL scope and Parameter No. NONE does not cover under NABL scope #
- Parameter No. NONE outsourced for testing.
- The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.
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Senior Analyst

(Report No: TC502519500001273F)



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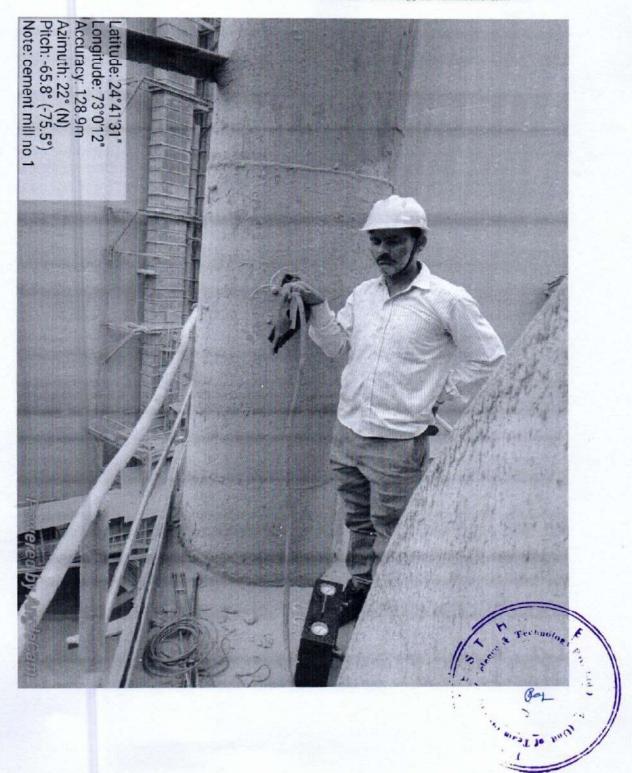
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Lab.: G1-584, Sitapura Industrial Area
Tonk Road, JAIPUR-302022 Raj.
Ph.: 0141-2771865, 94602-22039, 94602-22049
E-mail: teamtesthouse@gmail.com

E-mail: director@teamtesthouse.com





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E-mail : teamtesthouse@gmail.com E-mail : director@teamtesthouse.com

#### **TEST REPORT**

Report No./ULR No.:	TC502519500001274F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	14-09-2019
Point of Collection	Cement Mill No.2 [24*41'32"N 73*0'9"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis:	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By:	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Particulate matter [mg/Nm3]	13.41	IS 11255 (Part 1):1985 Reaffirmed 2014	30

#### Notes :-

- # Parameter No. 1 covered under NABL scope and Parameter No. NONE does not cover under NABL scope
- # Parameter No. NONE outsourced for testing.
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Puran Mal Yogi Senior Analyst

Authorized Signatory

(Report No: TC502519500001274F)

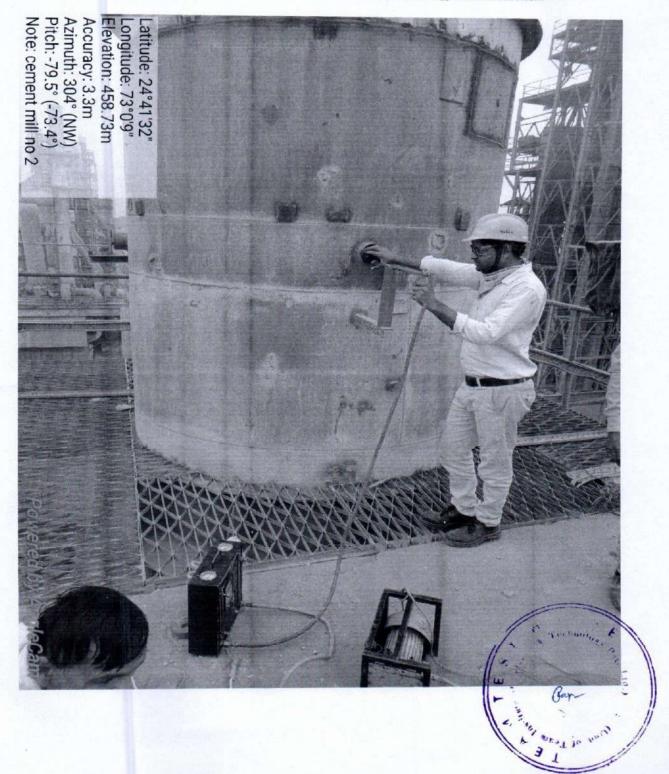


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Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 0141-2771865, 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com

E-mail: director@teamtesthouse.com





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E-mail : teamtesthouse@gmail.com E-mail : director@teamtesthouse.com

TEST REPORT

Report No./ULR No. :	TC502519500001275F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	19-09-2019
Point of Collection	Cement Mill No.3 [24*41'29"N 73*0'12"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :		Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Particulate matter [mg/Nm3]	13.54	IS 11255 (Part 1):1985 Reaffirmed 2014	30

#### Notes :-

- # Parameter No. 1 covered under NABL scope and Parameter No. NONE does not cover under NABL scope
- # Parameter No. NONE outsourced for testing.
- # The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.
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Senior Analyst

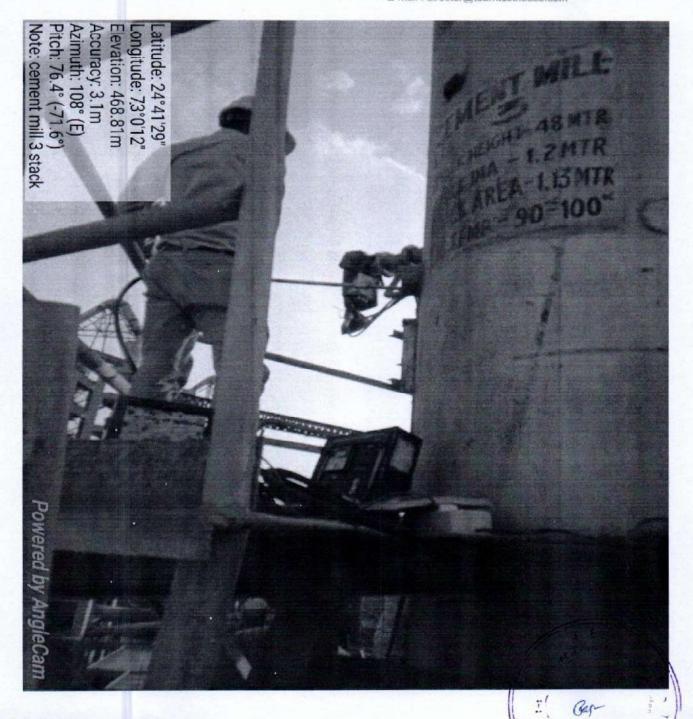
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Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com

### TEST REPORT

Report No./ULR No. :	TC502519500001276F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	19-09-2019
Point of Collection :	Cement Mill No.4 [24*41'31"N 73*0"9"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

#### RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Particulate matter [mg/Nm3]	14.16	IS 11255 (Part 1):1985 Reaffirmed 2014	30

### Notes :-

- # Parameter No. 1 covered under NABL scope and Parameter No. NONE does not cover under NABL scope
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Senior Analyst

orized Signatory

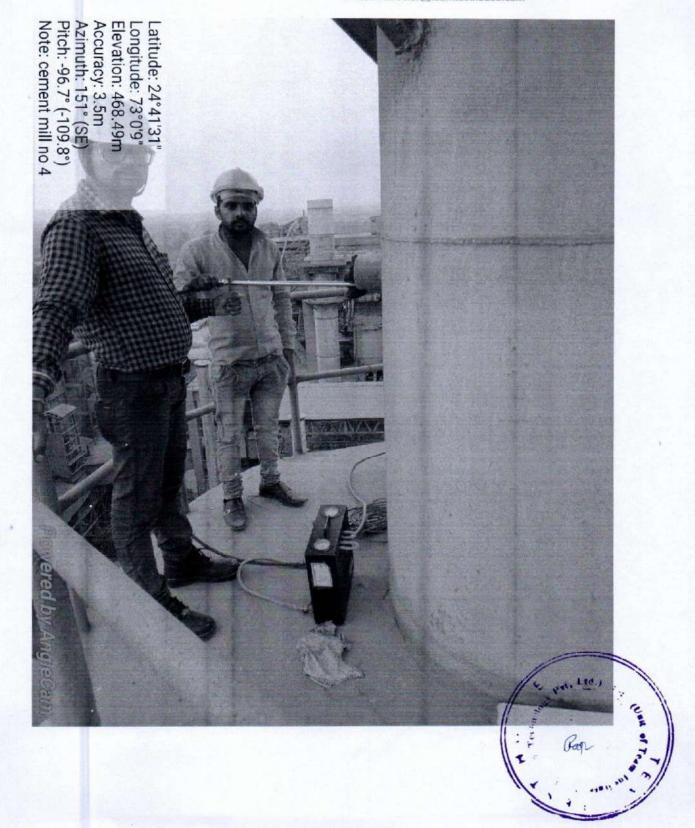
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Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 0141-2771865, 94602-22039, 94602-22049





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Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com

Lab.: G1-584, Sitapura Industrial Area

E-mail: director@teamtesthouse.com

### TEST REPORT

Report No./ULR No.:	TC502519500001277F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	19-09-2019
Point of Collection	Cement Mill No.5 [24*41'30"N73*0'8"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By:	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

#### **RESULTS**

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Particulate matter [mg/Nm3]	15.24	IS 11255 (Part 1):1985 Reaffirmed 2014	30

### Notes :-

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Tat Youi

Senior Analyst

(Report No: TC502519500001277F)



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E-mail: director@teamtesthouse.com

### **TEST REPORT**

Report No./ULR No.:	TC502519500001278F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	18-09-2019
Point of Collection	Cement Mill No.6 [24*41'29"N 73*0'8"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis:	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	•	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Particulate matter [mg/Nm3]	15.76	IS 11255 (Part 1):1985 Reaffirmed 2014	30

#### Notes :-

- # Parameter No. 1 covered under NABL scope and Parameter No. NONE does not cover under NABL scope
- # Parameter No. NONE outsourced for testing.
- The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied. #
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Puran Mal Yogi

Senior Analyst

Authorized Signatory

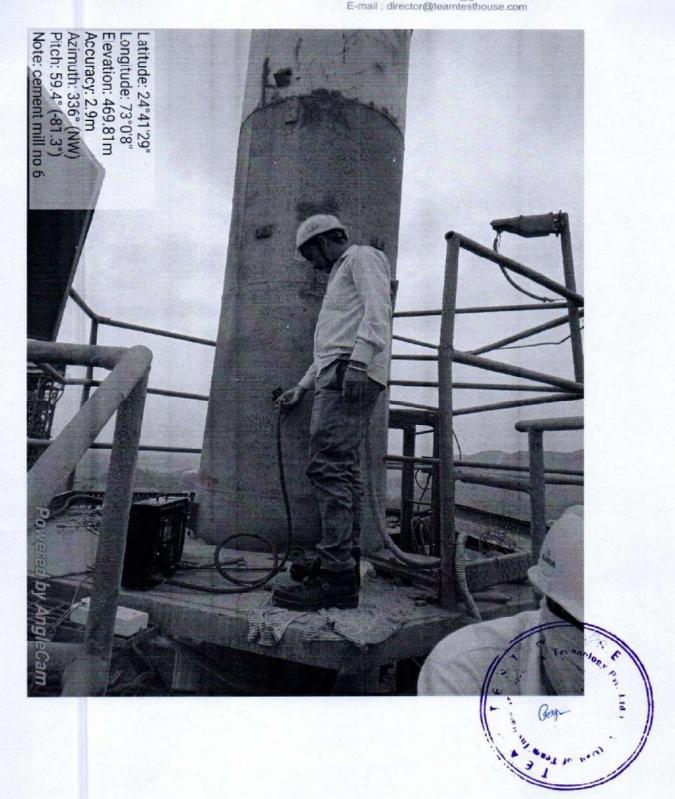
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Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 0141-2771865, 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com





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E-mail: director@teamtesthouse.com

TEST REPORT

Report No./ULR No.:	TC502519500001270F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	15-09-2019
Point of Collection :	Coal Mill 1 [24*41'39"N 73*0'12"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	•	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS S.No Observed Value | Testing Protocol **Parameters** Limits as per Environment protection rules. 1986 Particulate matter [mg/Nm3] 15.68 IS 11255 (Part 1):1985 30 Reaffirmed 2014

#### Notes :-

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Wal Yogi Senior Analyst

Rajesh Maheshwar

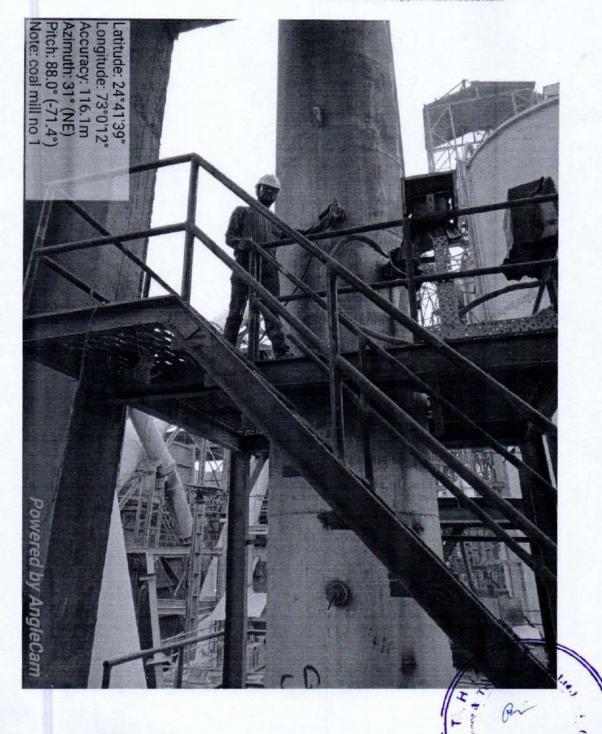
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Office: E-65, Chitranjan Marg, C-Scheme, Jaipur-302001 Phone: 0141-2369980, 2771865 Website: www.teamtesthouse.com

Tonk Road, JAIPUR-302022 Raj.

Ph.: 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com

Lab.: G1-584, Sitapura Industrial Area

### TE

EST REPORT		E-mail: director@teamtesthouse.com	
	Date :	02-10-2019	

Report No./ULR No.:	TC502519500001271F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	16-09-2019
Point of Collection	Coal Mill 2 [24*41'54"N 72*59'33"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By:	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

### DECLII TO

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Particulate matter [mg/Nm3]	11.61	IS 11255 (Part 1):1985 Reaffirmed 2014	30

### Notes :-

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Mal Yogi Senior Analyst

Rajeshivianeshwan

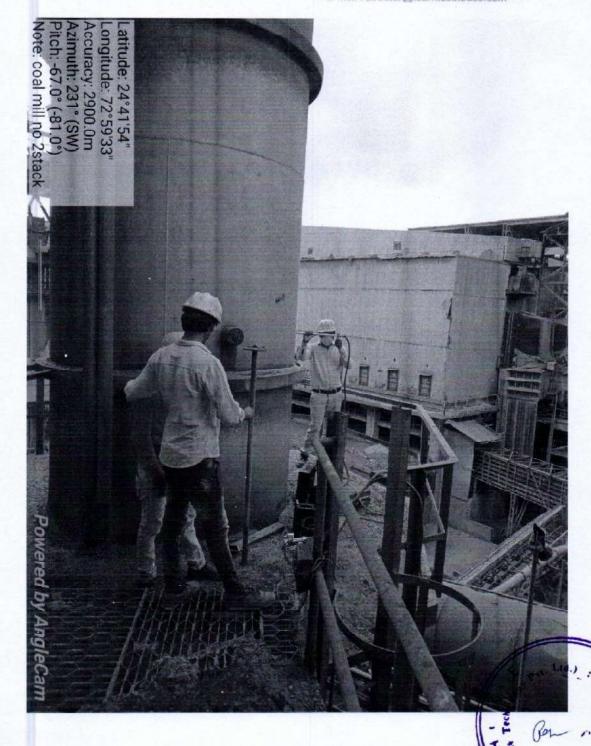
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(Report No: TC502519500001271F)



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Office: E-65, Chitranjan Marg, C-Scheme, Jaipur-302001 Phone: 0141-2369980, 2771865 Website: www.teamtesthouse.com Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com

TEST REPORT

Report No./ULR No.:	TC502519500001272F	Date :	03-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	20-09-2019
Point of Collection	Coal Mill 3 [24*42'11"N 72*58'38"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	•	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

**RESULTS** S.No **Parameters** Observed Value | Testing Protocol Limits as per Environment protection rules. 1986 Particulate matter [mg/Nm3] 10.41 IS 11255 (Part 1):1985 30 Reaffirmed 2014

### Notes :-

- Parameter No. 1 covered under NABL scope and Parameter No. NONE does not cover under NABL scope
- # Parameter No. NONE outsourced for testing.
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- The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Mai Yes.

Raiesh Maheshwan

**Authorized Signatory** 

(Report No: TC502519500001272F)

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Office: E-65, Chitranjan Marg, C-Scheme, Jaipur-302001

Phone: 0141-2369980, 2771865 Website: www.teamtesthouse.com Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com

E-mail : director@teamtesthouse.com

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Report No./ULR No. :	TC502519500001280P	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	18-09-2019
Point of Collection	KILN-1 (China Mil) VRM 24*41'22.1" N 73*00'14.7" E]	Date of Receipt :	26-09-2019
Date of Test/Analysis:	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

#### RESULTS

S.No	Parameters	Observed Value	Testing Protocol	
1	Particulate matter [mg/Nm3]	20.37	IS 11255 (Part 1):1985 Reaffirmed 2014	30
2	Sulphur Dioxide [mg/Nm3]	33.7	IS 11255(Part 2) :1985 Reaffirmed 2014	
3	Oxides of Nitrogen [mg/Nm3]	519	IS 11255 (Part 7) :1985 Redffirmed 2012	-
4	Carbon monoxide [mg/Nm3]	180	IS 5182 (Part 10): 1999	
5	Mercury & its Compounds [mg/Nm3]	BDL (< 0.001)	USEPA method 29	0.05
6	Arsenic [mg/Nm3]	BDL (< 0.2)	USEPA method 29	

#### Notes :-

- # Parameter No. 1,2,3,4 covered under NABL scope and Parameter No. 5,6 does not cover under NABL scope
- # Parameter No. NONE outsourced for testing.
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Puran Mai Yogi Senior Analyst

Rajesh Maheshwan

Authorized Signatory

A CALL MA

(Report No: TC502519500001280P)



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E-mail: director@teamtesthouse.com

### TEST REPORT

Report No./ULR No.:	TC502519500001279P	Date :	03-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit:	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	17-09-2019
Point of Collection	KILN -1 (Hybrid) VRM [24*41'25"N 73*0'15"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By:	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS.

S.No	Parameters	Observed Value	Testing Protocol	
1	Particulate matter [mg/Nm3]	14.62	IS 11255 (Part 1):1985 Reaffirmed 2014	100
2	Sulphur Dioxide [mg/Nm3]	BDL (<2.0)	IS 11255(Part 2) :1985 Reaffirmed 2014	
3	Oxides of Nitrogen [mg/Nm3]	784	IS 11255 (Part 7):1985 Redffirmed 2012	-
4	Carbon monoxide [mg/Nm3]	135	IS 5182 (Part 10): 1999	
5	Mercury & its Compounds [mg/Nm3]	BDL(<0.001)	USEPA method 29	0.05
6	Arsenic [mg/Nm3]	BDL (< 0.2)	USEPA method 29	-

#### Notes :-

- Parameter No. 1,2,3,4 covered under NABL scope and Parameter No. 5,6 does not cover under NABL scope
- Parameter No. NONE outsourced for testing.
- The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.
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- The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

Senior Analyst

Rajesh Maneshwan Authorized Signatory

(Report No: TC502519500001279P)

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Office: E-65, Chitranjan Marg, C-Scheme, Jaipur-302001 Phone: 0141-2369980, 4020820 Website: www.teamtesthouse.com Lab. : G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph. : 0141-2771865, 94602-22039, 94602-22049





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TEST REPORT

Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com

Report No./ULR No. :	TC502519500001281P	Date :	03-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	17-09-2019
Point of Collection	KILN-2 (RABH) VRM 24*41'23"N 73*0'13"E	Date of Receipt :	26-09-2019
Date of Test/Analysis:	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	•	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

S.No	Parameters	Observed Value	Testing Protocol	
1	Particulate matter [mg/Nm3]	20.32	IS 11255 (Part 1):1985 Reaffirmed 2014	30
2	Sulphur Dioxide [mg/Nm3]	BDL (< 2.0)	IS 11255(Part 2) :1985 Reaffirmed 2014	
3	Oxides of Nitrogen [mg/Nm3]	780	IS 11255 (Part 7) :1985 Redffirmed 2012	-
4	Carbon monoxide [mg/Nm3]	186	IS 5182 (Part 10): 1999	
5	Mercury & its Compounds [mg/Nm3]	BDL(<0.001)	USEPA 29	0.05
6	Arsenic [mg/Nm3]	BDL (< 0.2)	USEPA 29	

#### Notes :-

- Parameter No. 1,2,3,4 covered under NABL scope and Parameter No. 5,6 does not cover under NABL scope
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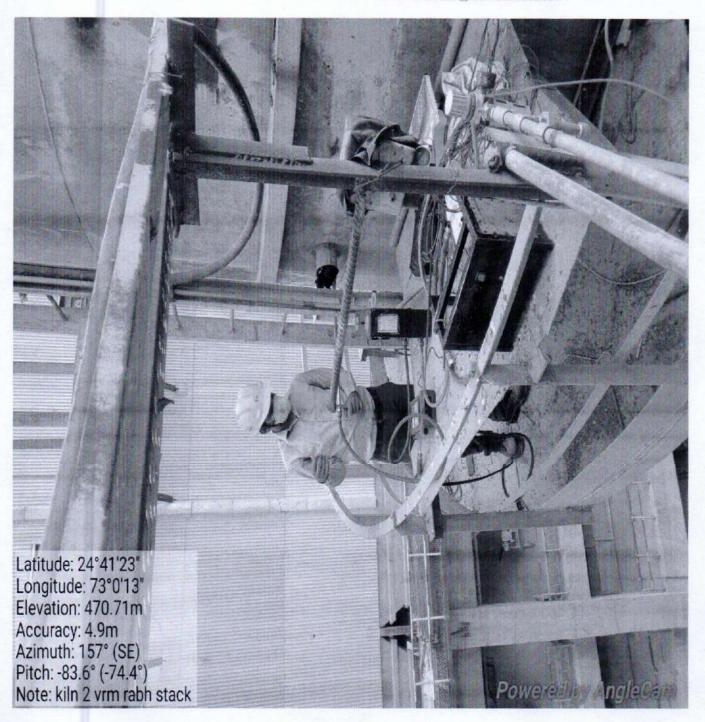
Rajeshiviaheshwan **Authorized Signatory** 

(Report No: TC502519500001281P)



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E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com

TEST REPORT

Report No./ULR No.:	TC502519500001282P	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	19-09-2019
Point of Collection	KILN-3 (RABH) VRM 24*41'20N 73*0'12"E	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA
Quantity of Sample :	•	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

DECLIFE

S.No	Parameters	Observed Value	Testing Protocol	
1	Particulate matter [mg/Nm3]	18.04	IS 11255 (Part 1):1985 Reaffirmed 2014	30
2	Sulphur Dioxide [mg/Nm3]	BDL (< 2.0)	IS 11255(Part 2) :1985 Reaffirmed 2014	
3	Oxides of Nitrogen [mg/Nm3]	732	IS 11255 (Part 7):1985 Redffirmed 2012	-
4	Carbon monoxide [mg/Nm3]	85	IS 5182 (Part 10): 1999	
5	Mercury & its Compounds [mg/Nm3]	BDL(<0.001)	USEPA method 29	0.05
6	Arsenic [mg/Nm3]	BDL (< 0.2)	USEPA method 29	

#### Notes :-

- # Parameter No. 1,2,3,4 covered under NABL scope and Parameter No. 5,6 does not cover under NABL scope
- Parameter No. NONE outsourced for testing.
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Senior Analyst

Authorized Signatory

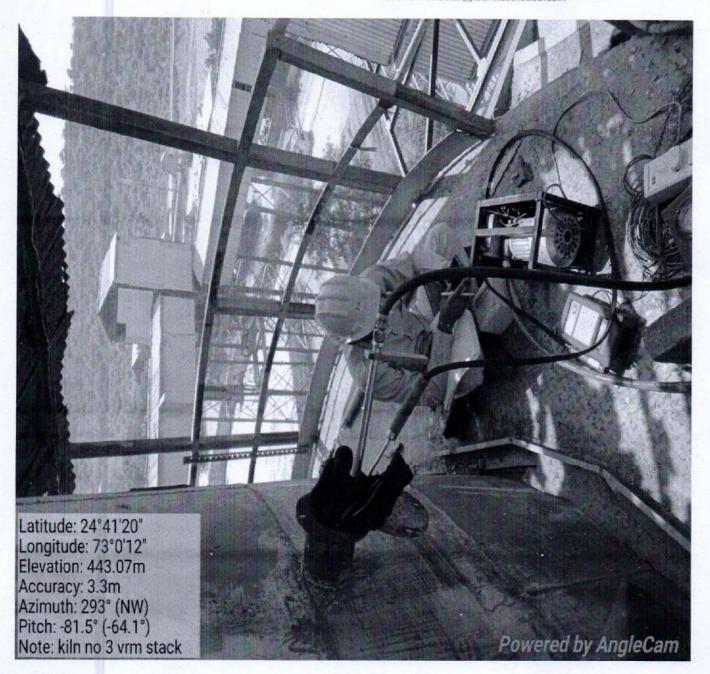
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Tonk Road, JAIPUR-302022 Raj.
Ph.: 0141-2771865, 94602-22039, 94602-22049
E-mail: teamtesthouse@gmeil.com









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Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com

TEST REPORT

E-mail: director@teamtesthouse.com

Report No./ULR No.:	TC502519500001267F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	14-09-2019
Point of Collection	Kiln 1 Cooler ESP 24*41'34"N 73'0'4"E	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By:	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Particulate matter [mg/Nm3]	18.44	IS 11255 (Part 1):1985 Reaffirmed 2014	30

#### Notes :-

- # Parameter No. 1 covered under NABL scope and Parameter No. NONE does not cover under NABL scope
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Puran Mal Yogi Senior Analyst

Rajesh Maheshwan, Authorized Signatory

(Report No: TC502519500001267F)



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Office: E-65, Chitranjan Marg, C-Scheme, Jaipur-302001 Phone: 0141-2369980, 4020820 Website: www.teamtesthouse.com

Lab.: G1-584, Sitapura Industrial Area
Tonk Road, JAIPUR-302022 Raj.
Ph.: 0141-2771865, 94602-22039, 94602-22049
E-mail: teamtesthouse@gmail.com

E-mail : director@teamtesthouse.com





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Ph.: 94602-22039, 94602-22049 E-mail : teamtesthouse@gmail.com E-mail : director@teamtesthouse.com

#### TEST REPORT

Report No./ULR No.:	TC502519500001268F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	15-09-2019
Point of Collection :	Kiln 2 Cooler ESP 24*41'25"N 73*0'7"E	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA
Quantity of Sample :		Sample Collected By:	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

S.No Parameters Observed Value Testing Protocol Limits as per Environment protection rules, 1986

1 Particulate matter [mg/Nm3] 17.95 IS 11255 (Part 1):1985 Reaffirmed 2014

#### Notes :-

- # Parameter No. 1 covered under NABL scope and Parameter No. NONE does not cover under NABL scope
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Puran Wal Yogi Senior Analyst

Rajesh Waheshwan Authorized Signatory

(Report No: TC502519500001268F)



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Office : E-65, Chitranjan Marg, C-Scheme, Jaipur-302001 Phone: 0141-2369980, 4020820 Website : www.teamlesthouse.com

Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 0141-2771865, 94602-22039, 94602-22049

E-mail: teamtesthouse@gmail.com E-mail : director@teamtesthouse.com





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TEST REPORT

Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com

Report No./ULR No. :	TC502519500001269F	Date :	02-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	20-09-2019
Point of Collection :	Kiln 3 Cooler ESP 24*42'45"N 72*59'7"E	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	•	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal		Fit for testing

**RESULTS** 

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Particulate matter [mg/Nm3]	19.62	IS 11255 (Part 1):1985 Reaffirmed 2014	30

#### Notes :-

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Senior Analyst

Rajestriviaheshwan **Authorized Signatory** 

(Report No: TC502519500001269F)



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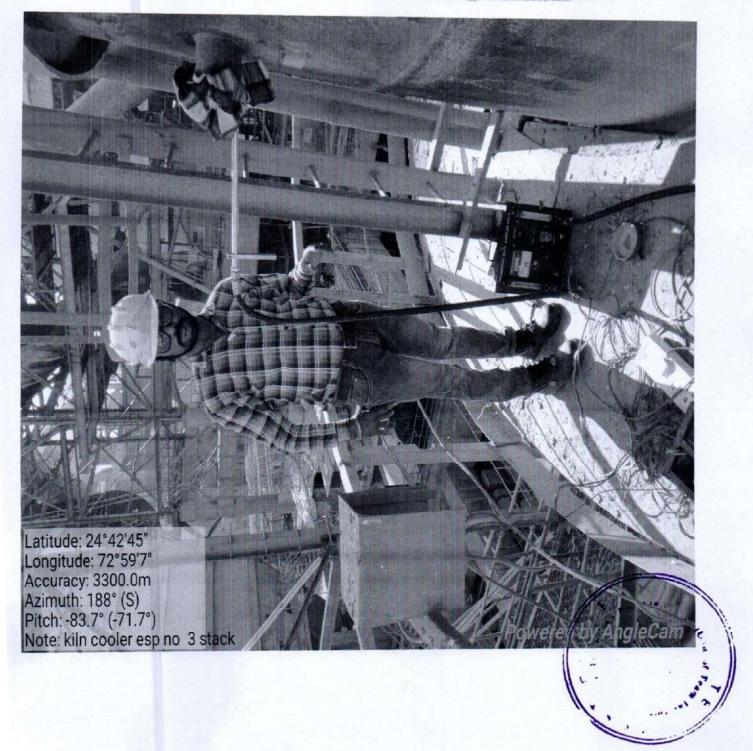
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Office: E-65, Chitranjan Marg, C-Scheme, Jaipur-302001 Phone: 0141-2369980, 4020820 Website: www.teamtesthouse.com

Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 0141-2771865, 94602-22039, 94602-22049

E-mail: teamtesthouse@grnail.com E-mail: director@teamtesthouse.com









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F

Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049

Lab.: G1-584, Sitapura Industrial Area

E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com

**TEST REPORT** 

Report No./ULR No.:	TC502519500001283P	Date :	03-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	19-09-2019
Point of Collection	40 MW Boiler ESP Stack [24*41'45"N 73*0'3"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis:	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS.

S.No	Parameters	Observed Value	Testing Protocol	
1	Particulate matter [mg/Nm3]	18.14	IS 11255 (Part 1):1985 Reaffirmed 2014	30
2	Sulphur Dioxide [mg/Nm3]	555	IS 11255(Part 2) :1985 Reaffirmed 2014	
3	Oxides of Nitrogen [mg/Nm3]	269	IS 11255 (Part 7):1985 Redffirmed 2012	-
4	Carbon monoxide [mg/Nm3]	198	IS 5182 (Part 10): 1999	-
5	Mercury & its Compounds [mg/Nm3]	BDL(<0.001)	USEPA method 29	0.03
6	Arsenic [mg/Nm3]	BDL (< 0.2)	USEPA method 29	-

#### Notes :-

- # Parameter No. 1,2,3,4 covered under NABL scope and Parameter No. 5,6 does not cover under NABL scope
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Puran Mal Yogi Senior Analyst

Rajesh Maheshwan

Authorized Signatory

(Report No: TC502519500001283P)

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Office: E-65, Chitranjan Marg, C-Scheme, Jaipur-302001 Phone: 0141-236980, 4020820 Website: www.teamtesthouse.com

Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 0141-2771865, 94602-2039, 94602-22049

E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com





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**TEST REPORT** 

Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049

E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com

Report No./ULR No. :	TC502519500001284P	Date :	11-10-2019
Issued To :	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Stack Emission Level	Date of Sample Collection/Monitori ng :	19-09-2019
Point of Collection	18 MW Boiler ESP Stack [24*41'46"N 73*0'3"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 02-10-2019	Sampling Plan :	IS 11255:2008(Part 3)RA 2018
Quantity of Sample :	-	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

#### RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment Protection Rules, 1986
1	Particulate matter [mg/Nm3]	26.72	IS 11255 (Part 1):1985 Reaffirmed 2014	50
2	Sulphur Dioxide [mg/Nm3]	528	IS 11255(Part 2) :1985 Reaffirmed 2014	-
3	Oxides of Nitrogen [mg/Nm3]	. 264	IS 11255 (Part 7) :1985 Redffirmed 2012	-
4	Carbon monoxide [mg/Nm3]	159	IS 5182 (Part 10): 1999	
5	Mercury & its Compounds [mg/Nm3]	BDL(<0.001)	USEPA method 29	0.03
6	Arsenic [mg/Nm3]	BDL (< 0.2)	USEPA method 29	2 300

#### Notes :-

- # Parameter No. 1,2,3,4 covered under NABL scope and Parameter No. 5,6 does not cover under NABL scope
- # Parameter No. NONE outsourced for testing.
- # The results listed refer only to the tested sample (s) & parameters (s). Endorsement of products is neither inferred nor implied.
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- # The samples will be destroyed after 15 days from the date of issue of test report unless otherwise specified.

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Rajesh Maheshwari Authorized Signatory

(Report No: TC502519500001284P)







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**TEST REPORT** 

Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049 E-mail: teamtesthouse@gmail.com E-mail: director@teamtesthouse.com

Report No./ULR No. :	TC502519200001364F	Date :	03-10-2019
Issued To :	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Wastewater Sample	Date of Sample Collection/Monitori ng :	21-09-2019
Point of Collection	STP OUTLET	Date of Receipt :	26-09-2019
Date of Test/Analysis:	26-09-2019 to 02-10-2019	Sampling Plan :	APHA 2017 : 1060
Quantity of Sample :	2 Ltr.	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

#### RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per Environment protection rules, 1986
1	Total Suspended Solids [mg/l]	6	APHA.2017:2540-D	100
2	Ammonical Nitrogen as N [mg/l]	1.12	APHA 2017 : 4500-NH3 C	50
3	Biochemical Oxygen Demand (BOD) [mg/l]	2	APHA 2017:5210-B	30
4	Chemical Oxygen Demand (COD) [mg/l]	12.93	APHA:2017 : 5220-C	250
5	Nitrate Nitrogen as NO3-N [mg/l]	8.40	APHA 2017 : 4500-NO3- B	10
6	pH	7.70	APHA:2017 : 4500 H+B	5.5 - 9.0
7	Oil & Grease [mg/l]	Less than 1	APHA 2017 : 5520 B	10
8	Total Residual Chlorine [mg/l]	BDL(<0.1)	APHA:2017 : 4500-CI B	1.0

#### Notes :-

- # Parameter No. 1,2,3,4,5,6,7,8 covered under NABL scope and Parameter No. NONE does not cover under NABL scope
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Puran Mai Yos. Senior Analyst

Rajesh Maheshwari Authorized Signatory

(Report No: TC502519200001364F)



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**TEST REPORT** 

Report No./ULR No.:	TC502519400002686P	Date :	01-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit:	Cement Plant
Type of Sample :	Ambient Air Quality Monitoring	Date of Sample Collection/Monitori ng:	16-09-2019
Point of Collection :	Near Mines Megzine Area [24*41'10.8"N,073*00'05.9"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis:	26-09-2019 to 01-10-2019	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	•	Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS.

S.No	Parameters	Observed Value	Testing Protocol	Limits as per National Ambient Air Quality Standard, 2009
1	Ammonia [microgram/m3]	11.4	CPCB Guidelines	400.00
2	Carbon Monoxide [microgram/m3]	350	IS 5182 (Part 10): 1999	4000
3	Lead [microgram/m3]	0.23	IS 5182 (Part 22) : 2004 Reaffirmed 2014	1.00
4	Nitrogen Dioxide as NO2 [microgram/m3]	16.43	IS 5182 (Part 6) : 2006 Reaffirmed 2012	80.00
5	Ozone [microgram/m3]	BDL (< 20.0)	APHA 1977, Part 819	100.00
6	Particulate Matter (PM2.5) [microgram/m3]	15.57	CPCB Guidelines	60.00
7	Sulphur Dioxide [microgram/m3]	5.02	IS 5182 (Part 2): 2001 Reaffirmed 2012	80.00
8	Particulate Matter (PM 10) [microgram/m3]	54.27	IS 5182 (Part 23)-2006 Reaffirmed 2012	100.00

Note:

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NABL	RSPCB	130 9001:2015		
Office : E-65, Chit <mark>r</mark> anjan Marg, C-Scheme, Jaipur-302001 <del>Phone : φ141-2369980, 2771865</del>		RESULTS	Tonk Road, JA	Sitapura Industrial Are AIPUR-302022 Raj. 2039, 94602-22049
Neblene	Ravametersesthouse.com	Observed Value	Testing Protocolmail: teamt E-mail: direct	esthenes இதைவி.com ஸூர்வங்கள்கட்க Air Quality Standard, 2009
9	Benzene [microgram/m3]	BDL(<1.0)	IS 5182 (Part 11): 2006	5.00
10	Benzo-alfa- Pyrene [ng/m3]	BDL(<0.5)	CPCB Guidelines	1.00
11	Arsenic [ng/m3]	BDL(<2.0)	IS 5182 (Part 22) : 2004 Reaffirmed 2014	6.00
12	Nickel [ng/m3]	1.7	IS 5182 (Part 22) : 2004 Reaffirmed 2014	20.00
13	Mercury as Hg [ng/m3]	BDL(<0.1)	IS 5182 (Part 22) : 2004 Reaffirmed 2014	-

#### Notes :-

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Senior Analyst

RajeGrimanesnwan

Authorized Signatory

(Report No: TC502519400002686P)



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**TEST REPORT** 

Report No./ULR No.:	TC502519400002687P	Date :	01-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Ambient Air Quality Monitoring	Date of Sample Collection/Monitori ng :	14-09-2019
Point of Collection :	Near NC Type Quarter [24*41'35.6"N,073*00'28.7"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 01-10-2019	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :	•	Sample Collected By:	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per National Ambient Air Quality Standard, 2009
1	Ammonia [microgram/m3]	BDL (< 10.0)	CPCB Guidelines	400.00
2	Carbon Monoxide [microgram/m3]	320	IS 5182 (Part 10): 1999	4000
3	Lead [microgram/m3]	0.17	IS 5182 (Part 22) : 2004 Reaffirmed 2014	1.00
4	Nitrogen Dioxide as NO2 [microgram/m3]	9.63	IS 5182 (Part 6) : 2006 Reaffirmed 2012	80.00
5	Ozone [microgram/m3]	BDL (<20.0)	APHA 1977, Part 819	100.00
6	Particulate Matter (PM2.5) [microgram/m3]	22.89	CPCB Guidelines	60.00
7	Sulphur Dioxide [microgram/m3]	3.64	IS 5182 (Part 2): 2001 Reaffirmed 2012	80.00
8	Particulate Matter (PM 10) [microgram/m3]	47.98	IS 5182 (Part 23)-2006 Reaffirmed 2012	100.00

Note:

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Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj.

hone: 0141-2369980, 2771865		RESULTS	Ph.: 94602-22039, 94602-22049	
/shaite	Parametesthouse.com	Observed Value	Testing Protocol E-mail : teamte	esthouse@gmail.com imits_as per or Dieames frouse cor National Ambient Air Quality Standard, 2009
9	Benzene [microgram/m3]	BDL(<1.0)	IS 5182 (Part 11): 2006	5.00
10	Benzo-alfa- Pyrene [ng/m3]	BDL(<0.5)	CPCB Guidelines	1.00
11	Arsenic [ng/m3]	BDL(<2.0)	IS 5182 (Part 22) : 2004 Reaffirmed 2014	6.00
12	Nickel [ng/m3]	1.4	IS 5182 (Part 22) : 2004 Reaffirmed 2014	20.00
13	Mercury as Hg [ng/m3]	BDL(<0.1)	IS 5182 (Part 22) : 2004 Reaffirmed 2014	-

#### Notes :-

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Senior Analyst

Authorized Signatory

(Report No: TC502519400002687P)



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Phone: 0141-2369980, 2771865 Website: www.teamtesthouse.com Lab.: G1-584, Sitapura Industrial Area Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049 E-mail::teamtesthouse@gmail.com

E-mail: director@teamtesthouse.com

#### **TEST REPORT**

Report No./ULR No.:	TC502519400002688P	Date :	01-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit :	Cement Plant
Type of Sample :	Ambient Air Quality Monitoring	Date of Sample Collection/Monitori ng :	14-09-2019
Point of Collection	Near CPP [24*41'47.4"N,073*00'12.5"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 01-10-2019	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :		Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per National Ambient Air Quality Standard, 2009
1	Ammonia [microgram/m3]	BDL (<10.0)	CPCB Guidelines	400.00
2	Carbon Monoxide [microgram/m3]	340	IS 5182 (Part 10): 1999	4000
3	Lead [microgram/m3]	0.15	IS 5182 (Part 22) : 2004 Reaffirmed 2014	1.00
4	Nitrogen Dioxide as NO2 [microgram/m3]	12.9	IS 5182 (Part 6) : 2006 Reaffirmed 2012	80.00
5	Ozone [microgram/m3]	BDL (<20.0)	APHA 1977,Part 819	100.00
6	Particulate Matter (PM2.5) [microgram/m3]	13.14	CPCB Guidelines	60.00
7	Sulphur Dioxide [microgram/m3]	2.81	IS 5182 (Part 2): 2001 Reaffirmed 2012	80.00
8	Particulate Matter (PM 10) [microgram/m3]	53	IS 5182 (Part 23)-2006 Reaffirmed 2012	100.00

Note:

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#### TEAM TEST HOUSE

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IS 5182 (Part 22): 2004 Reaffirmed 2014

IS 5182 (Part 22): 2004 Reaffirmed 2014

Office : E-65, Chitranjan Marg, C-Scheme, Jaipur-302001 Phone : 0141-2369980, 2771865		RESULTS	Lab.: G1-584, Sitapura Industrial Ar Tonk Road, JAIPUR-302022 Raj. Ph.: 94602-22039, 94602-22049		
Vs!Nije	Parameters sthouse.com	Observed Value	Testing Protocol : teamto	esthouse (200mail.com Limits as ne Mational Ambient Air Quality Standard, 2009	
9	Benzene [microgram/m3]	BDL(<1.0)	IS 5182 (Part 11) : 2006	5.00	
10	Benzo-alfa- Pyrene [ng/m3]	BDL(<0.5)	CPCB Guidelines	1.00	
11	Arsenic [ng/m3]	BDL(<2.0)	IS 5182 (Part 22) : 2004 Reaffirmed 2014	6.00	

Notes :-

Nickel [ng/m3]

Mercury as Hg [ng/m3]

Parameter No. 1,2,3,4,5,6,7,8,11,12 covered under NABL scope and Parameter No. 9,10,13 does not cover under NABL scope

BDL(<0.1)

1.7

Parameter No. NONE outsourced for testing.

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Senior Analyst

Kajesh waneshwan

**Authorized Signatory** 

(Report No: TC502519400002688P)

20.00



# TEAM TEST HOUSE (Unit of Team Institute of Science & Technology Pvt. Ltd.)



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E-mail: director@teamtesthouse.com

#### TEST REPORT

Report No./ULR No.:	TC502519400002689P	Date :	01-10-2019
Issued To:	M/s J.K. Lakshmi Cement Ltd. (Cement plant) Jaykaypuram, Sirohi (Rajasthan),	Type of Unit:	Cement Plant
Type of Sample :	Ambient Air Quality Monitoring	Date of Sample Collection/Monitori ng :	14-09-2019
Point of Collection	Near Play Ground [24*41'45.5"N,073*00'26.9"E]	Date of Receipt :	26-09-2019
Date of Test/Analysis :	26-09-2019 to 01-10-2019	Sampling Plan :	IS 5182:2000(Part 14)RA 2014
Quantity of Sample :		Sample Collected By :	kishan murari
Unit's representative :	Hitesh Shukwal	Condition of Sample :	Fit for testing

RESULTS

S.No	Parameters	Observed Value	Testing Protocol	Limits as per National Ambient Air Quality Standard, 2009
1	Ammonia [microgram/m3]	14.6	CPCB Guidelines	400.00
2	Carbon Monoxide [microgram/m3]	290	IS 5182 (Part 10): 1999	4000
3	Lead [microgram/m3]	0.13	IS 5182 (Part 22) : 2004 Reaffirmed 2014	1.00
4	Nitrogen Dioxide as NO2 [microgram/m3]	7.01	IS 5182 (Part 6) : 2006 Reaffirmed 2012	80.00
5	Ozone [microgram/m3]	BDL (<20.0)	APHA 1977,Part 819	100.00
6	Particulate Matter (PM2.5) [microgram/m3]	17.66	CPCB Guidelines	60.00
7	Sulphur Dioxide [microgram/m3]	3.15	IS 5182 (Part 2) : 2001 Reaffirmed 2012	80.00
3	Particulate Matter (PM 10) [microgram/m3]	43.55	IS 5182 (Part 23)-2006 Reaffirmed 2012	100.00

Note:

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Office : E-65, Chitranjan Marg, C-Scheme, Jaipur-302001 Phone : 0141-2369980, 2771865		-Scheme, Jaipur-302001 hone : 0141-2369980, 2771865 RESULTS		Sitapura Industrial Area AIPUR-302022 Raj. 2039, 94602-22049 osthouse@gmail.com
//shqte	Parameters sthouse.com	Observed Value	Testing Protocophail : direct	or@tmits/as/beruse.com National Ambient Air Quality Standard, 2009
9	Benzene [microgram/m3]	BDL(<1.0)	IS 5182 (Part 11): 2006	5.00
10	Benzo-alfa- Pyrene [ng/m3]	BDL(<0.5)	CPCB Guidelines	1.00
11	Arsenic [ng/m3]	BDL(<2.0)	IS 5182 (Part 22) : 2004 Reaffirmed 2014	6.00
12	Nickel [ng/m3]	1.7	IS 5182 (Part 22) : 2004 Reaffirmed 2014	20.00

#### Notes :-

Mercury as Hg [ng/m3]

13

Parameter No. 1,2,3,4,5,6,7,8,11,12 covered under NABL scope and Parameter No. 9,10,13 does not cover under NABL scope

BDL(<0.1)

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Senior Analyst

Rajesh Maheshwari

**Authorized Signatory** 

IS 5182 (Part 22) : 2004 Reaffirmed 2014

(Report No: TC502519400002689P)

#### JK LAKSHMI CEMENT LTD. P.O. JAYKAYPURAM, TEHSIL PINDWARA, DISTT. SIROHI (RAJ.)

# COMPLIANCE STATUS OF THE CREP MARCH 2003 RECOMMONDATIONS

S/N	CREP CONDITION	PRESENT STATUS
1	Cement plant, which are not complying with notified standards, shall do the following to meet the standards:  Augmentation of existing Air pollution Control Devices - by July 2003.  Replacement of existing Air Pollution Control Devices - by July 2004	Not Applicable. We are already complying with notified standard.
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 50 mg/Nm3.	Not Applicable. The plant is neither located in critically polluted area nor in urban area. However, we are complying emission standard of particulate matter <50 mg/Nm3.
3	The new cement kiln to be accorded NOC/ Environmental Clearance w.e.f 1/4/03 will meet the limit of 50 mg/Nm3 for particulate matter emission.	Complied. Particulate matter emission limit of 50 mg/Nm3 is being maintained.
4	CPCB will evolve load-based standards by December 2003.	Load based standards (0.125 kg/tone of clinker w.e.f. 01/01/2017) notified vide MoEFCC notification dt. 25/08/2016. JKLC will comply the standard.
5	CPCB and NCBM will evolve SO <sub>2</sub> and NOx emission standards by June - 2004	Emission standards (for SO2 & NOX w.e.f. 01/04/2017) notified vide MoEFCC notification dt. 09/05/2016. Action plan is being made to meet out the standards.
6	The cement industries will control fugitive emission from all raw material and product storage and transfer points by December 2003. However, the National Task Force will decide the feasibility for the control of fugitive emission from limestone and coal storage areas. The NTF shall submit its recommendations with in three months.	We have closed storage silo for Coal, Clinker, Fly ash and Limestone, Cement etc. and have water spraying arrangement on raw materials at identified locations. All conveyor belts are covered to avoid wind blowing of fines. All material transfer points are fully enclosed and equipped with dust extraction systems. Provided cemented concrete floor/paved road in the plant and at main gate truck parking area to mitigate fugitive dust generation. We carried out regular sweeping of cemented roads and floors through vacuum sweeper machines and maintain housekeeping.
7	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum cock as fuel in Cement Kiln by July 2003.	We are using petroleum coke as a fuel.

8	After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operation/section for installation of continuous monitoring equipment.  The industry will install the continuous monitoring system (CMS) BY December 2003.	Continuous Emission Monitoring Systems installed in Cement Plant.
9	Tripping in Kiln ESP to be minimized by July 2003 as per the recommendation on NTF	Not applicable. As we have Hybrid Bag Filter-ESP, Reverse Air Bag Houses and Jet Pulse Bag Filter in Kilns.
10	Industries will submit the target date to enhance the utilization waste material by April 2003.	At present fly ash is being consumed for PPC production. We are using biomass (agro-waste like mustard, moong, soyabean husk, sarson etc.) for partial replacement of coal in pyro-processing of Kiln 2 & Kiln 3.
11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	We obtained authorizations for utilization of more than 60 types of waste for co-processing and as an alternate raw material.
12	Cement industries will carry out feasible study and submit target dates to CPCB for co-generation of power by July-2003.	Waste heat recovery power plant of 15 MW capacity installed with existing kilns.

<sup>\*</sup> Non complying units shall give bank guarantee to respective SPCBs.