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

CIN : L17229UP1994PLC017199

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

Our Ref. No.: MGR/PC-14/ 3151

Date: 28.11.2018

To,

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

Sub: Environmental Clearance Compliance report of Tilakhera Limestone Mine.

Dear Sir,

Kindly refer Environmental Clearance letter No. J-11015/25/2011-IA.II (M) dated. 23rd January 2014 of our **Tilakhera Lime Stone Mine.**

We are enclosing herewith compliance report of Environmental Clearance conditions along with Environment Monitoring Data (**Core zone & Buffer Zone**) 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, Mangrol


S.K. Acharya
(Technical Head)

Encl: a/a

Copy to:

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

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

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

Corporate & Registered Office : Kamla Tower, Kanpur-208001, (U. P.) INDIA
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J. K. Cement Works, Nimbahera
J. K. Cement Works Mangrol
J. K. Cement Works, Gotan
J. K. Cement Works, Jharli

J. K. Power, Bamania
J. K. Cement Works, Muddapur
J. K. White Cement Works, Gotan
J. K. White, Katni



Compliance report of Environment Clearance for Mangrol Tilakhera Lime Stone Mine

Reference Letter from MOEF, New Delhi - J-11015/25/2011-1A. II (M) dated 23.01.2014

(For the Period from April 2018 to September 2018)

<u>Sr. No.</u>	<u>Condition</u>	<u>Status</u>
	A. SPECIFIC CONDITIONS:	
(i)	The mining activity will not commence unless the NOC from the Gram Panchayat for grazing land has been obtained.	Mining lease was initially executed on 09.05.1978 and it was renewed (First renewal) from 09.05.1998. It is not planned to do mining activity in grazing land in future also.
(ii)	The lands which are not owned by Proponent, mining will be carried out only after obtaining the consents from all the concerned land owners as per the provision of the Mineral Concession Rules, 1960 and MMDR Act, 1957.	Mining is carried out after obtaining consents from land owners as per provision of the Mineral Concession Rules, 2016 and MMDR Act, 1957.
(iii)	Implementation of the Conservation Plan for Schedule I species report in the study area namely <i>Pavo cristatus</i> (Indian peafowl).	Conservation Plan for Schedule Species in the study area namely <i>Pavo cristatus</i> (Indian peafowl) is implemented by planting tall trees at closer spacing and conducting awareness programme.
(iv)	The Proponent shall ensure implementation of Action Plan on the issues raised during the Public Hearing held on 20.12.2012. The proponent shall complete all the tasks as per the action plan submitted with the budgetary provision during the public hearing.	Action plan is being implemented.
(v)	The Proponent shall ensure implementation of commitment made for Socioeconomic welfare measures and report shall be submitted to the Ministry of Environment & Forest and its Regional Office located at Lucknow on six monthly basis.	We have spent Rs. 2,54,97,756/- in FY 2018-19 (up to September) in surrounding village i.e. Charlia, Pipaliya gadia, Unkhaliya, Shahbad, Arniya Joshi, Mangrol, BadoliGhata, FhacherAhiran, Nimbahera, Phalwa, Lotha Bairu, Maliakheri, Chittorgarh, Udaipur Bhawaliya and Karunda for Socioeconomic welfare measures under various heads like Rural Development, Religious, Infrastructure/civil work, Drinking Water supply, Education, Medical & Health, Environment, Livelihood Promotion, sports & games and social activities. Detail is enclosed as <i>annexure-II</i>
(vi)	Sufficient number of Gullies should be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the Ministry of Environment & Forest and its Regional Office located at Lucknow on six monthly basis.	Garland drain system maintained at the Mining Pit. Report of water samples collected from different locations is send regularly. Latest report has been sent on dated 06.09.2018 for monsoon season (August' 2018) vide letter no. MGR/PC/14/2205.
(vii)	Environment clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.	Noted.

(viii)	No Mining activities will be allowed in forest area, if applicable, for which the forest Clearance is not available.	All the mining activity is carried out in non-forest land.
(ix)	The project proponent shall obtain Consent to Operate from the State Pollution Control Board, Rajasthan and effectively implement all the conditions stipulated therein.	For enhance capacity of production, consent to operate from the State Pollution control Board, Rajasthan will be taken and implement all the conditions stipulated therein.
(x)	The Mining operations shall be restricted to above ground water table and it shall not be intersect groundwater table. For working below ground water table, prior approval of the Ministry of Environment and Forests and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.	Agreed. The Mining operation will be restricted above Ground water table and will not intersect it.
(xi)	Dimension of the retaining wall at the toe of over burden dumps and OB benches within the mine to check run off and siltation shall be based on the rainfall data.	Agreed. Since there is no generation of waste dump, only top soil is generated which is stacked, levelled and used for plantation.
(xii)	Blasting operation shall be carried out only during the day time. Controlled blasting shall be practiced. The mitigative measures for control of ground vibration and to arrest fly rocks and boulders should be implemented. Drills shall either be operated with dust extractors or equipped with water injection system. Advanced technologies for environmental protection to be used for controlled blasting.	Blasting operation is carried out only during day time. Use of Sequential blasting machine (SBM), Delay detonator, Non-Electric detonator and use of air deck to reduce charge per hole and vibration. Regular monitoring of Ground vibration is practiced. Rock breaker is used to minimize secondary blasting. Wet drilling system is practiced on the existing setup for drilling machine to arrest dust.
(xiii)	Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.	Regular Water sprinkling by deploying water sprinkler is done at loading, unloading, transfer points and haul roads to reduce fugitive emissions.
(xiv)	The project proponent shall obtain necessary prior permission of the competent authority for drawl of requisite quantity of surface water and ground water for project.	We have obtained NOC for withdrawal of ground water from CGWA vide letter No 21-4(34)/WR/CGWA/2005-1675 Dated 28/10/2015.
(xv)	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered dumpers and further leading to the plant through covered conveyor belt. The vehicles carrying the mineral shall not be overloaded.	Tipplers engaged in the mines are regularly checked once in Six months for vehicular emissions and are kept under permissible limits. The tipplers are not loaded above the rated capacity. Copy of PUC enclosed as <i>annexure-(II)</i>
(xvi)	Fugitive dust emission from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer point should be provided and properly maintained.	Agreed and being implemented to control fugitive dust emission by regular water spraying arrangement.
(xvii)	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly. Occupational health and safety measures for workers who are having some ailments like BP, diabetes, or are habitual smokers should have health check-up once in six months.	Regular initial and periodical medical examination is being carried out.

(xviii)	Environment clearance is granted subject to final outcome of Hon'ble supreme Court of India, Hon'ble High Court of Rajasthan and any other Court of Law, as may be applicable to this project.	Agreed.
	B. General conditions	
(i)	No Change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	Agreed. Mining will be done in accordance with Approved Mining Plan.
(ii)	No change in the calendar plan including excavation, quantum of limestone mineral and waste should be made.	Agreed. Mining will be done in accordance with Approved Mining Plan.
(iii)	A Final Mine closure Plan along with detail of Corpus Fund shall be submitted to the Ministry of Environment & Forest 5 years in advance of final closure for approval.	Progressive Mine Closure Plan is being prepared along with Mining Plan. There is no plan of Final Mine Closure in current Mining Plan.
(iv)	There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis in consultation with Regional Director, Central Ground water Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central ground Water Board.	Surface rain water is collected in the lower most benches to augment Ground water resources. Pits in western side of mine have been made to store water to augment ground water resources in the area.
(v)	Regular Monitoring of ground water table to be carried out at the upstream and depth of water available in the dug well is to be measured. Monitoring to be done by establishing a network of existing wells and constructing new piezometers.	Report is being sent regularly on Schedule time. Latest report has been sent on dated 06.09.2018 for monsoon season (August' 2018) vide letter no. MGR/PC/14/2205.
(vi)	The project proponent shall ensure that no natural water course and /or water resources shall be obstructed due to any mining operations.	Agreed. No natural course and / or water resources will be obstructed due to any mining operation.
(vii)	The top soil, if any, shall temporarily be stored at earmarked site (s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The overburden (OB) generated during the mining operations shall be stacked at earmarked dumped site (s) only and it should not be kept active for a long period of time. The maximum height of dump shall not exceed 8m and width 20m and overall slope of the dump shall be maintained to 45° degree. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self –sustaining. Compliance status shall be submitted to the Ministry of Environment & Forest and its Regional office located at Lucknow on six monthly basis.	The top soil generated will not be kept long and will be stored at designated places, levelled and stabilized by carrying plantation over it. After complete excavation, the entire excavated area will be used for storing rain water and act as reservoir. (Necessary correction to be made in Environment Clearance is sent to MoEF vide letter No. NBH/ UH/ 2941 dated 05.02.2014). Management and Monitoring of Plantation area is done till it becomes self – sustain. Six monthly reports are already submitting to concern offices.
(viii)	Catch drain and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly in	Garland drain system is maintained all around the mining pit, outside the mining limit for proper water harvesting. Check dams

	to the river and other water bodies. The water so collected should be utilized for watering the mine area, roads green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.	and Siltation ponds are provided to control the inflow of sediments, silt in and around the mine working. There is no generation of waste and all the blasted material is used for manufacturing of Cement.
(ix)	Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The destiny of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five year.	Agreed. Plantation done during the year 2018-19 (upto sept. 2018) within lease 1650 nos. covering 0.95 ha. new area. Total Planation done till date is 40145 nos. inside and 53592 nos. in outside lease area. Survival rate of plantation is 49.81% inside lease area and 60.84% outside lease area. Total plantation area covered till date is 14.11 ha in inside lease area and 5.0 hectare outside lease area and green belt of 47.54 ha. area.
(x)	Regular monitoring of the flow rate of the spring and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain.	Agreed.
(xi)	Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment and forest, its Regional Office, Lucknow, Central Ground water Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	Agreed.
(xii)	Regular Monitoring of Ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year pre-monsoon (April-May), Monsoon (August), Post Monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment and Forests and its Regional Office, Lucknow, Central Ground Water Authority and Regional Director, Central Ground Water Board.	Report is being sent regularly on Schedule time. Latest report has been sent on dated 06.09.2018 for monsoon season (August' 2018) vide letter no. MGR/PC/14/2205.
(xiii)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely leopard, elephant etc. spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and wildlife Department. Necessary allocation of funds for implemented of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measure brought out in the Wildlife Conservation plan so prepared specify to the project site shall be effectively implemented. A copy of action plan shall be submitted to the Ministry of Environment and	Agreed. We take all precautionary measures during mining operation for conservation & protection of endangered fauna namely leopard, elephant etc.

	Forests and its Regional Office, Lucknow.	
(xiv)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking mobile toilets, 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.	No construction labours are engaged in mine.
(xv)	Monitoring of Ambient Air Quality shall be carried out based on the Notification, as amended from time to time by the Central Pollution control Board.	Agreed. We are regular carrying out Ambient Air Quality Monitoring based on CPCB notification.
(xvi)	The critical parameters such as SPM, RSPM (Particulate matter with size less than 10 micron i.e. PM10) and NOx in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on the display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.	These parameters are already being monitored and will continue in future also. We are not discharging water outside. Latest report on Ambient Air Monitoring and peak particle velocity monitoring is enclosed as <i>annexure-(III)</i>
(xvii)	Measures should be taken for control of noise levels below 85dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.	Regular maintenance (including cabin) of HEMM being done to keep noise level within the specified limits. Workers engaged in operation of HEMM etc. are provided with ear plugs.
(xviii)	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1933 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	Agreed. No industrial waste water is generated in the mine. Periodical analysis of Mine pit water reveals that there is no presence of any kind of toxic substance.
(xix)	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.	Persons engaged in drilling, dozing and loading have been provided with dust mask. Vocational training is being provided as required under MVT Rules.
(xx)	Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and record maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	Regular periodic check-up of workers is being carried out. During the year 2018-19 (upto sept.), 2 nos. of periodical and 00 nos. of initial medical examination were done.
(xxi)	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	A separate environmental management cell with qualified personnel is already established & have sufficient monitoring equipment in environmental laboratory.
(xxii)	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be	A separate fund is kept for environment protection measures and report is being sent regularly to the concerned authority.

	reported to the Ministry and its Regional Office located at Lucknow.	Environment expenditure for 2017-2018 and Proposed FY Budget 2018-2019 detail report is already submitted vide letter no. MGR/PC/14/907 dated 29.05.2018.
(xxiii)	The project authorities should inform to the Regional Office located at Lucknow regarding data of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Agreed.
(xxiv)	The Regional Office of this Ministry located at Lucknow shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Agreed. We extend full cooperation to the office(s) of the RO by furnishing the requisite data/information/monitoring reports.
(xxv)	The project proponent shall submit six monthly reports on the status of the implemented of the stipulated environment safeguard to the Ministry of Environment and Forest, its Regional Office, Central Pollution Control Board and State Pollution Control Board.	Agreed. Six monthly reports are submitting regularly to concern offices. Last Six monthly monitoring report was sent on 29.05.2018 vide letter no. MGR/PC/14/907.
(xxvi)	A copy of clearance letter will be marked to concerned panchayat / local NGO, If any, from whom suggestion/ representation has been received while processing the proposal.	Implemented.
(xxvii)	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.	Complied.
(xxviii)	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at website of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Lucknow.	Implemented and the necessary information already sent to the concerned authority.

Corporate Social Responsibility work Detail from April to Oct. 2018						
Unit Name- J. K. Cement Works Nimbahera & Mangrol						
S.no.	Activity	Village Name	Mines Area	Expenditure (Rs. In lac)	Work Detail	Remarks
1	Infrastructure/ Civil work	Phalwa	Maliyakeda	5313455.00	Construction work of C.C. Road in phalwa Village.	As per our old commitment for provide road connectivity and NOC issue for mines side govt road diversion.
		Phalwa	Maliyakeda	618000.00	Construction work of Gravel Gitti Road on New CC road side at phalwa Village.	Approche road diversion at maliykhera for mines safety issue.
		Charliya	Karunda	3395934.00	Construction work of C.C. Road in Charliya Village.	As per NOC of govt. road diversion for our mines lease out side area and UDH minister recommendation.
		Mangrol	Mangrol 132	2527117.00	Construction work of Rly station to village C.C. Road in Mangrol Village.	As per recommendation by gram panchayat at the time of conveyer belt NOC.
		Pipliya Gadiya	Karunda	230000.00	Construction work of Gravel Gitti Road at Pipliya to Bansa Village.	On the requisition of Gram pachayat and villagers.
		Badoli ghata	Tillakheda	293311.00	Construction work of Gravel Gitti Road at Karthana Village. (Intake well jk)	For easy movement of our water tubewell point and required of local farmers.
		Unkhaliya	Tillakheda	300000.00	Construction work of Gravel Gitti Road at Unkhaliya Village.	On the requisition of Gram pachayat and villagers.
		Arniya Joshi	Tillakheda	253575.00	Construction work of Pathways at Namo park Arniya Joshi Village.	As per recommendation by Gram panchayat and UDH minister.
		Arniya Joshi	Tillakheda	419175.00	Construction work of C.C. Road in Bhil baasti at Tilla keda Village.	As per recommendation by Gram panchayat and UDH minister.
		Shahbad	Tillakheda	1069121.00	Construction work of Funeral Shed and Grave yard in Shahbad Village.	As per our CSR commitment.
		Nimbahera	NBH Plant	44750.00	Patwar Bhawan Repairing work Nimbahera	As per recommendation by SDM sir nimbahera.
		Chittorgarh	Nimbahera	238611	Repairing Work at SP Office Chittorgarh	As per recommendation by SP sir Chittorgarh.
		Charliya	Karunda	537015	Construction of Toilet and Kitchen at Community center in Chaliya gadiya village (Mahadev Enterprises)	As per our CSR commitment with villagers.
		Shahbad	Tillakheda	177413	Renovation work of Temple at Shabad	As per our CSR commitment with villagers.
				1541747.00		
2	Water Conservation	Shahbad	Tillakheda	199782.00	Water Tanker Supply In Summer season in Shahbad villages.	As per our CSR commitment with villagers.
		Nimbahera	NBH Plant	1066100.00	Water Tanker Supply In Summer season in Nimbahera city.	As per our CSR commitment.
		Shahbad	Tillakheda	100625.00	Tubewell work at Shabad village.	As per our CSR commitment with villagers.
				1366507.00		
3	School/ Education	Phacher Ahiran	Murliya Block	2244879.00	Construction of Six New rooms in Govt.School Phacher Ahiran	Our previous CSR commitment at the time of Murliya mines block NOC in 2010-11 six new room constructed by us.
		Arniya Joshi	Tillakheda	619555.00	Construction of Toilet Govt.School Arniya Joshi.	For Education promotion.
		Shahbad	Tillakheda	47064.00	Construction work of Water Tank In Govt. School at Shahbad Village.	Recommendation by School administration.
		Nimbahera	NBH Plant	677492.00	Adopted 18 Anganwadi for making Adarsh Anganwadi under Hand Ghar Chalo Abhiyan.	We association for child education under UDAN SARTHI project. (5 Year MOU)
		Nimbahera	NBH Plant	727836.00	Free Career counseling & Coaching classes for youth for Govt. Competition examination.	To provide free coaching to our rural youth for achieve Govt. Job under education promotion.
		Chittorgarh	NBH Plant	75000.00	Financial Help to Educatuon department chittorgarh (RAMSA) for Light connection and facility in Govt School.	As per instruction by DIC Chittorgarh.
				4391826.00		
4	Medical & Health	Surrounding Village nearby Our Plant & Mines	NBH Plant	320000.00	Organized Free medical & Health check-up camp nearby Nbh & Mgri plant Nimbahera.	As per CSR practice For better health and hygene of rural people.
				320000.00		
5	Livelihood Promotion	Surrounding Village nearby Our Plant & Mines	NBH Plant	1338162	Organized Women Skill Development Training Programmes under the CSR (No.2400 of womens are benefices)	For Women Empowerment Livelihood generation.
		Surrounding Village nearby Our Plant & Mines	MGR Plant	1535784.00	Sanitary napkin making through S.H.G. (Women Empoverment, Health & hygiene).	For Women Empowerment Livelihood generation.
				2873946.00		
6	Sports & Games	Nimbahera	NBH Plant	239000.00	To recognise and motivate the Students on Independence day function (8th to 12th class) by Distributed of Silver Medal to those who have achieved 70% and above marks in Board Exam.	
		Bhawliya	Nimbahera	25000.00	To Promote Games & Motivate Students this Donation given by us for School tournament.	
				258000.00		
7	Social Activities	Nimbahera	NBH Plant	200000.00	Donation for beautification work by painting at Ratlam Railway Station.	
		Nimbahera	NBH Plant	220000.00	Financial Help for Promotion of Cultural programe in Ganesh Mahostasav and Navratri in mining areas.	
		Nimbahera	NBH Plant	300000.00	Financial Help for Construction temple at Bansa Village near by mining areas.	
		Nimbahera	NBH Plant	150000.00	Financial Help for Promotion of Cultural programe (Srajan The Spark All India Mushaira)	
				870000.00		
G.Total				25497756.00		

J.K. CEMENT WORKS , MANGROL
Mangrol-Tilakhera Limestone Mines

PUC Certificate Details

Sr. No.	Tipper Reg. No.	Make	Year	PUC No.	Validity Upto
1	RJ09GB7728	ASHOK-LEYLAND	2012	3288	04.12.2018
2	RJ09GB5728	ASHOK-LEYLAND	2016	3289	06.12.2018
3	RJ09GB2828	ASHOK-LEYLAND	2014	3286	05.12.2018
4	RJ09GB2728	ASHOK-LEYLAND	2014	3287	05.12.2018
5	RJ09GB5928	ASHOK-LEYLAND	2016	3291	06.12.2018
6	RJ09GB2528	ASHOK-LEYLAND	2014	3292	06.12.2018
7	RJ09GB0028	ASHOK-LEYLAND	2018	All new vehicles purchased in 2018	
8	RJ09GB9928	ASHOK-LEYLAND	2018		
9	RJ09GC1128	ASHOK-LEYLAND	2018		
10	RJ09GC1228	ASHOK-LEYLAND	2018		
11	RJ09GC1428	ASHOK-LEYLAND	2018		
12	RJ09GB0043	ASHOK-LEYLAND	2018		
13	RJ09GB0048	ASHOK-LEYLAND	2018		
14	RJ09GB7628	ASHOK-LEYLAND	2013	D17RJ01101002	04.04.2019
15	RJ09GB7828	ASHOK-LEYLAND	2014	D17RJ01101001	04.04.2019
16	RJ09GB9528	ASHOK-LEYLAND	2014	D17RJ01100999	04.04.2019
17	RJ09GB8228	ASHOK-LEYLAND	2014	D17RJ01101320	29.04.2019
18	RJ09GB8128	ASHOK-LEYLAND	2014	D17RJ01101316	29.04.2019
19					



L.S. POKHARNA

SR. MANAGER (MINES)

GROUND VIBRATION DETAILS(MANGROL-TILAKHERA MINES)							
PERIOD :- APRIL-2018 TO SEP-2018							
S.NO	DATE	LOCATON OF BLASTING	APPROX . DIST.OF INSTRUMENT FROM BLAST	NO OF HOLES	CHARGE PER DELAY KGS.	PVS MM/SEC.	ACCESSORIES USED IN BLASTING
1	5/4/2018	IST BENCH SOUTH BID16-1	250MTR.BACK SIDE OF FACE	11	29.55	2.61	NONEL DTH &TLD
2	17/05/2018	IISE BENCH SOUTH BID17-4	300MTR, BACK SIDE OF FACE	7	28.57	1.52	NONEL DTH &TLD
3	26/05/2018	IIINE BENCH SOUTH,BID15-5	300MTR,OPP. SIDE OF FACE	12	31.95	1.04	NONEL DTH &TLD
4	28/05/2018	IIINE BENCH SOUTH,BID17-5	300MTR., BACK SIDE OF FACE	9	32.1	3.4	NONEL DTH &TLD
5	28/05/2018	IV BENCH SOUTH,BID 14-4	300MTR., BACK SIDE OF FACE	16	35.07	2.39	NONEL DTH &TLD
6	22/06/2018	IST BENCH SOUTH BID17-6	300MTR., BACK SIDE OF FACE	6	27.78	1.51	NONEL DTH &TLD
7	22/06/2018	IST BENCH SOUTH BID18-1	250MTR.BACK SIDE OF FACE	8	28.82	1.07	NONEL DTH &TLD
8	25/06/2018	IV BENCH SOUTH BID14-7	250MTR. IN THE LINE OF INITIATION	8	30.56	0.79	NONEL DTH &TLD
9	7/7/2018	IIINE BENCH SOUTH,BID16-3	250MTR. IN THE LINE OF INITIATION	9	29.32	1.56	NONEL DTH &TLD
10	7/7/2018	IIINE BENCH SOUTH,BID17-7	250MTR, BACK SIDE OF FACE	9	29.32	2.19	NONEL DTH &TLD
11	24/07/2018	IIINE BENCH SOUTH,BID18-2	250MTR,OPP. SIDE OF FACE	6	26.85	1.55	NONEL DTH &TLD
12	24/07/2018	ISE BENCH SOUTH,BID18-3	250MTR.,BACK SIDE OF FACE	6	25	3.4	NONEL DTH &TLD
13	26/07/2018	IIINE BENCH SOUTH,BID 18-4	250MTR.,BACK SIDE OF FACE	8	33.34	3.06	NONEL DTH &TLD
14	26/07/2018	IIINE BENCH SOUTH BID17-8	250MTR.,BACK SIDE OF FACE	7	29.76	1.01	NONEL DTH &TLD
15	30/07/2018	IST NE BENCH SOUTH BID14-8	250MTR.BACK SIDE OF FACE	14	31.57	1.1	NONEL DTH &TLD
16	3/8/2018	IIINE BENCH SOUTH BID16-6	250MTR. IN THE LINE OF INITIATION	4	25.7	1.02	NONEL DTH &TLD
17	3/8/2018	IIINE BENCH SOUTH BID17-9	250MTR. IN THE LINE OF INITIATION	7	24.6	3.4	NONEL DTH &TLD
18	16/08/2018	INE BENCH SOUTH BID14-9	250MTR.,BACK SIDE OF FACE	12	27.5	1.49	NONEL DTH &TLD
19	17/08/2018	INE BENCH SOUTH BID14-10	250MTR.,BACK SIDE OF FACE	12	27.7	1.78	NONEL DTH &TLD
20	17/08/2018	IIINE BENCH SOUTH BID15-14	250MTR.,BACK SIDE OF FACE	13	27.7	0.76	NONEL DTH &TLD
21	17/09/2018	IIINE BENCH SOUTH BID15-15	300MTR.,BACK SIDE OF FACE	13	33.55	1.56	NONEL DTH &TLD

22	18/09/2018	IIS BENCH SOUTH BID17--10	257MTR., BACK SIDE OF FACE	10	33.61	2.3	NONEL DTH & TLD
23	20/09/2018	INE BENCH SOUTH BID14--11	270MTR., BACK SIDE OF FACE	21	14.68	1.37	NONEL DTH & TLD
24	25/09/2018	IISE BENCH SOUTH BID18--8	270MTR., BACK SIDE OF FACE	6	25.93	1.37	NONEL DTH & TLD
25	25/09/2018	INE BENCH SOUTH BID18--7	270MTR., BACK SIDE OF FACE	8	26.39	1.27	NONEL DTH & TLD
26	27/09/2018	INE BENCH SOUTH BID17--10	260MTR., BACK SIDE OF FACE	7	34.53	1.88	NONEL DTH & TLD
27	27/09/2018	INE BENCH SOUTH BID18--9	260MTR., BACK SIDE OF FACE	7	26.98	1.36	NONEL DTH & TLD


 L.S. POKHARNA
 MINES MANAGER

J.K. Cement WORKS, MANGROL (A)

TILAKHERA LIMESTONE MINE

SIX MONTHLY AMBIENT AIR QUALITY & NOISE MONITORING REPORT

1) AMBIENT AIR QUALITY SPM RESULTS : (ALL VALUES IN µg/M3)

Sample duration: 24 hourly sample,
(monthly average basis)

Month	Near Mine Office					Near Ravana Office					3 to 10 Meter Distance From Drilling Operation					Near loading point				
	SPM	PM10	SO ₂	Nox	CO	SPM	PM10	SO ₂	Nox	CO	SPM	PM10	SO ₂	Nox	CO	SPM	PM10	SO ₂	Nox	CO
Apr-18	372.0	49.3	11.3	23.2	629.8	436.0	54.2	13.8	26.4	744.3	472.0	57.4	18.6	35.4	801.5	429.0	50.1	15.4	30.4	687.0
May-18	394.0	51.5	13.6	26.1	572.5	457.0	56.2	18.6	30.4	744.3	504.0	60.6	20.4	37.6	916.0	437.0	53.4	16.5	33.7	858.8
Jun-18	368.0	48.3	10.8	23.2	515.3	397.0	52.3	14.4	26.4	744.3	437.0	54.6	17.4	30.2	858.8	378.0	46.4	12.4	24.2	629.8
Jul-18	239.0	29.2	6.7	18.6	286.3	312.0	35.6	10.8	22.8	515.3	366.0	43.8	12.5	26.3	629.8	264.0	32.5	8.9	20.2	458.0
Aug-18	255.0	24.5	7.2	20.4	400.8	332.0	33.4	11.4	25.6	629.8	380.0	45.7	14.7	23.4	744.3	289.0	35.4	9.4	22.1	400.8
Sep-18	279.0	28.4	9.2	18.2	286.3	348.0	36.8	12.2	24.3	515.3	392.0	46.4	15.1	22.7	629.8	298.0	37.3	10.6	22.9	400.8

2) NOISE LEVEL MEASUREMENT RESULTS : (ALL VALUES IN dB(A))

Month	Near Mine Office		Near Ravana Office	
	NOISE LEVEL db(A)			
	Day Time	Night Time	Day Time	Night Time
Apr-18	68.6	59.8	70.2	62.3
May-18	66.6	58.9	68.7	59.6
Jun-18	67.2	55.8	69.3	56.5
Jul-18	65.6	53.8	67.5	55.6
Aug-18	64.2	52.8	66.4	54.7
Sep-18	63.5	51.1	65.5	53.1

Mitra S.K. Private Limited

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Name & Address of the Customer :

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

Report No. : MSK/UDR/2018-19/944

Date : 31.08.2018

Sample No. : MSKGL/ED/2018-19/08/01649

Sample Description : Ambient Air

Sampling Location : Arnia Joshi Village (Tilakhera Mine)

Date of Sampling : 20/21.08.2018

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

SL. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	69	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	34	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	5.0	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	20.2	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.22	IS 5182 :(Part-10) :1999

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, Mangrol
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/945

Date : 31.08.2018

Sample No. : MSKGL/ED/2018-19/08/01650

Sample Description : Ambient Air

Sampling Location : Near Loading Point (Tilakhera Mine)

Date of Sampling : 20/21.08.2018

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

SL. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	96	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	52	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	6.9	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	29.4	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.39	IS 5182 :(Part-10) :1999

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

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Name & Address of the Customer :

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

Report No. : MSK/UDR/2018-19/946

Date : 31.08.2018

Sample No. : MSKGL/ED/2018-19/08/01651

Sample Description : Ambient Air

Sampling Location : Near Mine Office (Tilakhera Mine)

Date of Sampling : 23/24.08.2018

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

SL. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	87	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	49	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	6.3	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	24.8	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.37	IS 5182 :(Part-10) :1999

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, Mangrol
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/947

Date : 31.08.2018

Sample No. : MSKGL/ED/2018-19/08/01652

Sample Description : Ambient Air

Sampling Location : Near Ravana Office (Tilakhera Mine)

Date of Sampling : 23/24.08.2018

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

SL. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	81	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	42	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	5.7	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	24.4	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.39	IS 5182 :(Part-10) :1999

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



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Name & Address of the Customer :

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

Report No. : MSK/UDR/2018-19/948

Date : 31.08.2018

Sample No. : MSKGL/ED/2018-19/08/01653

Sample Description : Ambient Air

Sampling Location : Near Shahbad (Tilakhera Mine)

Date of Sampling : 23/24.08.2018

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

SL. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	64	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	30	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	4.4	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	18.6	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.18	IS 5182 :(Part-10) :1999

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



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Name & Address of the Customer :

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

Report No. : MSK/UDR/2018-19/943

Date : 31.08.2018

Sample No. : MSKGL/ED/2018-19/08/01648

Sample Description : Ambient Air

Sampling Location : 3-10 Meter Distance from Drilling

Operation (Tilakhera Mine)

Date of Sampling : 20/21.08.2018

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

Sl. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	95	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	51	USEPA CFR-40,Part-50, Appendix-L.
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	6.3	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	25.4	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.32	IS 5182 :(Part-10) :1999

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



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TEST REPORT

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

Report No. : MSK/UDR/2018-19/957
Date : 31.08.2018
Sample No. : MSKGL/ED/2018-19/08/01675 & 01676
Sample Description : Noise Monitoring (Tilakhera Mine)

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.	23/24.08.2018	Near Mine Office (Tilakhera Mine)	59.8	46.5
2.		Near Ravana Office (Tilakhera Mine)	57.3	45.0
Limit As per CPCB (Environment Protection Rules, 1986)		in Industrial Area Leq dB(A)	75	70

Report Prepared by :

For Mitra S.K. Private Limited



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Name & Address of the Customer :

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

Report No. : MSK/UDR/2018-19/370

Date : 30.06.2018

Sample No. : MSKGL ED 2018-19/06/01412

Sample Description : Ambient Air

Sampling Location : 3-10 Meter Distance from Drilling

Operation (Tilakhera Mine)

Date of Sampling : 15/16.06.2018

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

Sl. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	90	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	48	USEPA CFR-40,Part-50, Appendix-1.
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	6.8	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	28.9	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.39	IS 5182 :(Part-10) :1999
6	Ozone (O ₃) in $\mu\text{g}/\text{m}^3$	180	19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH ₃) in $\mu\text{g}/\text{m}^3$	400	23.6	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu\text{g}/\text{m}^3$	1	0.22	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	9.32	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C ₆ H ₆) in $\mu\text{g}/\text{m}^3$	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



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Name & Address of the Customer :

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

Report No. : MSK/UDR/2018-19/371

Date : 30.06.2018

Sample No. : MSKGL/ED/2018-19-06-01413

Sample Description : Ambient Air

Sampling Location : Arnia Joshi Village (Tilakhera Mine)

Date of Sampling : 16/17.06.2018

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

Sl. No.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in µg/m ³	100	76	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in µg/m ³	60	38	USEPA CFR-40,Part-50, Appendix-I.
3	Sulphur dioxide(SO ₂) in µg/m ³	80	5.4	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in µg/m ³	80	22.8	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m ³	2	0.28	IS 5182 :(Part-10) :1999
6	Ozone (O ₃) in µg/m ³	180	19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-111)
7	Ammonia (NH ₃) in µg/m ³	400	19.6	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-101)
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 (C ₆ H ₆) 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:



Mitra S.K. Private Limited

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Name & Address of the Customer :

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

Report No. : MSK/UDR/2018-19/372

Date : 30.06.2018

Sample No. : MSKGL/ID/2018-19-06/01414

Sample Description : Ambient Air

Sampling Location : Near Loading Point (Tilakhera Mine)

Date of Sampling : 16-17.06.2018

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

SL. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	94	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	56	USEPA CFR-40,Part-50, Appendix-1.
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	6.3	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	27.2	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.34	IS 5182 :(Part-10) :1999
6	Ozone (O ₃) in $\mu\text{g}/\text{m}^3$	180	≤ 19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH ₃) in $\mu\text{g}/\text{m}^3$	400	22.4	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu\text{g}/\text{m}^3$	1	0.23	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	8.4	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	< 1.0	APHA 22nd - 3114 C
11	Benzene (C ₆ H ₆) in $\mu\text{g}/\text{m}^3$	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:



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

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Name & Address of the Customer :

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

Report No. : MSK/UDR/2018-19/373

Date : 30.06.2018

Sample No. : MSKGL/ED/2018-19/06-01415

Sample Description : Ambient Air

Sampling Location : Near Mine Office (Tilakhera Mine)

Date of Sampling : 15/16.06.2018

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

Sl. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	80	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	44	USEPA CFR-40,Part-50, Appendix-1
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	5.8	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	26.8	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.34	IS 5182 :(Part-10) :1999
6	Ozone (O ₃) in $\mu\text{g}/\text{m}^3$	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH ₃) in $\mu\text{g}/\text{m}^3$	400	21.4	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu\text{g}/\text{m}^3$	1	0.17	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	6.54	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C ₆ H ₆) in $\mu\text{g}/\text{m}^3$	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:



Mitra S.K. Private Limited

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Name & Address of the Customer :

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

Report No. : MSK/UDR/2018-19/374

Date : 30.06.2018

Sample No. : MSKGL/ED/2018-19/06/01416

Sample Description : Ambient Air

Sampling Location : Near Ravana Office (Tilakhera Mine)

Date of Sampling : 15/16.06.2018

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

Sl. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	84	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	40	USEPA CFR-40,Part-50, Appendix-1.
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	6.2	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	27.6	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.36	IS 5182 :(Part-10) :1999
6	Ozone (O ₃) in $\mu\text{g}/\text{m}^3$	180	<19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH ₃) in $\mu\text{g}/\text{m}^3$	400	19.6	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu\text{g}/\text{m}^3$	1	0.20	EPA-IO 3.2
9	Nickel (Ni) in ng/m^3	20	7.84	EPA-IO 3.2
10	Arsenic (As) in ng/m^3	6	<1.0	APHA 22nd - 3114 C
11	Benzene (C ₆ H ₆) in $\mu\text{g}/\text{m}^3$	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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Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/375

Date : 30.06.2018

Sample No. : MSKGL/ED/2018-19/06/01417

Sample Description : Ambient Air

Sampling Location : Near Shahbad (Filakhara Mine)

Date of Sampling : 16/17.06.2018

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

SL. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	72	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	34	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	5.0	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	19.7	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.22	IS 5182 :(Part-10) :1999
6	Ozone (O ₃) in $\mu\text{g}/\text{m}^3$	180	19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH ₃) in $\mu\text{g}/\text{m}^3$	400	17.6	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu\text{g}/\text{m}^3$	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 (C ₆ H ₆) in $\mu\text{g}/\text{m}^3$	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. Private Limited

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Report No. : MSK/UDR/2018-19/375

Date : 30.06.2018

Sample No. : MSKGL/ED/2018-19/06/01417

Sample Description : Ambient Air

Sampling Location : Near Shahbad (Tilakhera Mine)

Date of Sampling : 16/17.06.2018

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

Sl. NO.	Pollutants	Limit	Result	Method of Test Reference
1	Particulate matter (PM ₁₀) in $\mu\text{g}/\text{m}^3$	100	72	IS: 5182:(Part-23)-2006
2	Particulate matter(PM _{2.5}) in $\mu\text{g}/\text{m}^3$	60	34	USEPA CFR-40,Part-50, Appendix-I.
3	Sulphur dioxide(SO ₂) in $\mu\text{g}/\text{m}^3$	80	5.0	IS: 5182 (Part-2)-2001
4	Nitrogen dioxide (NO ₂) in $\mu\text{g}/\text{m}^3$	80	19.7	IS: 5182 (Part- 6)-2006
5	Carbon monoxide(CO) in mg/m^3	2	0.22	IS 5182 : (Part-10) : 1999
6	Ozone (O ₃) in $\mu\text{g}/\text{m}^3$	180	19.62	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-411)
7	Ammonia (NH ₃) in $\mu\text{g}/\text{m}^3$	400	17.6	Method of Air sampling, 3rd Edn. By James P. Lodge (Method-401)
8	Lead (Pb) in $\mu\text{g}/\text{m}^3$	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 (C ₆ H ₆) in $\mu\text{g}/\text{m}^3$	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, Mangrol
Distt. Chittorgarh (Raj.)

Report No. : MSK/UDR/2018-19/409
Date : 30.06.2018
Sample No. : MSKGL/ED/2018-19/06/01451 & 01452
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.	15/16.06.2018	Near Mine Office (Tilakhera Mine)	58.6	48.7
2.		Near Ravana Office (Tilakhera Mine)	55.9	44.6
Limit As per CPCB (Environment Protection Rules, 1986)		in Industrial Area Leq dB(A)	75	70

Report Prepared by :

For Mitra S.K. Private Limited



