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J.K. Cement Works
Kailash Nagar - 312617, Nimbahera
Distt. Chittorgarh (Raj.) INDIA

CIN : L17229UP1994PLC017199
ISO 9001:2008, ISO 14001:2004 & OHSAS 18001 : 2007 CERTIFIED COMPANY

Our Ref. No.: NBH-PC-11B/ 3583

Date: 28.11.2018

To,

The Joint Director,
Indira Paryavaran Bhavan,
JOR Bagh Road,
Near JOR bagh Metro station
New Delhi -

Sub: Environmental Clearance Compliance report for Expansion of Integrated Cement Plant (Clinker 2.8 MTPA to 5.0 MTPA) Cement 3.6 MTPA to 6.5 MTPA) CPP (22.0 MW to 47 MW) & WHRB (13.2 MW to 15.0 MW) M/s J.K. Cement Works, Nimbahera , located at Kailash Nagar Tehsil : Nimbahera , District-Chittorgarh, Rajasthan.

Ref.: Letter from MOEF, New Delhi - J-11011/243/2016-1A (II) (I) dated 23.07.2018

Dear Sir,

We are enclosing herewith the compliance report of Environmental Clearance conditions for Expansion of Integrated Cement Plant (Clinker 2.8 MTPA to 5.0 MTPA) Cement 3.6 MTPA to 6.5 MTPA) CPP (22.0 MW to 47 MW) & WHRB (13.2 MW to 15.0 MW) along with Existing Plant **Environment monitoring report from the month of April' 2018 to September' 2018 in hard copy as well as mail as soft copy** for your kind reference and record. We trust you will find the same in order.

Thanking you,

Yours Faithfully
For J.K. Cement Works, Nimbahera

S.K. Acharya
(Technical Head)

Encl: a/a
Copy to:

1.The Director,Ministry of Environment, Forests & Climate Change,_Regional office (Central Region), Kendriya Bhawan, 5th Floor, Sector 'H' , ALIGANJ, **LUCKNOW-** 226020 **(U.P.)**

2.The Chairman, Central Pollution Control Board ,Parivesh Bhawan, CBD-CUM office complex, East Arjun Nagar, Maharaja Surajmal Marg, Vishwas Nagar Extension, Viswas nagar Shahdara- Behind Karkarduma high court New Delhi 11032

3. Member Secretary,_Rajasthan State Pollution Control Board, 4, Institutional Area, Jhalana Doongri, **JAIPUR -** 302004 (RAJASTHAN)

J.K. CEMENT WORKS, Nimbahera (RAJ.)

Latest Compliance report of Environment Clearance for Nimbahera Cement Plant

Reference Letter from MOEF, New Delhi - J-11011/243/2016-1A (II) (I) dated 23.07.2018

28.11.2018

A.) SPECIFIC CONDITIONS:

Sr. No	Condition	Status
(i)	The Project proponent shall implement the conservation plan for schedule-I species (Peafowl and Leopard) in consultation with the local forest department with the fund provisions of Rs. 82.80 Lakhs in addition to the existing fund provision of 8.90 Lakhs.	We have made wild life conservation plan for our Nimbahera plant and submitted to chief wild life conservator copy is enclosed as ***Annexure – (I).***
(ii)	The project proponent shall adopt the slip power recovery system for proposed line No.4 equipped with Bag Hose fan (Raw Mill, Kiln PH Fan-1 and Separator Fan for cement Mill Polycom, Separator fan for Raw Mill Polycom).	Agreed, SPRS was adopted at Raw mill fan and Kiln-3 smoke fan of existing unit. Possible extent to explore in proposed unit also.
(iii)	The Project proponent shall utilize the alternate fuels to the maximum extent possible.	We are having a various hazardous waste /other waste permissions granted from CPCB / RSPCB & using in our existing unit as Alternative fuel & raw materials (AFR) like agro waste , Plastic waste, ETP waste from textile industries – Lead zinc slag –Waste mix solid – Waste mix liquid – Pharmaceutical waste etc.
(iv)	The treated water from the STP shall be recycled and reused to conserve the water.	Agreed. The plant is running on zero discharge bases and there is no discharge of waste water outside the plant premises. The treated wastewater is being utilized for plantation/ greenbelt development and dust suppression purpose.

B.) GENERAL CONDITIONS:

Sr. No	Condition	Status
1	An amount of Rs 4.22 Crores proposed towards Corporate Environment Responsibility (CER) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates	We will be earmarked towards cost and recurring cost / annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate change (MoEF & CC) as well as the state govt. Implementation schedule will be submitted to Regional office of the Ministry at Lucknow after commissioning of the Plant.
2	Green belt shall be developed in 72.77 Ha with a native tree species in	Agreed, As per CPCB guideline followed.

	accordance with CPCB guidelines. The Greenbelt shall inter alia cover the entire periphery of the plant.	
3	The Capital cost Rs.36.80 Crores (21.96 Crores for Existing + 14.84 Crores for expansion) and annual recurring cost Rs 4.08 Crores (Rs. 2.87 Crores for existing + 1.21 Crores for expansion) towards the environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.	Agreed & will be complied with.
4	The project proponent shall (Air Quality Monitoring):	We have installed the continuous emission monitoring system (CEMS) & Continuous ambient air monitoring system (CAAQMS) for our existing unit and real time data being sent to CPCB & RPCB regularly. The same will be installed in proposed project. We are already having the 4 ambient air monitoring stations in the downward direction for PM 10, PM 2.5, SO2 & NOx are anticipate in consultation with the State Pollution Control Board and monitoring data is being regular submitting to the Ministry and its regional office at Lucknow and the SPCB/CPCB once in six month for existing Nimbahera plant. Proposed new line will be install in existing premises, hence ambient air monitoring station will be same.
	a. install 24X7 continuous monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R No. 612 € dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (Co-processing Cement); S.O. 3305 € dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	
	b. monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	We are in practice to conduct the fugitive emission monitoring regularly in our existing plant and controlled the emission by installing bag filters on material discharge point and water spraying in coal yard & other raw material yard. Guideline / Code of practice issued by the CPCB in this regard will be followed. Fugitive emission monitoring through recognized third party will be done after commissioning of proposed plant.
	c. Install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emissions, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (One within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions;	Agreed, Presently we have one CAAQMS (Continuous ambient air quality monitoring system) station installed and connected with CPCB & RSPCB server & Three station proposed for installation in periphery of the plant.

	d. submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/fugitive emission to Regional office of MoEF&CC, Zonal office of CPCB and Regional office of SPCB along with six-monthly monitoring report.	Complying with, The Ambient & stack manual monitoring report of existing plant are enclosed as ***Annexure-(II).***
5	The Project proponent shall (Water Quality Monitoring):	
	a) install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	There is no waste water discharge in the cement plant hence 'Zero discharge' facility adopted and provided camera & flow meter for CPP & WHR treated effluent for online data uploading.
	b) Monitor regularly ground water quality at least twice a year (Pre and Post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories; and	Regularly conducted ground water quality monitoring four times in a year at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories; and submitting regularly.
	c) Submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional office of MoEF&CC, Zonal office of CPCB and Regional office of SPCB along with six-monthly monitoring report.	There is no effluent discharge in the cement plant hence 'Zero discharge' facility adopted and only CPP & WHR treated waste water is reused in cement plant so there is no any waste water discharge outside the plant premises. Treated waste water is being analyzed by MOEF recognized lab and report submitted accordingly.
6.	The Project proponent shall (Air Pollution Control):	
	a) Provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Bag filters provided for all dust generating source and ESP for Clinker Cooler in our existing plant to controlled stack emission and fugitive emission in our existing plant & same will be provided in our proposed unit.
	b) Provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags;	Will be complied after commissioning of projects.
	c) Provide pollution control system in the cement plant as per the CREP Guidelines of CPCB;	We have provided bag filters at all dust generating source and ESP for Clinker Cooler in our existing plant to controlled stack emission and fugitive emission and same

		will be provided as all recommendations made in the Charter on Corporate responsibility for Environment protection (CREP) for the Cement plants. Complying in our existing Unit
	d) Provide sufficient number of mobile or stationary vacuum cleaners to clean plant roads, shop floors, roofs regularly;	We have provided three nos. of mobile vacuum cleaner to clean plant roads, shop floor roofs regularly in existing plant and same practice will be maintained in proposed plant.
	e) recycle and reuse lime fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after agglomeration;	All the dust i.e. raw mill dust, coal dust, clinker dust and cement dust from Pollution control equipment like Bag house / ESP are being recycled and reused in the cement manufacturing process in our existing plant.
	f) Ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;	All raw material transportation in covered dumper and end product being transporting in covered trucks or through rail mode in existing plant. We have provided separate truck parking area in the existing plant. The same practice will be adopted for proposed project.
	g) Provide wind shelter fence and chemical spraying on the raw material stock piles;	Complying with, we have already provided covered shed with all type of raw materials & also developed dense plantation around the plant.
	h) Provide Low NOx burners as primary measures and SCR/ NSCR technologies as secondary measure to control NOx emissions. Have separate truck parking area and monitoring vehicular emissions at regular interval.	We have installed low nox burner in our kiln-3 & SNCR system to for SLC control Nox emissions and same practice will be adopted for proposed project. Yes We have provided separate truck parking area in the existing plant. The same practice will be adopted for proposed project.
7.	The project proponent shall (Water Pollution Control):	
	a) Adhere to 'zero liquid discharge';	There is no waste water discharge in the cement plant hence 'Zero discharge' facility adopted and only from CPP & WHR waste water after treatment are recycle & reuse for dust suppression in coal yard and machineries cooling in the cement plant respectively.
	b) Provide sewage Treatment Plant for domestic wastewater; and	We already installed STP plant for domestic sewage with capacity 500 KLD which is sufficient including proposed project requirement.
	c) Provide garland drains and collection pits for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run-off.	Complied, Garland drains have been constructed around the active mines pit to arrest silt and sediment flows with the water. The collected water will be used for watering in the mines area, haul roads, greenbelt development etc. Drains are de-silted & maintained.

8.	The Project proponent shall (Water Conservation);	
	a) Practice rainwater harvesting to maximum possible extent ;	We have constructed many rain water harvesting structures in our plant.
	b) Provide water meters at the inlet to all the unit processes in the cement plants; and	We have provided water meters at all borewell and other water sources and water meter reading taken on monthly basis .
	c) Make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.	We have air cooled condensers in our captive power plant and treated waste water from CPP is being reuse in coal yard for dust suppression and from WHR is being recycle in cement plant for machineries cooling purpose only. Our Cement plant based on dry process cement manufacturing technology based, hence there is no waste water discharge outside the factory premises and 'Zero discharge' facility adopted.
9.	The Project proponent shall (Energy Conservation):	
	a) Provide waste heat recovery system for kiln and cooler;	We have already installed 13.2 MW waste heat recovery power plant for generation of power from waste heat of kiln and cooler in existing plant.
	b) Make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 kcal/Kg of clinker;	We are regularly doing efforts to achieve targets in our existing plant and will be complied the condition by installation of energy efficient equipment in our proposed project.
	c) Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;	We will be provide the solar light system for all common areas, street lights, village and parking around proposed project area and maintain the same regularly.
	d) Provide the project proponent for LED lights in their offices and residential areas;	We have started process for replacement of light in the offices, plant and residential indoor & outdoor areas done by LED lights..
	e) Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards; and	Complying with, Fly ash generated from own power plant 100% utilized in manufacturing of PPC itself. A continuous effort has been made for use of fly ash in making PPC.
10.	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport.	Agreed & Complying, We have been taken all precautions to reduce impact of transport of raw material etc. Fly ash is transported by pneumatic system and all type of materials are transported by covered truck, provide paved roads &

		regular sprinkling of water on roads. There are separate parking areas for trucks with green belt on the periphery and End product also transporting through rail to reduce the road transport.
11.	Used refractories shall be recycled as far as possible.	Used refractories is sold back to manufacturer and partially recycled in existing plant and same practice will be adopted in proposed plant.
12.	The project proponent shall prepare GHG emission inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation.	Will be complied after commission of proposed project however we are continuously making efforts to reduce CO2 emissions. 1. In future we will increase PPC production by which less clinker will be require. 2. More Power generation through WHR. Possible extent to explore in proposed unit also.
13.	Emergency preparedness plan based on the Hazard identification and Risk assessment (HIRA) and Disaster management plan shall be implemented.	We are having the onsite emergency plan with respect to following objectives. • To overcome any emergency in its initial stage and to handle Disaster in most effective manner. • To eliminate any chance of loss to Human Life. • To minimise loss of Property in the Plant and surrounding areas. • To maintain essential supplies at the time of natural Calamities and / or Public disturbances. A copy of the onsite emergency plan for Nimbahera Plant existing unit is enclosed as ***Annexure – (III).***
14.	The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	There is no any activity is carried out in high temperature work zone however during shutdown we start working after cooling of equipment and same practice will be followed in proposed unit. Personal protective equipment are being provided to respective worker.
15.	The PP shall adhere to the corporate environmental policy and system of the reporting of any infringements/non-compliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF & CC as a part of six-monthly report.	Complied, We have submitted an environmental policy which includes our commitment towards legal & other requirements, operational control measures, operational control procedures, rolls & responsibility (Hierarchical System of reporting) & communication system with board of directors & other concerns agencies.
16.	All the recommendations made in the Charter on Corporate Responsibility for	We have provided bag filters for main equipment &

	Environment Protection (CREP) for the cement plants shall be implemented.	discharge points and ESP for Clinker Cooler in our existing plant to controlled stack emission and fugitive emission and water spraying in material storage yard and same we will be complied as recommendations made in the Charter on Corporate responsibility for Environment protection (CREP) for the proposed project.
17.	A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of the organization.	We have a separate Environment Management Cell with efficient monitoring equipment & well qualified executives.
18.	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, 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.	In our existing plant we have all necessary infrastructure and facilities such as fuel of cooking, mobile toilets, safe drinking water, medical health care etc. for workmen or labor & same will be used for project work.
19.	The project authorities must directly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Agreed
20.	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).	Agreed
21.	The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.	Complying with, Hazardous waste generated from our existing plant i.e. Used Oil (5.1), Waste oil (5.2) and batteries are being sold out to authorized recyclers. Same shall be complying.
22.	The storage of NH3 and other hazardous chemicals at the site shall be as per the provisions of Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended from time to time.	Complied, all safety provision for storage of NH3 & others chemical are being followed as per provisions of Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended.
23.	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	Complied with, we are maintaining noise level below prescribed standard in existing plant and same practice will be adopted in proposed plant.
24.	Occupational Health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	We are carried adequate occupational health checkup programme regularly at our well established Dispensary. We are carried out Pre-placement & Periodic Medical checkup for all workers.
25.	The Project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.	Complying with, All the environment management measures given in the

		EIA/EMP are being implemented for partially capacity enhancement.
26.	Ventilation system shall be designed for adequate air changes as per the ACGIH document for all tunnels, motor houses and cement bagging plants.	Agreed,
27.	Sufficient number of color coded waste collection bins shall be constructed at shop floors in each shop to systematically segregate and store waste materials generated at the shop floors (other than Process waste) in designated colored bins for value addition by promoting reuse of such wastes and for good housekeeping.	We have provided color coded waste collection bins at shop floor to systematically segregate and store waste materials generated at the shop floors (other than Process waste) in designated colored bins and same practice will be adopted in proposed plant.
28.	Kitchen waste shall be composted or converted to biogas for further use. (To be decided on case to case basis depending on type and size of plant)	After proper collection of dry and wet garbage including all kitchen waste we are sending to Nimbahera nagar palika for further disposal practices.
29	The Project proponent shall (post- EC monitoring):	
	a. Send a copy of environmental clearance letters to the heads of Local bodies, Panchayat, Municipal Bodies and relevant offices of the Government.	Complied, The copy of Environment Clearance has been submitted to concern Panchayat, Zila Parishad/Municipal Corporation.
	b. Put on the clearance letter on the web site of the company for access to the public.	Complied, We have uploaded environment clearance on the company's website www.jkcement.com.
	c. Inform the public through advertisement 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 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 (MoEF&CC) at http:/envfor.nic.in.	We have publish the notice that the project has been accorded environmental clearance by the Ministry of environment & Forest in two newspaper namely as followed. *1.* Dainik Bhaskar dated 26.07.2018 2. Rajasthan Patrika dated 26.07.2018
	d. Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically.	Agreed, We will upload status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically.
	e. Monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;	We are regularly monitoring (ambient and stack) and also provided display facility at the main gate of plant of existing plant and we will also put it on the website of the company.
	f. Submit six monthly reports on the status of the compliance of the stipulated	Agreed, We are submitting six monthly reports on the

	environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional office of MoEF&CC, the respective Zonal office of CPCB and the SPCB;	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 MoEF&CC, the respective Zonal office of CPCB and the SPCB.
	g. Submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complying with, we are regularly submitting environment statement report of each financial year of existing plant. FY 2017-18 ESR Nimbahera plant, 22 MW CPP and 13.2 MW WHR has submitted at RSPCB office vide letter no. NBH-PC-13/2747, 2762 & 2761 respectively, dated 27.09.2018 and also will be put on the website of company.
	h. 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.	Agreed,
30.	The Ministry of Environment, Forest and Climate Change has considered the application based on the recommendations of the Expert Appraisal Committee (Industry-I) and hereby decided to grant environmental clearance for the proposed expansion of Integrated Cement Plant.	Agreed,
31.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed,
32.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed,
33.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and that during their presentation to the Expert Appraisal Committee. The commitment made by the project proponent to the issue raised during Public Hearing shall be implemented by the proponent.	Noted
34.	The above conditions shall be enforced , inter-alia under the provisions of the Water(Prevention & Control of Pollution) Act, 1974, the Air(Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and other Wastes(Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Agreed,
35.	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010	Agreed.

Annexure-1

J.K. Cement Works, Nimbahera (Raj.)

Ref: NBH / PC – 11 (B) /2016 – 17/1301 **Date: - 12.06.2017**

To,
The Deputy Conservator of Forest
Department of Forest (Govt. of Rajasthan)
Chittorgarh (Raj.)

Sub: - Regarding Authentication of conservation plan of Peacock & Leopard within 10 km radius of our proposed expansion of J. K. Cement Works situated at Nimbahera, Tehsil-Nimbahera, District – Chittorgarh (Raj.) for an area of 170.27 Ha.

Ref. No.:- (i) Terms of Reference (ToR) issued by Ministry of Environment, Forest and Climate Change, New Delhi. vide letter no. J-11011/ 243/ 2016-IA.II (I) dated 31.01.2017.
(ii) Your letter no. F()Survey/DCF/WL/17-18 dated 25.05.2017.

Respected Sir,

We would like to your goodself, It is bring to your kind information that, we had applied for Environmental Clearance for enhance the production capacity for our Nimbahera Cement Plant, Power Plant & WHR at MoEF & CC, New Delhi. We have mandatory to submit documents as under:-

1. Conservation Plan of Schedule – I animal i.e. (Pavo Cristatus) (Ref. TOR Point no. 5(v)).
2. Conservation Plan of Schedule – I animal i.e. Leopard (Panthera pardus fusca) (Ref. TOR Point no. 5(v)).

In this regard we need a authenticate conservation plan of Peacock & Leopard from your goodself office for onward submission to Ministry of Environment, Forest & Climate change.

You are requested to kindly authenticate the conservation plan (as per TOR point no. 5) of Peacock & Leopard.

Kindly do the needful.

Thanking you.

Yours faithfully,

For J.K. Cement Works, Nimbahera

S.K. Rathore
(Unit Head)

Enclosure: - 1. TOR issued from MoEF & CC, New Delhi
2. Conservation Plan of Peacock & Leopard

➲Pollution Control deptt.

Annexure-II

J.K. Cement WORKS, NIMBAHERA (RAJ)

DATA SHEET FOR PARTICULATE MATTER EMISSION FROM POINT SOURCE

April' 2018 - September' 2018

DATE	NAME OF THE STACK / DUCT ATTECHED WITH UNIT AND MONTH	CROSS SECTIONAL AREA OF DUCT (M2)	STACK GASES TEMP. (^{0} K)	STACK GASES VELOCITY (M / Sec.)	FLOW OF GASES IN STACK (NM^3/Sec.)	DUST CONC. (Mg/NM^3)	MEAN DUST CONC. (Mg/NM^3)	EMISSION RATE (Ts/DAY)	REMARK
April'18									
03.04.2018	L.S. CRUSHER (B.F.)	0.26	325	11.84	2.82	14.50	13.3	0.00	
10.04.2018	L.S. CRUSHER (B.F.)	0.26	322	11.41	2.75	11.40		0.00	
17.04.2018	L.S. CRUSHER (B.F.)	0.26	320	12.51	3.03	17.70		0.01	
24.04.2018	L.S. CRUSHER (B.F.)	0.26	323	12.12	2.91	9.70		0.00	
May'18									
01.05.2018	L.S. CRUSHER (B.F.)	0.26	328	12.47	2.95	12.20	15.4	0.003	
08.05.2018	L.S. CRUSHER (B.F.)	0.26	330	11.16	2.62	19.50		0.004	
15.05.2018	L.S. CRUSHER (B.F.)	0.26	327	11.61	2.75	16.20		0.004	
22.05.2018	L.S. CRUSHER (B.F.)	0.26	332	12.39	2.89	13.60		0.003	
June'18									
01.06.2018	L.S. CRUSHER (B.F.)	0.3	327	11.50	2.72	12.60	15.6	0.003	
08.06.2018	L.S. CRUSHER (B.F.)	0.3	331	12.53	2.93	8.50		0.002	
19.06.2018	L.S. CRUSHER (B.F.)	0.3	329	11.09	2.61	11.80		0.003	
28.06.2018	L.S. CRUSHER (B.F.)	0.26	330	12.09	2.84	13.80		0.003	
July'18									
05.07.2018	L.S. CRUSHER (B.F.)	0.26	325	10.51	2.51	11.90	12.4	0.003	
12.07.2018	L.S. CRUSHER (B.F.)	0.26	322	12.04	2.90	14.40		0.004	
19.07.2018	L.S. CRUSHER (B.F.)	0.26	320	11.16	2.70	9.50		0.002	
26.07.2018	L.S. CRUSHER (B.F.)	0.26	323	10.88	2.61	13.60		0.003	
August'18									
03.08.2018	L.S. CRUSHER (B.F.)	0.26	322	10.52	2.53	14.50	14.5	0.003	
10.08.2018	L.S. CRUSHER (B.F.)	0.26	321	11.18	2.70	16.90		0.004	
17.08.2018	L.S. CRUSHER (B.F.)	0.26	323	11.65	2.79	11.10		0.003	
24.08.2018	L.S. CRUSHER (B.F.)	0.26	320	11.33	2.74	15.40		0.004	
September'18									
01-09-2018	L.S. CRUSHER (B.F.)	0.26	324	11.56	2.76	16.20	13.9	0.004	
07-09-2018	L.S. CRUSHER (B.F.)	0.26	320	11.16	2.70	13.10		0.003	
13-09-2018	L.S. CRUSHER (B.F.)	0.26	318	10.91	2.66	10.70		0.002	
24-09-2018	L.S. CRUSHER (B.F.)	0.26	326	11.81	2.81	15.40		0.004	
April'18									
02.04.2018	KILN No.1 (Bag House)	4.90	402	10.17	36.94	11.90	14.6	0.038	
09.04.2018	KILN No.1 (Bag House)	4.90	395	10.61	39.22	15.00		0.051	
16.04.2018	KILN No.1 (Bag House)	4.90	398	9.39	34.45	18.20		0.054	
23.04.2018	KILN No.1 (Bag House)	4.90	400	9.91	36.18	13.40		0.042	
May'18									
01.05.2018	KILN No.1 (Bag House)	4.90	399	9.15	33.49	10.60	11.7	0.03	
08.05.2018	KILN No.1 (Bag House)	4.90	405	11.04	39.80	12.20		0.04	
15.05.2018	KILN No.1 (Bag House)	4.90	403	9.95	36.05	14.70		0.05	
23.05.2018	KILN No.1 (Bag House)	4.90	401	9.60	34.96	9.20		0.028	
June'18									
02.06.2018	KILN No.1 (Bag House)	4.90	395	10.61	39.22	8.10	10.4	0.03	
09.06.2018	KILN No.1 (Bag House)	4.90	402	9.93	36.07	11.10		0.035	
16.06.2018	KILN No.1 (Bag House)	4.90	398	11.23	41.20	9.60		0.034	
23.06.2018	KILN No.1 (Bag House)	4.90	400	10.97	40.05	12.60		0.044	
July'18									
02.07.2018	KILN No.1 (Bag House)	4.9	405	10.25	36.96	11.80	9.7	0.038	
09.07.2018	KILN No.1 (Bag House)	4.9	399	11.18	40.91	7.50		0.027	
16.07.2018	KILN No.1 (Bag House)	Kiln Stop							
31.07.2018	KILN No.1 (Bag House)								
August'18									
04.08.2018	KILN No.1 (Bag House)	Kiln Stop							
11.08.2018	KILN No.1 (Bag House)								
18.08.2018	KILN No.1 (Bag House)								
25.08.2018	KILN No.1 (Bag House)								

September'18									
04-09-2018	KILN No.1 (Bag House)	Kiln Stop							
11-09-2018	KILN No.1 (Bag House)								
18-09-2018	KILN No.1 (Bag House)								
30-09-2018	KILN No.1 (Bag House)								

April'18									
02.04.2018	KILN No. 2 (Bag house)	3.80	435	18.44	48.00	10.40	10.5	0.040	
09.04.2018	KILN No. 2 (Bag house)	**Under Maintenance**							
18.04.2018	KILN No. 2 (Bag house)	3.80	431	17.81	46.79	8.50		0.030	
25.04.2018	KILN No. 2 (Bag house)	3.80	429	18.72	49.41	12.60		0.050	
May'18									
01.05.2018	KILN No. 2 (Bag house)	3.80	412	18.30	50.30	12.60	12.2	0.050	
08.05.2018	KILN No. 2 (Bag house)	3.80	415	17.75	48.43	11.20		0.050	
15.05.2018	KILN No. 2 (Bag house)	3.80	410	18.08	49.94	15.20		0.070	
23.05.2018	KILN No. 2 (Bag house)	3.80	417	18.63	50.59	9.90		0.04	
June'18									
02.06.2018	KILN No. 2 (Bag house)	3.80	422	18.08	48.52	14.40	13.5	0.06	
09.06.2018	KILN No. 2 (Bag house)	3.80	418	18.82	50.99	12.40		0.05	
16.06.2018	KILN No. 2 (Bag house)	3.80	425	18.89	50.33	15.20		0.07	
23.06.2018	KILN No. 2 (Bag house)	3.80	421	17.70	47.61	11.80		0.05	
July'18									
04.07.2018	KILN No. 2 (Bag house)	**Kiln Under Maintenace**							
11.07.2018	KILN No. 2 (Bag house)	3.80	422	18.21	48.86	10.40	11.8	0.040	
18.07.2018	KILN No. 2 (Bag house)	3.80	410	16.91	46.70	13.10		0.050	
25.07.2018	KILN No. 2 (Bag house)	3.80	418	18.52	50.17	11.90		0.050	
August'18									
04.08.2018	KILN No. 2 (Bag house)	3.80	422	17.99	48.27	13.00	12.5	0.050	
11.08.2018	KILN No. 2 (Bag house)	3.80	421	17.74	47.72	16.80		0.070	
[illegible].2018	KILN No. 2 (Bag house)	3.80	415	17.16	46.82	9.00		0.040	
25.08.2018	KILN No. 2 (Bag house)	3.80	417	17.43	47.33	11.10		0.050	
September'18									
04-09-2018	KILN No. 2 (Bag house)	**Kiln Stop**							
11-09-2018	KILN No. 2 (Bag house)								
18-09-2018	KILN No. 2 (Bag house)								
30-09-2018	KILN No. 2 (Bag house)								
April'18									
02.04.2018	KILN No. 3 (Bag House)	3.80	428	19.83	52.47	7.40	9.1	0.030	
09.04.2018	KILN No. 3 (Bag House)	3.80	420	18.42	49.66	11.60		0.050	
16.04.2018	KILN No. 3 (Bag House)	3.80	424	19.00	50.74	9.00		0.040	
23.04.2018	KILN No. 3 (Bag House)	3.80	418	18.10	49.03	8.30		0.040	
May'18									
01.05.2018	KILN No. 3 (Bag House)	3.80	425	18.57	49.48	10.90	10.4	0.050	
08.05.2018	KILN No. 3 (Bag House)	3.80	419	19.41	52.46	8.40		0.040	
22.05.2018	KILN No. 3 (Bag House)	3.80	422	18.64	50.02	12.40		0.050	
29.05.2018	KILN No. 3 (Bag House)	3.80	417	18.84	51.16	9.80		0.040	
June'18									
01.06.2018	KILN No. 3 (Bag House)	3.80	421	18.84	50.68	13.10	11.8	0.060	
08.06.2018	KILN No. 3 (Bag House)	**Under Maintenance**							
[illegible].2018	KILN No. 3 (Bag House)	3.80	419	19.24	52.00	10.10		0.05	
[illegible].2018	KILN No. 3 (Bag House)	3.80	420	18.33	49.42	12.30		0.05	
July'18									
4.07.2018	KILN No. 3 (Bag House)	3.80	418	17.54	47.52	10.10	10.6	0.04	
13.07.2018	KILN No. 3 (Bag House)	3.80	424	18.30	48.87	12.00		0.05	
20.07.2018	KILN No. 3 (Bag House)	3.80	421	18.63	50.11	9.10		0.04	
28.07.2018	KILN No. 3 (Bag House)	3.80	416	17.68	48.13	11.20		0.05	
August'18									
07.08.2018	KILN No. 3 (Bag House)	3.80	416	17.18	46.77	9.20	9.8	0.04	
14.08.2018	KILN No. 3 (Bag House)	3.80	422	18.43	49.46	11.50		0.05	
22.08.2018	KILN No. 3 (Bag House)	3.80	421	18.32	49.28	10.20		0.04	
29.08.2018	KILN No. 3 (Bag House)	3.80	419	17.47	47.21	8.30		0.03	
September'18									
04-09-2018	KILN No. 3 (Bag House)	3.80	425	17.96	47.85	11.70	11.2	0.05	
11-09-2018	KILN No. 3 (Bag House)	3.80	420	18.03	48.61	13.50		0.06	
18-09-2018	KILN No. 3 (Bag House)	3.80	418	18.43	49.93	10.10		0.04	
25-09-2018	KILN No. 3 (Bag House)	3.80	424	17.99	48.05	9.60		0.04	

April'18									
02.04.2018	PRE-CALCINER (Bag House)	7.79	405	14.88	85.29	12.50		0.09	
09.04.2018	PRE-CALCINER (Bag House)	7.79	399	16.20	94.25	16.10	12.3	0.13	
16.04.2018	PRE-CALCINER (Bag House)	7.79	402	15.04	86.85	9.90		0.07	
23.04.2018	PRE-CALCINER (Bag House)	7.79	398	15.68	91.46	10.70		0.08	
May'18									
01.05.2018	PRE-CALCINER (Bag House)	7.79	401	14.31	82.84	14.80		0.11	
08.05.2018	PRE-CALCINER (Bag House)	7.79	398	15.27	89.07	10.80	13.6	0.08	
22.05.2018	PRE-CALCINER (Bag House)	7.79	403	16.08	92.63	12.50		0.10	
29.05.2018	PRE-CALCINER (Bag House)	7.79	396	14.71	86.23	16.10		0.120	
June'18									
01.06.2018	PRE-CALCINER (Bag House)	7.79	400	15.00	87.05	8.10		0.06	
08.06.2018	PRE-CALCINER (Bag House)	Under Maintenance					10.5		
19.06.2018	PRE-CALCINER (Bag House)	7.79	401	15.17	87.82	12.80		0.10	
27.06.2018	PRE-CALCINER (Bag House)	7.79	395	15.92	93.56	10.60		0.09	
July'18									
04.07.2018	PRE-CALCINER (Bag House)	7.79	395	14.36	84.39	16.20		0.120	
13.07.2018	PRE-CALCINER (Bag House)	7.79	398	15.70	91.57	14.50	14.4	0.110	
20.07.2018	PRE-CALCINER (Bag House)	7.79	400	15.13	87.81	13.80		0.100	
28.7.2018	PRE-CALCINER (Bag House)	7.79	392	15.23	90.19	12.90		0.100	
August'18									
07.08.2018	PRE-CALCINER (Bag House)	7.79	396	14.65	85.88	10.60		0.080	
14.08.2018	PRE-CALCINER (Bag House)	7.79	399	15.22	88.55	15.40	13.0	0.120	
22.08.2018	PRE-CALCINER (Bag House)	7.79	397	15.43	90.23	14.00		0.110	
29.08.2018	PRE-CALCINER (Bag House)	7.79	395	14.94	87.80	11.80		0.090	
September'18									
04-09-2018	PRE-CALCINER (Bag House)	7.79	394	15.32	90.26	18.10		0.140	
11-09-2018	PRE-CALCINER (Bag House)	7.79	397	15.13	88.47	12.70	14.8	0.100	
18-09-2018	PRE-CALCINER (Bag House)	7.79	395	15.54	91.33	13.10		0.100	
25-09-2018	PRE-CALCINER (Bag House)	7.79	398	15.89	92.68	15.20		0.120	
April'18									
02.04.2018	FOLAX COOLER (E.S.P)	12.56	400	9.08	84.96	24.80		0.180	
09.04.2018	FOLAX COOLER (E.S.P)	12.56	397	8.78	82.78	36.10	32.7	0.260	
16.04.2018	FOLAX COOLER (E.S.P)	12.56	402	7.78	72.44	27.90		0.170	
23.04.2018	FOLAX COOLER (E.S.P)	12.56	399	9.90	92.87	42.00		0.340	
May'18									
01.05.2018	FOLAX COOLER (E.S.P)	12.56	398	7.74	72.79	40.40		0.250	
08.05.2018	FOLAX COOLER (E.S.P)	12.56	404	9.12	84.49	34.60	36.2	0.250	
22.05.2018	FOLAX COOLER (E.S.P)	12.56	400	6.78	63.44	38.10		0.210	
29.05.2018	FOLAX COOLER (E.S.P)	12.56	402	8.56	79.70	31.50		0.220	
June'18									
01.06.2018	FOLAX COOLER (E.S.P)	12.56	389	9.85	94.77	36.20		0.300	
08.06.2018	FOLAX COOLER (E.S.P)	Under Maintenance					24.6		
19.06.2018	FOLAX COOLER (E.S.P)	12.56	395	11.19	106.03	20.10		0.180	
27.06.2018	FOLAX COOLER (E.S.P)	12.56	392	10.86	103.69	17.60		0.160	
July'18									
04.07.2018	FOLAX COOLER (E.S.P)	12.56	383	9.27	90.59	18.10		0.140	
13.07.2018	FOLAX COOLER (E.S.P)	12.56	387	10.24	99.04	16.30	17.4	0.140	
20.07.2018	FOLAX COOLER (E.S.P)	12.56	390	9.67	92.80	21.10		0.170	
28.07.2018	FOLAX COOLER (E.S.P)	12.56	388	8.92	86.05	14.10		0.100	
August'18									
07.08.2018	FOLAX COOLER (E.S.P)	12.56	385	9.45	91.87	17.50		0.14	
14.08.2018	FOLAX COOLER (E.S.P)	12.56	384	9.83	95.81	16.00	16.5	0.13	
22.08.2018	FOLAX COOLER (E.S.P)	12.56	389	9.74	93.72	19.10		0.15	
29.08.2018	FOLAX COOLER (E.S.P)	12.56	387	9.32	90.14	13.20		0.100	
September'18									
04-09-2018	FOLAX COOLER (E.S.P)	12.56	398	9.93	93.38	26.60		0.210	
11-09-2018	FOLAX COOLER (E.S.P)	12.56	390	10.24	98.27	19.50	22.7	0.170	
18-09-2018	FOLAX COOLER (E.S.P)	12.56	389	9.42	90.64	23.60		0.180	
25-09-2018	FOLAX COOLER (E.S.P)	12.56	396	9.82	92.82	21.00		0.170	

April'18									
02.04.2018	COAL MILL - 1 (B.F.)	0.33	348	11.87	3.35	12.80	14.2	0.004	
09.04.2018	COAL MILL - 1 (B.F.)	0.33	352	12.70	3.55	18.10		0.006	
16.04.2018	COAL MILL - 1 (B.F.)	0.33	345	13.25	3.78	14.90		0.005	
23.04.2018	COAL MILL - 1 (B.F.)	0.33	349	12.97	3.65	10.80		0.003	
May'18									
01.05.2018	COAL MILL - 1 (B.F.)	0.33	351	12.47	3.49	9.50	12.4	0.003	
08.05.2018	COAL MILL - 1 (B.F.)	0.33	349	11.71	3.30	16.30		0.005	
15.05.2018	COAL MILL - 1 (B.F.)	0.33	353	12.72	3.54	13.10		0.004	
23.05.2018	COAL MILL - 1 (B.F.)	0.33	347	11.45	3.24	10.70		0.003	
June'18									
02.06.2018	COAL MILL - 1 (B.F.)	0.33	347	11.39	3.23	12.40	15.3	0.003	
09.06.2018	COAL MILL - 1 (B.F.)	0.33	343	12.70	3.64	14.40		0.005	
16.06.2018	COAL MILL - 1 (B.F.)	0.33	351	11.92	3.34	16.40		0.005	
23.06.2018	COAL MILL - 1 (B.F.)	0.33	349	12.16	3.43	17.90		0.005	
July'18									
02.07.2018	COAL MILL - 1 (B.F.)	0.33	342	11.64	3.35	12.10	11.3	0.003	
09.07.2018	COAL MILL - 1 (B.F.)	0.33	340	11.09	3.21	10.50		0.003	
16.07.2018	COAL MILL - 1 (B.F.)	**Mill Stop**							
31.07.2018	COAL MILL - 1 (B.F.)								
August'18									
04.08.2018	COAL MILL - 1 (B.F.)	**Mill Stop**							
11.08.2018	COAL MILL - 1 (B.F.)								
[illegible].2018	COAL MILL - 1 (B.F.)								
25.08.2018	COAL MILL - 1 (B.F.)								
September'18									
04-09-2018	COAL MILL - 1 (B.F.)	**Mill Stop**							
11-09-2018	COAL MILL - 1 (B.F.)								
18-09-2018	COAL MILL - 1 (B.F.)								
30-09-2018	COAL MILL - 1 (B.F.)								
April'18									
02.04.2018	COAL MILL - 2 (B.F.)	0.38	347	13.08	4.27	10.20	10.7	0.004	
09.04.2018	COAL MILL - 2 (B.F.)	**Under Maintenance**							
18.04.2018	COAL MILL - 2 (B.F.)	0.38	345	13.40	4.40	8.70		0.003	
25.04.2018	COAL MILL - 2 (B.F.)	0.38	350	14.92	4.83	13.20		0.006	
May'18									
01.05.2018	COAL MILL - 2 (B.F.)	0.38	348	13.6	4.43	12.40	14.7	0.005	
08.05.2018	COAL MILL - 2 (B.F.)	0.38	356	14.91	4.74	16.20		0.007	
15.05.2018	COAL MILL - 2 (B.F.)	0.38	350	13.98	4.52	13.00		0.005	
23.05.2018	COAL MILL - 2 (B.F.)	0.38	353	14.28	4.58	17.10		0.007	
June'18									
02.06.2018	COAL MILL - 2 (B.F.)	0.38	349	12.97	4.21	11.40	13.8	0.004	
09.06.2018	COAL MILL - 2 (B.F.)	0.38	352	14.55	4.68	14.80		0.006	
[illegible].2018	COAL MILL - 2 (B.F.)	0.38	345	13.04	4.28	12.80		0.005	
23.06.2018	COAL MILL - 2 (B.F.)	0.38	343	13.75	4.54	16.10		0.006	
July'18									
04.07.2018	COAL MILL - 2 (B.F.)	**Mill under Maintenance**							
11.07.2018	COAL MILL - 2 (B.F.)	0.38	343	12.72	4.20	14.50	15.3	0.005	
18.07.2018	COAL MILL - 2 (B.F.)	0.38	348	14.22	4.63	17.10		0.007	
25.07.2018	COAL MILL - 2 (B.F.)	0.38	342	12.39	4.10	14.20		0.005	
August'18									
04.08.2018	COAL MILL - 2 (B.F.)	0.38	339	12.64	4.22	13.50	13.0	0.005	
11.08.2018	COAL MILL - 2 (B.F.)	0.38	340	12.91	4.30	10.80		0.004	
18.08.2018	COAL MILL - 2 (B.F.)	0.38	345	13.59	4.46	12.20		0.005	
25.08.2018	COAL MILL - 2 (B.F.)	0.38	343	12.92	4.27	15.40		0.006	
September'18									
04-09-2018	COAL MILL - 2 (B.F.)	**Mill Stop**							
11-09-2018	COAL MILL - 2 (B.F.)								
18-09-2018	COAL MILL - 2 (B.F.)								
30-09-2018	COAL MILL - 2 (B.F.)								

April'18									
02.04.2018	COAL MILL - 3 (B.F.)	0.38	345	13.36	4.39	7.30	8.9	0.003	
09.04.2018	COAL MILL - 3 (B.F.)	0.38	340	12.24	4.08	9.60		0.003	
16.04.2018	COAL MILL - 3 (B.F.)	0.38	350	13.95	4.51	10.40		0.004	
23.04.2018	COAL MILL - 3 (B.F.)	0.38	343	12.67	4.18	8.30		0.003	
May'18									
01.05.2018	COAL MILL - 3 (B.F.)	0.38	348	12.91	4.20	10.50	10.8	0.004	
08.05.2018	COAL MILL - 3 (B.F.)	0.38	350	14.09	4.56	12.00		0.005	
22.05.2018	COAL MILL - 3 (B.F.)	0.38	345	13.41	4.40	9.30		0.004	
29.05.2018	COAL MILL - 3 (B.F.)	0.38	352	13.99	4.50	11.20		0.004	
June'18									
01.06.2018	COAL MILL - 3 (B.F.)	0.38	344	13.92	4.58	11.00	11.3	0.004	
08.06.2018	COAL MILL - 3 (B.F.)	**Under Maintenance**							
19.06.2018	COAL MILL - 3 (B.F.)	0.38	350	13.16	4.26	10.40		0.004	
27.06.2018	COAL MILL - 3 (B.F.)	0.38	348	13.57	4.42	12.40		0.005	
July'18									
04.07.2018	COAL MILL - 3 (B.F.)	0.38	341	12.76	4.24	8.80	9.4	0.003	
13.07.2018	COAL MILL - 3 (B.F.)	0.38	345	13.72	4.50	7.90		0.003	
20.07.2018	COAL MILL - 3 (B.F.)	0.38	342	13.38	4.43	9.80		0.004	
28.07.2018	COAL MILL - 3 (B.F.)	0.38	347	12.50	4.08	10.90		0.004	
August'18									
07.08.2018	COAL MILL - 3 (B.F.)	0.38	342	12.20	4.04	15.20	15.4	0.005	
14.08.2018	COAL MILL - 3 (B.F.)	0.38	344	12.71	4.18	16.50		0.006	
22.08.2018	COAL MILL - 3 (B.F.)	0.38	341	13.21	4.39	12.70		0.005	
29.08.2018	COAL MILL - 3 (B.F.)	0.38	346	13.00	4.25	17.00		0.006	
September'18									
43347	COAL MILL - 3 (B.F.)	0.38	344	12.45	4.10	10.20	11.6	0.004	
43355	COAL MILL - 3 (B.F.)	0.38	342	13.13	4.35	9.10		0.003	
43362	COAL MILL - 3 (B.F.)	0.38	348	13.39	4.36	14.90		0.006	
43367	COAL MILL - 3 (B.F.)	0.38	345	12.88	4.23	12.10		0.004	
April'18									
02.04.2018	COAL MILL - 4 (BAG FILTER)	1.13	339	12.75	12.67	12.10	11.6	0.013	
09.04.2018	COAL MILL - 4 (BAG FILTER)	1.13	341	11.99	11.84	10.60		0.011	
16.04.2018	COAL MILL - 4 (BAG FILTER)	1.13	337	12.96	12.95	14.40		0.016	
23.04.2018	COAL MILL - 4 (BAG FILTER)	1.13	335	12.15	12.21	9.40		0.01	
May'18									
01.05.2018	COAL MILL - 4 (BAG FILTER)	1.13	342	13.16	12.96	11.00	13.2	0.012	
08.05.2018	COAL MILL - 4 (BAG FILTER)	1.13	348	11.84	11.46	14.40		0.014	
22.05.2018	COAL MILL - 4 (BAG FILTER)	1.13	350	12.95	12.46	12.30		0.013	
29.05.2018	COAL MILL - 4 (BAG FILTER)	1.13	346	13.13	12.78	15.10		0.017	
June'18									
01.06.2018	COAL MILL - 4 (BAG FILTER)	1.13	341	12.89	12.73	12.40	12.7	0.014	
08.06.2018	COAL MILL - 4 (BAG FILTER)	**Under Maintenance**							
19.06.2018	COAL MILL - 4 (BAG FILTER)	1.13	348	13.57	13.13	10.60		0.012	
27.06.2018	COAL MILL - 4 (BAG FILTER)	1.13	343	13.02	12.78	15.00		0.017	
July'18									
04.07.2018	COAL MILL - 4 (BAG FILTER)	1.13	345	11.87	11.59	11.40	10.5	0.011	
13.07.2018	COAL MILL - 4 (BAG FILTER)	1.13	342	12.78	12.58	8.70		0.009	
20.07.2018	COAL MILL - 4 (BAG FILTER)	1.13	347	12.07	11.71	9.60		0.01	
28.07.2018	COAL MILL - 4 (BAG FILTER)	1.13	341	11.52	11.38	12.30		0.012	
August'18									
07.08.2018	COAL MILL - 4 (BAG FILTER)	1.13	344	12.13	11.87	16.80	14.0	0.017	
14.08.2018	COAL MILL - 4 (BAG FILTER)	1.13	340	12.48	12.36	11.00		0.012	
22.08.2018	COAL MILL - 4 (BAG FILTER)	1.13	342	11.71	11.53	15.10		0.015	
29.08.2018	COAL MILL - 4 (BAG FILTER)	1.13	343	12.27	12.05	12.90		0.013	
September'18									
04-09-2018	COAL MILL - 4 (BAG FILTER)	1.13	347	12.40	12.03	9.60	13.5	0.01	
12-09-2018	COAL MILL - 4 (BAG FILTER)	1.13	345	13.14	12.83	20.10		0.022	
19-09-2018	COAL MILL - 4 (BAG FILTER)	1.13	349	13.06	12.60	11.00		0.012	
24-09-2018	COAL MILL - 4 (BAG FILTER)	1.13	348	12.03	11.64	13.20		0.013	

April'18									
05.04.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	373	13.37	2.88	21.20	17.1	0.005	
12.04.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	370	12.60	2.74	15.20		0.004	
19.04.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	368	13.65	2.98	18.20		0.005	
26.04.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	375	13.02	2.79	13.60		0.003	
May'18									
03.05.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	378	12.80	2.72	18.20	15.2	0.004	
12.05.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	380	14.38	3.04	13.80		0.004	
19.05.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	376	13.48	2.88	16.40		0.004	
26.05.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	383	14.03	2.95	12.50		0.003	
June'18									
04.06.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	373	13.37	2.88	17.60	14.3	0.004	
11.06.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	378	13.83	2.94	11.50		0.003	
18.06.2018	CEMENT MILL - 1 (BAG FILTER)	**Under Maintenance**							
29.06.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	375	13.08	2.81	13.70		0.003	
July'18									
02.07.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	369	12.19	2.66	12.10	12.2	0.003	
09.07.2018	CEMENT MILL - 1 (BAG FILTER)	**Mill under maintenance**							
19.07.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	377	13.11	2.80	13.6		0.003	
26.07.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	372	13.35	2.89	11.0		0.003	
August'18									
06.08.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	370	13.32	2.90	8.20	10.0	0.002	
13.08.2018	CEMENT MILL - 1 (BAG FILTER)	0.27	371	12.68	2.75	10.20		0.002	
[illegible].2018	CEMENT MILL - 1 (BAG FILTER)	0.27	373	13.53	2.92	11.70		0.003	
31.08.2018	CEMENT MILL - 1 (BAG FILTER)	**Mill under maintenance**							
September'18									
03-09-2018	CEMENT MILL - 1 (BAG FILTER)	**Mill Stop**							
10-09-2018	CEMENT MILL - 1 (BAG FILTER)								
17-09-2018	CEMENT MILL - 1 (BAG FILTER)								
30-09-2018	CEMENT MILL - 1 (BAG FILTER)								
April'18									
05.04.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	371	20.83	5.35	19.20	16.3	0.009	
12.04.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	368	22.28	5.77	15.80		0.008	
19.04.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	374	21.59	5.50	18.10		0.009	
26.04.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	370	21.96	5.66	11.90		0.006	
May'18									
10.05.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	371	21.53	5.53	12.30	14.3	0.006	
17.05.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	378	22.90	5.78	14.50		0.007	
24.05.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	382	22.38	5.59	16.50		0.008	
31.05.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	375	21.11	5.37	13.70		0.006	
June'18									
04.06.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	369	20.77	5.37	9.70	10.4	0.005	
11.06.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	373	22.11	5.65	12.50		0.006	
[illegible].2018	CEMENT MILL - 2 (BAG FILTER)	0.32	377	21.67	5.48	11.60		0.005	
[illegible].2018	CEMENT MILL - 2 (BAG FILTER)	0.32	391	21.06	5.14	7.80		0.003	
July'18									
02.07.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	372	20.20	5.18	15.10	13.4	0.007	
09.07.2018	CEMENT MILL - 2 (BAG FILTER)	**Mill Under Maintenance**							
16.07.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	378	22.10	5.58	13.80		0.007	
23.07.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	368	20.64	5.35	11.20		0.005	
August'18									
06.08.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	370	20.70	5.34	7.80	9.5	0.004	
13.08.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	371	20.48	5.26	9.20		0.004	
25.08.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	372	21.40	5.49	9.90		0.005	
31.08.2018	CEMENT MILL - 2 (BAG FILTER)	0.32	374	21.08	5.37	11.20		0.005	
September'18									
03-09-2018	CEMENT MILL - 2 (BAG FILTER)	**Mill Stop**							
10-09-2018	CEMENT MILL - 2 (BAG FILTER)								
17-09-2018	CEMENT MILL - 2 (BAG FILTER)								
30-09-2018	CEMENT MILL - 2 (BAG FILTER)								

J.K. Cement WORKS, Nimbahera (RAJ)
AMBIENT AIR QUALITY AVERAGE RESULTS (SPM)
(ALL VALUES IN MICROGRAMS / CUBIC METER)
(April' 2018 - September' 2018)

S.No. & Month	LOCATION / PERAMETER	NEAR MAIN SECURITY GATE	NEAR STACKER TRANSFER POINT	NEAR NEW J.K. FACTORY GATE	NEAR MINE GATE	Remarks
April' 2018						
1	SPM	421.3	354.2	379.5	403.5	
2	PM10	51.7	42.1	45.9	48.2	
3	SO2	13.1	8.1	10.7	11.0	
4	NOX	25.5	18.6	22.0	22.8	
5	CO	500.9	329.2	472.3	429.4	
May' 2018						
1	SPM	434.0	376.0	401.0	417.2	
2	PM10	52.6	46.5	48.8	50.8	
3	SO2	15.7	12.7	14.1	14.0	
4	NOX	30.0	24.9	27.3	26.7	
5	CO	701.3	500.9	596.4	577.3	
June' 2018						
1	SPM	412.8	363.5	388.2	398.3	
2	PM10	51.3	45.4	48.8	50.4	
3	SO2	14.5	12.1	13.4	15.5	
4	NOX	26.5	23.3	25.4	28.5	
5	CO	787.2	572.5	601.1	586.8	
July' 2018						
1	SPM	204.7	264.5	228.5	245.5	
2	PM10	26.2	33.5	28.3	31.2	
3	SO2	6.7	8.9	5.2	7.1	
4	NOX	20.8	23.2	20.2	23.4	
5	CO	257.6	353.0	300.6	434.1	
August' 2018						
1	SPM	195.7	260.8	225.0	242.5	
2	PM10	26.2	33.3	27.5	29.8	
3	SO2	9.2	10.3	9.4	10.0	
4	NOX	19.7	19.1	20.6	20.7	
5	CO	500.9	415.1	343.5	405.5	
September' 2018						
1	SPM	214.8	281.2	222.4	241.6	
2	PM10	28.2	31.5	27.1	31.2	
3	SO2	10.0	12.2	9.8	11.2	
4	NOX	20.8	20.0	18.6	21.4	
5	CO	754	539.1	577.3	691.8	
Six monthly Average						
1	SPM	313.9	316.7	307.4	324.8	
2	PM10	39.4	38.7	37.7	40.3	
3	SO2	11.5	10.7	10.4	11.5	
4	NOX	23.9	21.5	22.3	23.9	
5	CO	583.6	451.6	481.9	520.8	

J.K. Cement Works, Nimbahera
Fugitive Emission Monitoring Report
April' 2018 - September' 2018

S.No.	Month/Year	SPM (µg/m3)			
		NEAR COAL YARD-1	NEAR LIMESTONE CRUSHING SITE-1	NEAR STACKER RECLAIMER-1	NEAR GYPSUM YARD-1
1	Apr-18	1962.3	3419.5	3047.1	2724.4
2	May-18	1871.4	3101.4	3239.9	3035.2
3	Jun-18	1775.4	2866.8	2585.5	2644.8
4	Jul-18	1053.9	1864.4	1463.5	1392.4
5	Aug-18	1194.4	1757.7	1641.9	1451.3
6	Sep-18	1278.0	1892.4	1904.8	1743.7

J.K. Cement WORKS, Nimbahera (RAJ)
22 MW CPP Fugitive Emission Monitoring Report
(April 2018 - September 2018)
(ALL VALUES IN MICROGRAMS / CUBIC METER)

Month/Year	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
NEAR COAL YARD OF 22 MW CPP	1758.5	1855.4	1731.3	1028.0	920.1	1119.1

J.K. *Cement* WORKS, Nimbahera (RAJ)

Treated Domestic Effluent Analysis Report

April' 2018 - September' 2018

S.No.	PARAMETER	Standards	April-18	May-18	June-18	July-18	August-18	September-18
1	pH	Between 5.5 to 9.0	7.6	7.85	7.76	7.6	7.35	7.6
2	Total Suspended solids	Not to exceed 100 mg/l	44	47	30	42	38	27
3	Chemical Oxygen Demand	Not to exceed 250 mg/l	52	55	38	51	47	32
4	Biological Oxygen Demand (3 days at 27 Degree C)	Not to exceed 30 mg/l	9.8	10.1	8	9.7	9.2	6
5	Oil & Grease	Not to exceed 10 mg/l	2	2	1.4	2	2	1.4
6	Ammonical Nitrogen (as N)	Not to exceed 50 mg/l	3.95	3.7	2	3.45	3.2	2.6
7	Sulphide (as S)	Not to exceed 2.0 mg/l	0.76	0.8	<0.1	0.72	0.79	<0.1
8	Chlorides	Not to exceed 1000 mg/l	89	82	66	87	82	62
9	Total Kjeldahl Nitrogen (as N)	Not to exceed 100 mg/l	3.6	3.9	3	3.7	3.4	3.28
10	Residual Chlorine	Not to exceed 1.0 mg/l	NIL	NIL	<0.1	NIL	NIL	<0.1

J.K. *Cement* WORKS, Nimbahera (RAJ)

Noise Monitoring Report

Month	FY 2018-19 (Up to September 2018) (Unit - 1 & 2)							
	Main Securty Gate		Stacker Transfer Point		New JK Factory Gate		Mines Gate	
	Day	Night	Day	Night	Day	Night	Day	Night
Apr-18	68.6	59.6	71.2	61.2	69.3	58.2	70.1	61.5
May-18	69.3	60.2	70.3	59.3	67.5	57.8	68.7	60.3
Jun-18	67.6	58.3	69.5	56.6	66.5	55.6	67.0	55.3
Jul-18	66.3	56.3	67.8	57.5	64.3	53.3	68.2	53.2
Aug-18	67.0	57.0	68.5	59.1	65.2	54.3	69.1	55.6
Sep-18	67.5	56.9	67.9	58.4	64.8	53.9	68.8	56.1

J.K. Cement WORKS, Nimbahera (RAJ)

Noise Monitoring Report

(April 2018 - September 2018) (Up to September 2018)

(ALL VALUES IN dB)

Month	22 MW CPP		13.2 MW WHR	
	Day	Night	Day	Night
Apr-18	70.2	59.6	71.2	60.5
May-18	69.5	60.1	68.6	58.9
Jun-18	68.3	58.2	69.2	57.3
Jul-18	67.2	56.3	68	59.2
Aug-18	66.5	55.1	67.5	58.8
Sep-18	66.0	54.2	67.0	57.4

J.K. Cement WORKS,Nimbahera (RAJ)

13.2 MW WASTE HEAT RECOVERY PLANT

Outlet of Waste heat recovery plant

(April' 2018 - September' 2018)

MONTH/ PARAMETRS	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
pH	7.7	7.25	7.68	7.4	7.55	7.6
Total Suspended Solids (TSS)	46	43	42	41	38	38
Oil & Grease	<1.1	<1.5	<1.4	<1.2	<1.4	<1.4
Bio-Chemical Oxygen Demand (BOD) (3 Days at 270C)	9.6	10.1	9	9.6	9.1	9
Chemical Oxygen Demand (COD)	55	53	48	49	53	44
Chlorides (as Cl)	164	169	122	149	138	104
Sulphates (as SO4)	38	35	84	61	57	78
Phosphate	3.95	4.05	3.4	3.8	3.6	3.8
Iron (as Fe)	0.3	0.2	<0.05	0.2	0.2	<0.05
Total Chromium (as Cr)	0.04	0.05	<0.01	0.03	0.05	<0.01
Free Available chlorine	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Copper as (Cu)	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02
Zinc (Zn)	<0.01	<0.02	<0.02	<0.01	<0.02	<0.02
Total Residual Chlorine	NIL	NIL	<0.1	NIL	NIL	<0.1
Temperature	04 oC Higher than the intake water	04 oC Higher than the intake water	04 oC Higher than the intake water	04 oC Higher than the intake water	04 oC Higher than the intake water	04 oC Higher than the intake water

J.K. Cement WORKS, Nimbahera (RAJ)

22 MW THERMAL POWER PLANT

Outlet of Power Plant

(April' 2018 - September' 2018)

PARAMETERS/MONTH	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
pH	7.85	7.45	7.54	7.56	7.85	7.62
Total Suspended Solids (TSS)	46	49	38	46	41	32
Bio-Chemical Oxygen Demand (BOD) (3 Days at 27 deg C)	9.1	9.7	9.2	9.2	8.9	8
Chemical Oxygen Demand (COD)	52	55	46	51	48	36
Oil & Grease	<1.5	<1.3	<1.4	<1.5	<1.2	<1.4
Chlorides	149	154	138	138	132	122
Sulphate	92	97	104	91	86	96
Temperature	4oc higher than the intake water temperature	4oc higher than the intake water temperature	4oc higher than the intake water temperature	4oc higher than the intake water temperature	4oc higher than the intake water temperature	4oc higher than the intake water temperature
Iron (Total)	0.1	0.2	<0.05	0.1	0.2	<0.05
Copper (total)	<0.02	<0.01	<0.02	<0.02	<0.01	<0.02
Phosphate (as PO_4)	1.4	1.6	3.2	2.2	2.7	3
Zinc (as Zn)	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02
Chromium (total)	0.05	0.06	<0.01	0.04	0.02	<0.01
Total Residual Chlorine	NIL	NIL	<0.1	NIL	NIL	<0.1
Free available chlorine	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

J.K. Cement WORKS, Nimbahera (RAJ)

22 MW THERMAL POWER PLANT

Stack monitoring results (April 2018 - September 2018)

Location/Month	SPM (Mg/Nm3)					
	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Stack attached with Boiler	34.0	37.0	31.8	34.0	31.0	20.5
Stack attached with Coal Handling system	17.3	15.9	14.7	15.4	14.9	15.1
Stack attached with Coal transfer point	15.2	13.8	12.7	16.5	13.8	14.3

Mitra S.K. Private Limited

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MSK
TESTING • INSPECTION

TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1120
Date : 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01314
Sample Description : Stack Emission
Date & Time of Sampling: 08.09.2018 at 09.00 A.M
Sampling Location : Kiln- 03

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Kiln-03	
2.Emission due to	: Burning of Limestone & additive	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 65.50 m	
2.Diameter of the Stack at sampling point	: 2.20 m	
3.Area of Stack	: 3.80 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 144	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 15.0	EPA Part 2
4.Concentration of Sulphur di oxide (mg/Nm^3)	: 9.2	EPA Part-6
5.Concentration of Nitrogen di oxide (mg/Nm^3)	: 694.0	EPA Part-7
6.Concentration of Particulate Matters (mg/Nm^3)	: 10.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag House	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

Authorized Signatory

Mitra S.K. Private Limited

TESTING • INSPECTION

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1121
Date : 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01315
Sample Description : Stack Emission
Date & Time of Sampling: 08.09.2018 at 10.30 a.m
Sampling Location : Pre-calciner

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Pre-calciner	
2.Emission due to	: Pre-calcination of lime Stone & additives	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 87.90 m	
2.Diameter of the Stack at sampling point	: 3.15 m	
3.Area of Stack	: 7.79 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 108	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 13.2	EPA Part 2
4.Concentration of Sulphur di oxide (mg/Nm^3)	: 11.6	EPA Part-6
5.Concentration of Nitrogen di oxide (mg/Nm^3)	: 974.0	EPA Part-7
6.Concentration of Particulate Matters (mg/Nm^3)	: 11.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag House	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

Authorised Signatory

Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1114
Date: 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01308
Sample Description : Stack Emission
Date & Time of Sampling: 07.09.2018 at 10.30 A.M
Sampling Location : Crusher

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Lime Stone Crusher	
2.Emission due to	: Lime Stone Crushing	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30 m	
2.Diameter of the Stack at sampling point	: 0.57 m	
3.Area of Stack	: 0.2553 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 38	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 8.0	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 26.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag Filter	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

Authorised Signatory

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TEST REPORT

Name & Address of the Customer :

J.K. Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1115
Date: 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01309
Sample Description : Stack Emission
Date & Time of Sampling: 08.09.2018 at 01.30 p.m
Sampling Location : Coal Mill - 3

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Coal mill	
2.Emission due to	: Grinding of coal	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 43.50 m	
2.Diameter of the Stack at sampling point	: 0.70 m	
3.Area of Stack	: 0.385 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 76	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 13.6	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 14.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag filter	
E. Remarks : NIL		

Report Prepared by :

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Authorised Signatory

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1116
Date: 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01310
Sample Description : Stack Emission
Date & Time of Sampling: 08.09.2018 at 03.30 p.m
Sampling Location : Coal Mill - 4

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Coal mill	
2.Emission due to	: Grinding of coal	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30.50 m	
2.Diameter of the Stack at sampling point	: 1.20 m	
3.Area of Stack	: 1.13 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 78	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 13.4	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 18.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag filter	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

Authorised Signatory

Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1117
Date: 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01311
Sample Description : Stack Emission
Date & Time of Sampling: 08.09.2018 at 12.00 p.m
Sampling Location : Clinker Cooler

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Clinker cooler	
2.Emission due to	: Clinker cooler	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 40.90 m	
2.Diameter of the Stack at sampling point	: 4.0 m	
3.Area of Stack	: 12.57 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 101	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 7.9	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 18.5	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Electrostatic Precipitator	
E. Remarks : NIL		

Report Prepared by :

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1118
Date: 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01312
Sample Description : Stack Emission
Date & Time of Sampling: 10.09.2018 at 10.00 a.m
Sampling Location : Cement Mill No. 3

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Cement Mill	
2.Emission due to	: Grinding of clinker	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30.0 m	
2.Diameter of the Stack at sampling point	: 0.75 m	
3.Area of Stack	: 0.44 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 95	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 12.6	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 14.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag Filter	
E. Remarks : NIL		

Report Prepared by :

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1119
Date: 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01313
Sample Description : Stack Emission
Date & Time of Sampling: 10.09.2018 at 11.30 A.M
Sampling Location : Cement Mill No. 4

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Cement Mill	
2.Emission due to	: Grinding of clinker	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30.0 m	
2.Diameter of the Stack at sampling point	: 0.85 m	
3.Area of Stack	: 0.57 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 98	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 13.0	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 16.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag Filter	
E. Remarks : NIL		

Report Prepared by :

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TEST REPORT

Name & Address of the Customer :
J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1134
Date : 28.09.2018
Sample No. : MSKGL/ED/2018-19/09/01553
Sample Description : Flue Gas Monitoring
Sampling Location :22 MW Thermal Power Plant
Date & Time of Sampling : 11.09.2018 at 10.30 A.M

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Boiler	
2.Emission due to	: Power Generation	
3.Material of construction of Stack	: RCC	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
6.Generation Capacity	: 22 MW	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 105.0 m	
2.Diameter of the Stack at sampling point	: 2.3 m	
3.Area of Stack	: 4.16 m^2	
C. Analysis/Characteristic of stack		
1. Fuel used : Coal		
D. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 126	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 8.8	EPA Part 2
4.Concentration of Oxygen (% v/v)	: 6.4	IS 13270:1992,Reaf:2014
5.Conc. of Particulate Matters (mg/Nm^3) at 6% O_2 on dry basis	: 36.0	EPA Part-17
E. Pollution control device		
Details of pollution control devices attached with the stack	: Electrostatic precipitator	
F. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :
J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1128
Date : 28.09.2018
Sample No. : MSKGL/ED/2018-19/09/01549
Sample Description : Treated Effluent Water
Sample Location : 22 MW TPP
Date of Collection : 11.09.2018

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

Sl No.	Parameter	Unit	Standard	Result
1.	pH (at 27^0 C)	---	6.5 to 8.5	7.62
2.	Total Suspended solids (TSS)	mg/l	100.0	32.0
3.	Oil & Grease	mg/l	10.0	<1.4
4.	Total Residual Chlorine	mg/l	1.0	<0.1
5.	Iron (as Fe)	mg/l	1.0	<0.05
6.	Chromium (Total)	mg/l	0.2	<0.01
7.	Free Available Chlorine	mg/l	0.5	<0.1
8.	Copper (as Cu)	mg/l	1.0	<0.02
9.	Zinc (as Zn)	mg/l	1.0	<0.02
10.	Temperature	^{0} C	Shall not exceed 5^0 C above the receiving water temperature	4^0 C higher than the intake water temperature
11.	Phosphate (as PO_4)	mg/l	5.0	3.0
12.	Chemical Oxygen Demand (as COD)	mg/l	250.0	36.0
13.	Biological Oxygen Demand (as BOD)	mg/l	30.0	8.0
14.	Chlorides (as Cl)	mg/l	1000.0	122.0
15.	Sulphate (as SO_4)	mg/l	1000.0	96.0

Report Prepared by :

For Mitra S.K. Private Limited

MITRA S.K. PVT. LTD.

Authorised Signatory

Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :
J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1129
Date : 28.09.2018
Sample No. : MSKGL/ED/2018-19/09/01550
Sample Description : Treated Effluent Water
Sample Location : 13.2 MW WHR
Date of Collection : 11.09.2018

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

Sl No.	Parameter	Unit	Standard	Result
1.	pH (at 27^0 C)	---	6.5 to 8.5	7.60
2.	Total Suspended solids (TSS)	mg/l	100.0	38.0
3.	Oil & Grease	mg/l	10.0	<1.4
4.	Total Residual Chlorine	mg/l	1.0	<0.1
5.	Iron (as Fe)	mg/l	1.0	<0.05
6.	Chromium (Total)	mg/l	0.2	<0.01
7.	Free Available Chlorine	mg/l	0.5	<0.1
8.	Copper (as Cu)	mg/l	1.0	<0.02
9.	Zinc (as Zn)	mg/l	1.0	<0.02
10.	Temperature	^{0} C	Shall not exceed 5^0 C above the receiving water temperature	4^0 C higher than the intake water temperature
11.	Phosphate (as PO_4)	mg/l	5.0	3.8
12.	Chemical Oxygen Demand (as COD)	mg/l	250.0	44.0
13.	Biological Oxygen Demand (as BOD)	mg/l	30.0	9.0
14.	Chlorides (as Cl)	mg/l	1000.0	104.0
15.	Sulphate (as SO_4)	mg/l	1000.0	78.0

Report Prepared by :

For Mitra S.K. Private Limited

MITRA S.K. PVT. LTD.

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Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1110
Date : 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01292
Sample Description : Ambient Air
Sampling Location : Near Main Security Gate
Date of Sampling : 07/08.09.2018

Reference No.& Date : e-mail dtd: 07.06.2018

SL. N0.	Pollutants	Limit	Result	Method of Test Refference
1	Particulate matter (PM_{10}) in $\mu g/m^3$	100	74	IS: 5182:(Part-23)-2006
2	Particulate matter($PM_{2.5}$) in $\mu g/m^3$	60	38	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO2) in $\mu g/m^3$	80	6.9	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO2) in $\mu g/m^3$	80	25.4	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.44	IS 5182 :(Part-10) :1999
6	Ozone (O3) in $\mu g/m^3$	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH3) in $\mu g/m^3$	400	19.2	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu g/m^3$	1	<0.02	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	<4.0	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C6H6) in $\mu g/m^3$	5	<2.08	IS 5182 : Part. 11 : 2006
12	Benzo(a) pyrene (BaP) in ng/m^3	1	<0.4	IS 5182 : Part. 12 : 2004

Note : Limit as per CPCB notification, New Delhi, 18th November 2009, For Ambient air Quality

Report prepared by:

For Mitra S. K. Pvt. Ltd.

MITRA S.K. PVT. LTD.

Authorized Signatory

Mitra S.K. Private Limited

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Name & Address of the Customer :

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Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1111
Date : 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01293
Sample Description : Ambient Air
Sampling Location : Near Stacker Transfer Point
Date of Sampling : 07/08.09.2018

Reference No.& Date : e-mail dtd: 07.06.2018

SL. N0.	Pollutants	Limit	Result	Method of Test Refference
1	Particulate matter (PM_{10}) in $\mu g/m^3$	100	91	IS: 5182:(Part-23)-2006
2	Particulate matter($PM_{2.5}$) in $\mu g/m^3$	60	47	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO2) in $\mu g/m^3$	80	6.6	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO2) in $\mu g/m^3$	80	24.8	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.34	IS 5182 :(Part-10) :1999
6	Ozone (O3) in $\mu g/m^3$	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH3) in $\mu g/m^3$	400	18.8	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu g/m^3$	1	<0.02	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	<4.0	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C6H6) in $\mu g/m^3$	5	<2.08	IS 5182 : Part. 11 : 2006
12	Benzo(a) pyrene (BaP) in ng/m^3	1	<0.4	IS 5182 : Part. 12 : 2004

Note : Limit as per CPCB notification, New Delhi, 18th November 2009, For Ambient air Quality

Report prepared by:

For Mitra S. K. Pvt. Ltd.

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Name & Address of the Customer :

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Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1112
Date : 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01294
Sample Description : Ambient Air
Sampling Location : Near New J.K.Factory Gate
Date of Sampling : 07/08.09.2018

Reference No.& Date : e-mail dtd: 07.06.2018

Sl.. N0.	Pollutants	Limit	Result	Method of Test Refference
1	Particulate matter (PM_{10}) in $\mu g/m^3$	100	76	IS: 5182:(Part-23)-2006
2	Particulate matter($PM_{2.5}$) in $\mu g/m^3$	60	40	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO2) in $\mu g/m^3$	80	6.1	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO2) in $\mu g/m^3$	80	23.6	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.35	IS 5182 :(Part-10) :1999
6	Ozone (O3) in $\mu g/m^3$	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH3) in $\mu g/m^3$	400	18.6	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu g/m^3$	1	<0.02	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	<4.0	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C6H6) in $\mu g/m^3$	5	<2.08	IS 5182 : Part. 11 : 2006
12	Benzo(a) pyrene (BaP) in ng/m^3	1	<0.4	IS 5182 : Part. 12 : 2004

Note : Limit as per CPCB notification, New Delhi, 18th November 2009, For Ambient air Quality

Report prepared by:

For Mitra S. K. Pvt. Ltd.

Authorized Signatory

Mitra S.K. Private Limited

TESTING • INSPECTION

Shrachi Center (5th Floor)
74B, Acharya Jagadish Chandra Bose Road
Kolkata – 700 016, West Bengal India
CIN: U51909WB1956PTC023037

T: 91 33 22172249 / 40143000 / 22650006 / 22650007
F: 91 33 22650008
E: info@mitrask.com
w: www.mitrask.com

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1113
Date : 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01295
Sample Description : Ambient Air
Sampling Location : Near Mine Gate
Date of Sampling : 07/08.09.2018

Reference No.& Date : e-mail dtd: 07.06.2018

SL. N0.	Pollutants	Limit	Result	Method of Test Refference
1	Particulate matter (PM_{10}) in $\mu g/m^3$	100	82	IS: 5182:(Part-23)-2006
2	Particulate matter($PM_{2.5}$) in $\mu g/m^3$	60	44	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO2) in $\mu g/m^3$	80	5.9	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO2) in $\mu g/m^3$	80	21.7	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.41	IS 5182 :(Part-10) :1999
6	Ozone (O3) in $\mu g/m^3$	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH3) in $\mu g/m^3$	400	19.8	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu g/m^3$	1	<0.02	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	<4.0	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C6H6) in $\mu g/m^3$	5	<2.08	IS 5182 : Part. 11 : 2006
12	Benzo(a) pyrene (BaP) in ng/m^3	1	<0.4	IS 5182 : Part. 12 : 2004

Note : Limit as per CPCB notification, New Delhi, 18th November 2009, For Ambient air Quality

Report prepared by:

For Mitra S.K. Pvt. Ltd.

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TEST REPORT

Name & Address of the Customer :
J.K. Cement Works, Nimbahera
Kailash Nagar – 312617
Nimbahera – Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1122
Date : 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01317 to 01320
Sample Description : Noise Monitoring

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

Sl. No.	Sampling Date	Sampling Location	Results Leq dB(A)	
			Day Time	Night Time
1.	07/08.09.2018	Near Main Security Gate	53.0	42.0
2.		Near Stacker Transfer Point	64.0	49.0
3.		Near New J.K. Factory Gate	63.0	47.0
4.		Near Mine Gate	61.0	44.0

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TEST REPORT

Name & Address of the Customer :
J.K. Cement Works, Nimbahera
Kailash Nagar – 312617
Nimbahera – Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/1123
Date : 26.09.2018
Sample No. : MSKGL/ED/2018-19/09/01322
Sample Description : Domestic Waste Water
Sample Location : STP outlet Water
Date of Collection : 07.09.2018

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

Sl No.	Parameter	Unit	Result
1.	pH (at 27^0 C)	---	7.60
2.	Total Suspended solids (TSS)	mg/l	27.0
3.	Chemical Oxygen Demand (COD)	mg/l	32.0
4.	Bio-Chemical Oxygen Demand (3 days at 27^0 C)	mg/l	6.0
5.	Oil & Grease	mg/l	1.4
6.	Ammonical Nitrogen (as N)	mg/l	2.60
7.	Sulphide (as S)	mg/l	<0.1
8.	Chloride	mg/l	62.0
9.	Total Kjeldahl Nitrogen (as N)	mg/l	3.28
10.	Total Residual Chlorine	mg/l	<0.1

Report Prepared by:

For Mitra S.K. Private Limited

MITRA S.K. PVT. LTD.

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Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/405
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01447
Sample Description : Ambient Air
Sampling Location : Near Main Security Gate
Date of Sampling : 21/22.06.2018

Reference No.& Date : e-mail dtd: 07.06.2018

SL. N0.	Pollutants	Limit	Result	Method of Test Refference
1	Particulate matter (PM_{10}) in $\mu g/m^3$	100	88	IS: 5182:(Part-23)-2006
2	Particulate matter($PM_{2.5}$) in $\mu g/m^3$	60	40	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO2) in $\mu g/m^3$	80	7.8	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO2) in $\mu g/m^3$	80	29.6	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.48	IS 5182 :(Part-10) :1999
6	Ozone (O3) in $\mu g/m^3$	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH3) in $\mu g/m^3$	400	19.7	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu g/m^3$	1	<0.02	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	<4.0	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C6H6) in $\mu g/m^3$	5	<2.08	IS 5182 : Part. 11 : 2006
12	Benzo(a) pyrene (BaP) in ng/m^3	1	<0.4	IS 5182 : Part. 12 : 2004

Note : Limit as per CPCB notification, New Delhi, 18th November 2009, For Ambient air Quality

Report prepared by:

For Mitra S. K. Pvt. Ltd.

Authorised Signatory

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Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/406
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01448
Sample Description : Ambient Air
Sampling Location : Near Stacker Transfer Point
Date of Sampling : 21/22.06.2018

Reference No.& Date : e-mail dtd: 07.06.2018

SL. N0.	Pollutants	Limit	Result	Method of Test Refference
1	Particulate matter (PM_{10}) in $\mu g/m^3$	100	86	IS: 5182:(Part-23)-2006
2	Particulate matter($PM_{2.5}$) in $\mu g/m^3$	60	42	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO2) in $\mu g/m^3$	80	7.0	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO2) in $\mu g/m^3$	80	26.7	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.3	IS 5182 :(Part-10) :1999
6	Ozone (O3) in $\mu g/m^3$	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH3) in $\mu g/m^3$	400	19.2	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu g/m^3$	1	<0.02	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	<4.0	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C6H6) in $\mu g/m^3$	5	<2.08	IS 5182 : Part. 11 : 2006
12	Benzo(a) pyrene (BaP) in ng/m^3	1	<0.4	IS 5182 : Part. 12 : 2004

Note : Limit as per CPCB notification, New Delhi, 18th November 2009, For Ambient air Quality

Report prepared by:

For Mitra S. K. Pvt. Ltd.

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Mitra S.K. Private Limited

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MSK
TESTING • INSPECTION

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/406
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01448
Sample Description : Ambient Air
Sampling Location : Near Stacker Transfer Point
Date of Sampling : 21/22.06.2018

Reference No.& Date : e-mail dtd: 07.06.2018

SL. N0.	Pollutants	Limit	Result	Method of Test Refference
1	Particulate matter (PM_{10}) in µg/m^3	100	86	IS: 5182:(Part-23)-2006
2	Particulate matter($PM_{2.5}$) in µg/m^3	60	42	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO2) in µg/m^3	80	7.0	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO2) in µg/m^3	80	26.7	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.3	IS 5182 :(Part-10) :1999
6	Ozone (O3) in µg/m^3	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH3) in µg/m^3	400	19.2	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in µg/m^3	1	<0.02	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	<4.0	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C6H6) in µg/m^3	5	<2.08	IS 5182 : Part. 11 : 2006
12	Benzo(a) pyrene (BaP) in ng/m^3	1	<0.4	IS 5182 : Part. 12 : 2004

Note : Limit as per CPCB notification, New Delhi, 18th November 2009, For Ambient air Quality

Report prepared by:

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TESTING • INSPECTION

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Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/407
Date : 30.06.2018
Sample No. : MSKGL-ED 2018-19/06/01449
Sample Description : Ambient Air
Sampling Location : New J.K.Factory Gate
Date of Sampling : 21/22.06.2018

Reference No.& Date : e-mail dtd: 07.06.2018

Sl. N0.	Pollutants	Limit	Result	Method of Test Refference
1	Particulate matter (PM_{10}) in $\mu g/m^3$	100	82	IS: 5182:(Part-23)-2006
2	Particulate matter($PM_{2.5}$) in $\mu g/m^3$	60	38	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO2) in $\mu g/m^3$	80	6.8	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO2) in $\mu g/m^3$	80	24.6	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.38	IS 5182 :(Part-10) :1999
6	Ozone (O3) in $\mu g/m^3$	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH3) in $\mu g/m^3$	400	18.0	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu g/m^3$	1	<0.02	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	<4.0	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C6H6) in $\mu g/m^3$	5	<2.08	IS 5182 : Part. 11 : 2006
12	Benzo(a) pyrene (BaP) in ng/m^3	1	<0.4	IS 5182 : Part. 12 : 2004

Note : Limit as per CPCB notification, New Delhi, 18th November 2009, For Ambient air Quality

Report prepared by:

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Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/408
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01450
Sample Description : Ambient Air
Sampling Location : Near Mine Gate
Date of Sampling : 21/22.06.2018

Reference No.& Date : e-mail dtd: 07.06.2018

Sl., N0.	Pollutants	Limit	Result	Method of Test Refference
1	Particulate matter (PM_{10}) in µg/m^3	100	78	IS: 5182:(Part-23)-2006
2	Particulate matter($PM_{2.5}$) in µg/m^3	60	36	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO2) in µg/m^3	80	6.4	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO2) in µg/m^3	80	23.8	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.34	IS 5182 :(Part-10) :1999
6	Ozone (O3) in µg/m^3	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH3) in µg/m^3	400	18.9	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in µg/m^3	1	<0.02	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	<4.0	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C6H6) in µg/m^3	5	<2.08	IS 5182 : Part. 11 : 2006
12	Benzo(a) pyrene (BaP) in ng/m^3	1	<0.4	IS 5182 : Part. 12 : 2004

Note : Limit as per CPCB notification, New Delhi, 18th November 2009, For Ambient air Quality

Report prepared by:

For Mitra S.K. Pvt. Ltd.

MITRA S.K. PVT. LTD.

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TEST REPORT

Name & Address of the Customer :
J.K. Cement Works, Nimbahera
Kailash Nagar – 312617
Nimbahera – Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/415
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01466 to 01469
Sample Description : Noise Monitoring

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

Sl. No.	Sampling Date	Sampling Location	Results Leq dB(A)	
			Day Time	Night Time
1.	21/22.06.2018	Near Main Security Gate	59.0	48.0
2.		Near Stacker Transfer Point	69.0	52.0
3.		Near New J.K. Factory Gate	67.0	58.0
4.		Near Mine Gate	64.0	50.0

Report Prepared by :

For Mitra S.K. Private Limited

Authorised Signatory

Mitra S.K. Private Limited

TESTING • INSPECTION

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/446
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01500
Sample Description : Stack Emission
Date & Time of Sampling: 20.06.2018 at 11.30 a.m
Sampling Location : Pre-calciner

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Pre-calciner	
2.Emission due to	: Pre-calcination of lime Stone & additives	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 87.00 m	
2.Diameter of the Stack at sampling point	: 3.15 m	
3.Area of Stack	: 7.79 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 112	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 13.8	EPA Part 2
4.Concentration of Sulphur di oxide (mg/Nm^3)	: 10.7	EPA Part-6
5.Concentration of Nitrogen di oxide (mg/Nm^3)	: 985	EPA Part-7
6.Concentration of Particulate Matters (mg/Nm^3)	: 13.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag House	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

Authorised Signatory

Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/445
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01499
Sample Description : Stack Emission
Date & Time of Sampling: 20.06.2018 at 10.00 A.M
Sampling Location : Kiln- 03

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Kiln-03	
2.Emission due to	: Burning of Limestone & additive	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 65.50 m	
2.Diameter of the Stack at sampling point	: 2.20 m	
3.Area of Stack	: 3.80 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 140	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 14.4	EPA Part 2
4.Concentration of Sulphur di oxide (mg/Nm^3)	: 8.5	EPA Part-6
5.Concentration of Nitrogen di oxide (mg/Nm^3)	: 680	EPA Part-7
6.Concentration of Particulate Matters (mg/Nm^3)	: 20.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag House	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/444
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01498
Sample Description : Stack Emission
Date & Time of Sampling: 19.06.2018 at 12.00 p.m
Sampling Location : Kiln- 02

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Kiln-02	
2.Emission due to	: Burning of Limestone & additive	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 60.00 m	
2.Diameter of the Stack at sampling point	: 2.20 m	
3.Area of Stack	: 3.80 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1. Temperature of emission (°C)	: 150	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 14.0	EPA Part 2
4.Concentration of Sulphur di oxide (mg/Nm^3)	: 12.5	EPA Part-6
5.Concentration of Nitrogen di oxide (mg/Nm^3)	: 845	EPA Part-7
6.Concentration of Particulate Matters (mg/Nm^3)	: 12.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag House	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

Authorised Signatory

Mitra S.K. Private Limited

TESTING • INSPECTION

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/443
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01497
Sample Description : Stack Emission
Date & Time of Sampling: 19.06.2018 at 10.00 A.M
Sampling Location : Kiln- 01

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Kiln-01	
2.Emission due to	: Burning of Limestone & additive	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 52.00 m	
2.Diameter of the Stack at sampling point	: 2.50 m	
3.Area of Stack	: 4.910 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 144	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 10.6	EPA Part 2
4.Concentration of Sulphur di oxide (mg/Nm^3)	: 9.8	EPA Part-6
5.Concentration of Nitrogen di oxide (mg/Nm^3)	: 762	EPA Part-7
6.Concentration of Particulate Matters (mg/Nm^3)	: 14.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag House	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

Authorised Signatory

Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :

J.K.Cement Works, Nimbahera
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Report No. : MSK/UDR/2018-19/428
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01482
Sample Description : Stack Emission
Date & Time of Sampling: 20.06.2018 at 1.00 p.m
Sampling Location : Clinker Cooler

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Clinker cooler	
2.Emission due to	: Clinker cooler	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 40.90 m	
2.Diameter of the Stack at sampling point	: 4.0 m	
3.Area of Stack	: 12.57 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 104	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 7.6	EPA Part 2
4.Quantity of gas flow ($Nm^3/hr.$)	: 223640	EPA Part 2
5.Concentration of Particulate Matters (mg/Nm^3)	: 20.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Electrostatic Precipitator	

E. Remarks : NIL

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Name & Address of the Customer :

J.K. Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/429
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01483
Sample Description : Stack Emission
Date & Time of Sampling: 19.06.2018 at 01.00 p.m
Sampling Location : Coal Mill - 1

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Coal mill	
2.Emission due to	: Grinding of coal	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30.00 m	
2.Diameter of the Stack at sampling point	: 0.65 m	
3.Area of Stack	: 0.385 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 72	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 11.8	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 13.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag filter	
E. Remarks : NIL		

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For Mitra S.K. Private Limited

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Name & Address of the Customer :

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Report No. : MSK/UDR/2018-19/430
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01484
Sample Description : Stack Emission
Date & Time of Sampling: 19.06.2018 at 03.00 p.m
Sampling Location : Coal Mill - 2

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Coal mill	
2.Emission due to	: Grinding of coal	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 31.0 m	
2.Diameter of the Stack at sampling point	: 0.70 m	
3.Area of Stack	: 0.385 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 70	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 12.8	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 12.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag filter	
E. Remarks : NIL		

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Name & Address of the Customer :

J.K. Cement Works, Nimbahera
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/431
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01485s
Sample Description : Stack Emission
Date & Time of Sampling: 20.06.2018 at 03.00 p.m
Sampling Location : Coal Mill - 3

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Coal mill	
2.Emission due to	: Grinding of coal	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 43.50 m	
2.Diameter of the Stack at sampling point	: 0.70 m	
3.Area of Stack	: 0.385 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 74	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 13.8	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 14.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag filter	
E. Remarks : NIL		

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Name & Address of the Customer :

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Report No. : MSK/UDR/2018-19/432
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01486
Sample Description : Stack Emission
Date & Time of Sampling: 20.06.2018 at 04.30 p.m
Sampling Location : Coal Mill - 4

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Coal mill	
2.Emission due to	: Grinding of coal	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30.50 m	
2.Diameter of the Stack at sampling point	: 1.20 m	
3.Area of Stack	: 1.13 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 76	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 13.0	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 15.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag filter	
E. Remarks : NIL		

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Name & Address of the Customer :

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Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/433
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01487
Sample Description : Stack Emission
Date & Time of Sampling: 14.06.2018 at 10.00 A.M
Sampling Location : Cement Mill No. 1

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Cement Mill	
2.Emission due to	: Grinding of clinker	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30.0 m	
2.Diameter of the Stack at sampling point	: 0.63 m	
3.Area of Stack	: 0.3118 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 92	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 15.0	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 14.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag Filter	
E. Remarks : NIL		

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Name & Address of the Customer :

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Report No. : MSK/UDR/2018-19/434
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01488
Sample Description : Stack Emission
Date & Time of Sampling: 21.06.2018 at 10.00 A.M
Sampling Location : Cement Mill No. 2

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Cement Mill	
2.Emission due to	: Grinding of clinker	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30.0 m	
2.Diameter of the Stack at sampling point	: 0.60 m	
3.Area of Stack	: 0.2829 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 90	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 17.0	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 18.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag Filter	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :

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Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/435
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01489
Sample Description : Stack Emission
Date & Time of Sampling: 21.06.2018 at 11.30 a.m
Sampling Location : Cement Mill No. 3

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Cement Mill	
2.Emission due to	: Grinding of clinker	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30.0 m	
2.Diameter of the Stack at sampling point	: 0.60 m	
3.Area of Stack	: 0.2829 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 96	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 13.0	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 12.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag Filter	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited
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Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :

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Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/436
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01490
Sample Description : Stack Emission
Date & Time of Sampling: 21.06.2018 at 01.00 p.m
Sampling Location : Cement Mill No. 4

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Cement Mill	
2.Emission due to	: Grinding of clinker	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30.0 m	
2.Diameter of the Stack at sampling point	: 0.89 m	
3.Area of Stack	: 0.6223 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 98	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 13.4	EPA Part 2
4.Concentration of Particulate Matters (mg/Nm^3)	: 17.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag Filter	
E. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

MITRA S.K. PVT. LTD.

Authorised Signatory

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TEST REPORT

Name & Address of the Customer :

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Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/437
Date: 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01491
Sample Description : Stack Emission
Date & Time of Sampling: 19.06.2018 at 04.30 p.m
Sampling Location : Crusher

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Lime Stone Crusher	
2.Emission due to	: Lime Stone Crushing	
3.Material of construction of Stack	: Mild Steel	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 30 m	
2.Diameter of the Stack at sampling point	: 0.57 m	
3.Area of Stack	: 0.2553 m^2	
C. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 40	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 8.4	EPA Part 2
4.Quantity of gas flow (Nm^3/hr.)	: 7246	EPA Part 2
5.Concentration of Particulate Matters (mg/Nm^3)	: 22.0	EPA Part-5
D. Pollution control device		
Details of pollution control devices attached with the stack	: Bag Filter	

E. Remarks : NIL

Report Prepared by :

For Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :
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Report No. : MSK/UDR/2018-19/440
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01494
Sample Description : Flue Gas Monitoring
Sampling Location :22 MW Thermal Power Plant
Date & Time of Sampling : 18.06.2018 at 01.30 P.M

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

A. General information about stack		
1. Stack connected to	: Boiler	
2.Emission due to	: Power Generation	
3.Material of construction of Stack	: RCC	
4.Shape of Stack	: Circular	
5.Whether Stack is provided with permanent platform & ladder	: Yes	
6.Generation Capacity	: 22 MW	
B. Physical characteristics of stack		
1.Height of the stack from ground level	: 105.0 m	
2.Diameter of the Stack at sampling point	: 2.3 m	
3.Area of Stack	: 4.16 m^2	
C. Analysis/Characteristic of stack		
1. Fuel used : Coal		
D. Results of sampling & analysis of gaseous emission	**Result**	**Method**
1.Temperature of emission (°C)	: 124	EPA Part 2
2.Barometric pressure (mm of Hg)	: 735	EPA Part 2
3.Velocity of gas (m/sec)	: 8.2	EPA Part 2
4.Quantity of gas flow (Nm^3/hr.)	: 92060	EPA Part 2
5.Concentration of Carbondioxide (% v/v)	: 10.6	IS 13270:1992,Reaf:2014
6.Concentration of Particulate Matters (mg/Nm^3)	: 32.0 at 12% CO_2	EPA Part-17
E. Pollution control device		
Details of pollution control devices attached with the stack	: Electrostatic precipitator	
F. Remarks : NIL		

Report Prepared by :

For Mitra S.K. Private Limited

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TEST REPORT

Name & Address of the Customer :
J.K. Cement Works, Nimbahera
Kailash Nagar – 312617
Nimbahera – Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/447
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01501
Sample Description : Waste Water
Sample Location : STP outlet Water
Date of Collection : 20.06.2018

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

Sl No.	Parameter	Unit	Result
1.	pH (at 27° C)	---	7.76
2.	Total Suspended solids (TSS)	mg/l	30.0
3.	Chemical Oxygen Demand (COD)	mg/l	38.0
4.	Bio-Chemical Oxygen Demand (3 days at 27° C)	mg/l	8.0
5.	Oil & Grease	mg/l	1.4
6.	Ammonical Nitrogen (as N)	mg/l	2.0
7.	Sulphide (as S)	mg/l	<0.1
8.	Chloride	mg/l	66.0
9.	Total Kjeldahl Nitrogen (as N)	mg/l	3.0
10.	Total Residual Chlorine	mg/l	<0.1

Report Prepared by:

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TEST REPORT

Name & Address of the Customer :
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Report No. : MSK/UDR/2018-19/448
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01502
Sample Description : Effluent Water
Sample Location : 22 MW TPP outlet
Date of Collection : 18.06.2018

Reference No.& Date : e-mail dtd: 07.06.2018

ANALYSIS RESULT

Sl No.	Parameter	Unit	Standard	Result
1.	pH (at 27° C)	---	6.5 to 8.5	7.54
2.	Total Suspended solids (TSS)	mg/l	100.0	38.0
3.	Oil & Grease	mg/l	10.0	<1.4
4.	Total Residual Chlorine	mg/l	1.0	<0.1
5.	Iron (as Fe)	mg/l	1.0	<0.05
6.	Chromium (Total)	mg/l	0.2	<0.01
7.	Free Available Chlorine	mg/l	0.5	<0.1
8.	Copper (as Cu)	mg/l	1.0	<0.02
9.	Zinc (as Zn)	mg/l	1.0	<0.02
10.	Temperature	° C	Shall not exceed 5° C above the receiving water temperature	4° C higher than the intake water temperature
11.	Phosphate (as PO_4)	mg/l	5.0	3.2
12.	Chemical Oxygen Demand (as COD)	mg/l	250.0	46.0
13.	Biological Oxygen Demand (as BOD)	mg/l	30.0	9.2
14.	Chlorides (as Cl)	mg/l	1000.0	138.0
15.	Sulphate (as SO_4)	mg/l	1000.0	104.0

Report Prepared by :

For Mitra S.K. Private Limited

MITRA S.K. PVT. LTD.

Authorised Signatory

Annexure-III

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Rev. No. :05
Date :24.05.2018

J.K. Cement Works: Nimbahera

On – Site Emergency Plan

PREFACE

An " ON-SITE EMERGENCY" may arise on account of dangerous occurrence taking place in the Plant, which could go out of control and threaten the Safety of Personnel, Environment, Plant / Equipments and their operations. Any such occurrence may develop into a major Emergency with ON / OFF Site consequences.

Hence it is absolutely essential that emergency Procedures are planned before hand to clearly specify various line responsibilities at different operation levels so as to act in a systematic manner during Emergency and restore normally within shortest span of time.

With above in view, a set of Guidelines under "ON-SITE EMERGENCY PLAN" has been prepared identifying Emergency areas / Materials along with their preventive and control measures for proper utilisation of Internal and External resources.

The Emergency Management Plan aims to focus on the following areas:

- Emergency scope and control Objectives
- Identification of Emergency prone areas / material.
- Emergency Alarm / Communication System and Mechanism.
- Precautionary / Corrective measures for Prevention and Control.
- Organisation for Emergency Control.
- Emergency Roles, Duties / Responsibilities of key Personnel.
- Emergency control, Services, Facilities and Utilities.
- Contact Locations / Telephones of key Personnel and Services.

Keeping above in view the Management is fully committed to discharge its activities with deep sense of responsibility and due regards for the well being of Personnel in and around the Plant in term of their Safety, Health and Environment Protection.

(S.K. Rathore)
Unit Head