

cement! sugar! refractories! power!

Date: 11.05.2023 To The Member Secretary, State Level Environment Impact Assessment Authority, Jharkhand Nursery Complex, Near Dhurwa Bus Stand, Dhurwa,

Subject: Half yearly Environment Clearance (EC) Compliance report of Dalmia Cement (Bharat) Limited, Bokaro for the period of October 2022 to March 2023.

Ref: EC Letter no. EC/SEIAA/2018-19/2138/2019/474, Ranchi, Dated:23.09.2019.

Dear Sir,

Please find enclosed herewith half yearly Environment Clearance compliance report of Dalmia Cement (Bharat) Limited, Bokaro, Jharkhand for the period of October 2022 to March '2023 for your kind perusal.

Thanking you.

Yours Sincerely,

For Dalmia Cement (Bharat) Limited, Bokaro

Prhi hhm

Ranchi-Jharkhand -834004

Authorized Signatory

- 1. The Director, Ministry of Environment, Forest and Climate Change, 2nd Floor, Headquarter-Jharkhand State Housing Board, Harmu Chowk, Ranchi, Jharkhand - 834002
- 2. The Member Secretary, Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, Delhi-110032
- 3. The Member Secretary, Jharkhand State Pollution Control Board, Township Administration Building, HEC Complex, Dhurwa, Ranchi-834004
- 4. Regional Environmental Officer, Jharkhand State Pollution Control Board Dhanbad, HIG-1, Sardar Patel Nagar, Hirapur Dhanbad-826001

Enclosed:

- EC Compliance Report
- 2. Annexure -1 to 9

Dalmia Cement (Bharat) Limited
Plot No. IV/A-7(P), Bokaro Industrial Area, Balidih, Bokaro Steel City, Bokaro - 827 014, Iharkhand, India
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DALMIA CEMENT (BHARAT) LIMITED, BOKARO ENVIRONMENT CLEARANCE COMPLIANCE REPORT FROM OCTOBER 2022 TO MARCH 2023

EC Letter No.-EC/SEIAA/2018-19/1997/2138/2019/474 Ranchi, Dated:23.09.2019.



Dalmia Cement (Bharat) Limited
Plot No. IV/A-7(P), Bokaro Industrial Area, Balidih,
Bokaro Steel City, Jharkhand- 827014

Plot No.: IV/A-7(P), Bokaro Industrial Area, Balidih, Bokaro Steel City, Jharkhand — 827014.

ENVIRONMENT CLEARANCE COMPLIANCE REPORT OF DALMIA CEMENT (BHARAT) LIMITED FOR THE PERIOD OF OCTOBER 2022 TO MARCH 2023

EC Letter No.-EC/ SEIAA / 2018-19 /2138/ 2019/ 474, Ranchi Dated:23.09.2019.

	EC Compliance Condition	EC Compliance Status
I	Specific Condition	
	This Environmental Clearance is valid subject to the following condition below —	Complied with.
	That this project has- a. Obtained all legal rights to operate at concerned place.	a. Obtained all necessary statutory clearance to operate our stand-alone cement Grinding Unit.
	b. Complied with all existing concerned laws of the land and	b. Complied all legal law of land with respect to our unit
	c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.	c. Complied with.
II	Statutory Compliance	
1	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	Not Applicable. The unit is located in notified Industrial area at JIADA, Bokaro, Jharkhand with due allocation through Govt of Jharkhand.
2	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not Applicable. There is no wild life sanctuary within 10 km radius of our unit.
3	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)	Not Applicable. The unit is located in notified industrial area at BIADA Bokaro. There is no record of schedule -I species within 10 km radius of our unit. Therefore, there is no need for site specific conservation plan/ wild life management plan.

4	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	Complied with. Our Unit has obtained CTE from JSPCB Ranchi vide letter no JSPCB/HO/RNC/CTE-11785214/2022/96 Dated: 06.03.2022 CTO obtained and renewed vide letter no JSPCB/HO/RNC/ CTO-14970501/2023/503, Dated15.03.2023 for the plant expansion from 3.7 MTPA to 4.50 MTPA from JSPCB Ranchi and CTO valid up to 31.03.2027.
5	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project	Complied with. This is a standalone cement grinding unit, where, water requirement for process is zero. The small quantity of water is required for cooling purpose, which is obtained from BIADA. The Unit have water agreement with BIADA for the supply of water to DCBL Bokaro.
6	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time	Complied with. DCBL, Bokaro has obtained Authorization of Hazardous waste from JSPCB, Ranchi vide letter no JSPCB/HO/RNC/HWM-9675664/2021/26, Dated 09.04.2021, which is valid up to 31.12.2026.
7	No mining /activity shall be undertaken in the forest land or deemed forest without obtaining prior forestry clearance.	Not Applicable to our unit operations
8	This Environmental Clearance is granted subject to final outcome of Hon'ble supreme court of India . Hon'ble High Court, Hon'ble NGT, MoEF&CC and any other Court of Law, if any, as, may be applicable to this project.	Agreeable
9	Environmental Clearance is subject to obtained prior clearance from forestry and wildlife angle including clearance from standing committee of NBWL as may be applicable to this project (in case any fauna occurs /is found in the project area or if the area involves forest land or Wildlife habitat I.e core zone of elephant/tiger reserve etc. and located within 10 km of protected area.	Not applicable. The unit is located in notified Industrial area at JIADA, Bokaro, Jharkhand with due allocation through Govt of Jharkhand.
10	The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue delay, which till process on their	Not applicable. The unit is located in notified Industrial area at BIADA, Bokaro, Jharkhand with due allocation through Govt of Jharkhand.

	accrue to them unless all clearance are obtained.	
Ш	Air quality monitoring and preservation	
1	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. no 612 (E) dated 25 August ,2014 (Cement) and subsequent amendment dated 9th May 2016 (Cement) and connected to SPCB and CPCB online server and calibrate these system from time from time to according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.	Complied with. Unit has already installed on line continuous emission monitoring system in our process stack and connected to JSPCB & CPCB server. On line stack emission monitoring data continuously transmitted to CPCB & JSPCB server. Regular maintenance and calibration are being done of stack emission monitoring equipment.
2	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.).	Complied with. We are regularly monitoring fugitive dust emission in our plant by JSPCB & NABL approved laboratory. Copy of all Environmental monitoring reports from October 2022 to March 2023 is attached as per Annexure-1
3	The project proponent shall install system to carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM-10 and PM-2.5 in reference to PM emission, and S02 and NOx in reference to S02 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. (case to case basis small plants: Manual; Large plants: Continuous)	Complied with. We have installed 2 Nos On-line Continuous AAQM monitoring station in up wind and downwind directions with parameter of PM-10, PM-2.5, SO2 & NOx, at the boundary location of the unit. Continuous AAQM monitoring equipment is transmitting data to JSPCB, & CPCB server through wide area network. The same data is also displayed at the factory main gate. Unit have also installed 4.nos manual AAQM monitoring station at 120-degree direction of a plant boundary location. AAQM reports are being regularly submitted to JSPCB Ranchi and Regional office at Dhanbad on monthly basis. Six monthly average AAQM report from October 2022 to March 2023 attached as per Annxure-1
4	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of	Complied. Six monthly environmental monitoring reports from October 2022 to March 2023 is

	manual stack monitoring and manual monitoring of air quality/fugitive emissions to Regional office of MoEF&CC, Zonal office of CPCB and Regional of SPCB along with six monthly monitoring report	attached as per Annexure-1
5	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Complied. We have installed 2 nos Bag house in VRM mills for the control of air pollution. The Bag house stack emission maintained below 30 mg/Nm3. Apart from this 33 nos of nuisance bag filter installed in all material transfer points to control the fugitive dust emission. All belt conveyors are fully covered for the control off fugitive dust emission. Raw materials and products are stored in covered sheds and silos. regular cleaning of roads by road sweeping machine. Good housekeeping is being maintained all around the plant.
6	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Complied. Regular maintenance of bag filters, leakage checking, cleaning of bag filters is being done by dedicated mechanical maintenance team as per schedule.
7	Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.	Complied. Applicable CREP compliance conditions complied.
8	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Complied. Regular road sweeping and -floor cleaning is being done by vacuum sweeping machine for the control of fugitive dust emission. Good housekeeping is being maintained in all around plant premises area.
9	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.	Complied. All raw materials are being transported in covered belt conveyors. Raw material & products is being transported in covered tarpaulin trucks / bulkers /rail for the control of material spillage as well as control of fugitive dust emission.
10	Provide wind shelter fence and chemical spraying on the raw material stock piles;	Complied. We have constructed plant boundary walls around the plant along with thick green belt, which act as wind shelter or wind shield for contaminants. We have boundary wall

		erected between plant and hostels which act as wind shields. We have also constructed walls around packing unit, which act as wind shelter. Raw materials stored in covered sheds and silos.
11	Have separate truck parking area and monitor vehicular emissions at regular interval.	Complied. Separate truck parking facility provided to park trucks. Regular checking of vehicles PUC certificates which entering in plant to control of vehicular emission.
12	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.	Complied. All raw materials and products are being transported in covered trucks, bulker, covered conveyor belts/railways to reduce the fugitive dust emission. Regular water sprinkling is being done on the roads through water spray tanker to control of fugitive dust emission.
13	Ventilation system shall be designed for adequate air changes as per ACGIH Document for all tunnels, motor houses, cement bagging plants.	Complied. Air ventilation system arrangement done for adequate air change in motor houses and packing plant area.
IV	Water quality monitoring and preservatio	n:
1	The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 as amended from time to time and connected to SPCB and CPCB online servers and calibrate this system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)	Our unit is standalone cement grinding unit and does not require water for process. The water is only used for equipment cooling in closed loop. Makeup water is only added. Therefore, there is no effluents generated from our process. In view of this effluent monitoring system is not relevant for our unit.
2	The project proponent shall 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.	Complied with. We are taking water from BIADA for plant operation and domestic uses. No ground water is used in our plant, however, we are regularly monitoring ground water quality and depth level in surrounding village wells. Water quality & wells depth level reports of surrounding village attached as per

		Annexure-1
3	The project proponent shall 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 generation from our unit as it does not require water for its process. Ground water monitoring reports are being regularly submitted to MoEF&CC regional office, Zonal office of CPCB and regional office of SPCB as a part of EC compliance report. Ground water quality analysis report attached as per Annexure-1
4	Adhere to 'Zero Liquid Discharge	Complied with . Zero Liquid Discharge is being maintained.
5	Sewage Treatment Plant shall be provided for treatment of domestic waste water to meet the prescribed standards.	Complied with. 100 KLD STP is in operation for the treatment of domestic waste water. Treated sewage quality meet the prescribed standard norms. Treated water analysis report attached as per Annexure-1
6	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off.	Complied with. Garland drain are existing in the raw material yard to accumulate run off water in a settling pit. As a practice, we collect water from pit in water tanker and use it for water sprinkling on our internal roads, on daily basis.
7	The project proponent shall practice rainwater harvesting to maximum possible extent.	Complied with. Rain water harvesting system implemented in our unit to recharge the ground water and same is also approved from Ground Water Board, Ranchi. We have also renovation of wells and pounds near surrounding village area to conserve the rain water.
8	Water meters shall be provided at the inlet to all unit processes in the cement plant.	Complied . Water meter installed at inlet of our unit.
9	The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water practicing cascade use and by recycling treated water.	Complied . Optimum use of water is practiced and all necessary efforts has been made to reduce water consumption in our plant.
V	Noise monitoring and prevention	

1	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six- monthly compliance report.	Compiled Noise level are being regularly monitored in different locations of Unit. Noise level report is being regularly submitted to Ministry, CPCB, JSPCB as a part of sixmonthly EC Compliance report. Six monthly noise level report (October 2022 to March 2023) attached as per Annexure-1
2	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.	Being complied.
VI	Energy Conservation measures-:	
1	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.	Complied with. We have installed solar plate light in plant, colony area. We have also initiated to install more solar light in plant.
2	Provide the project proponent for LED lights in their offices and residential areas,	Complied with. LED bulbs are being used in all offices and residential areas for the lighting purpose.
3	Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS Standards. Waste management	Complied with. Slag and fly ash are being used as a raw material for cement manufacturing as per BIS norms.
VII	Waste management	
1	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Trans boundary Movement) Rules, 2016.	Authorization obtained from JSPCB vide
2	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)	Complied with. Kitchen waste composted and used in greenbelt development.
VIII	Green Belt and EMP:	

1	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant	Complied with. We have developed greenbelt in 33% of the total land of unit. Tree plantation report attached as per Annexure-2
2	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation	Dalmia Cement (Bharat) Limited Bokaro is a standalone cement grinding unit for the manufacturing of blended cement by utilizing industrial waste -such as slag, fly ash and gypsum. Only small quantity of coal is used in HAG for moisture drying in raw material slag. The GHG emission inventory and action plan for the reduction of GHG emission report attached as per Annexure-3 .
IX	Public hearing and Human health issues	
1	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Complied with. On side emergency preparedness plan, Hazard identification and Risk Assessment (HIRA) already prepared and same is approved by Chief Factory Inspector of Jharkhand.
2	The PP shall provide Personal Protection Equipment (PPE) as per the norms of factory Act.	Complied with. All Personal protective equipment's (PPE) Safety shoes, Nose mask, safety helmet, earplug, provided to all employees and contract workers for their safety. Safety training is being regularly done
		among the employees for the awareness of safe working culture.
3	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.	Complied with. All necessary infrastructure / facility provided to construction labour during construction phase of the project and also removed temporary houses after completion of project
4	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act	Complied Periodic medical health checkup is being regularly done to all employees and workers every six months. reports are being maintained as per Factory Act.

x	Corporate Environment Responsibility	
1	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	Being Complied. we are regularly doing CREP surrounding village area which is as follows:
		Nells & Pond renovation done surrounding village area for water conservation.
		2. street light & solar light installed in village
		3.Tree plantation done surrounding village
		4 Toilet constructed in schools
		5. Renovation of school building, community hall and Aganwadi surrounding village area.
		CER report for the year 2022-23 attached as per Annexure: 4
2	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six- monthly report.	Complied with. DCBL Bokaro have Environmental Management Policy duly approved from Board of Director. copy of Environment policy attached herewith as per Annexure-5
3	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of Senior Executive. who will directly to the head of the organization.	Complied. Environment Management Cell has been established at our plant as well as at Corporate headquarter for the management of environmental activities with qualified person. Environment management cell is headed by Executive Director (Plant Head) in our unit.
4	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action	Action plan for EMP implementation is in place. Separate budget allocated for Environment Protection. It is ensured that budget shall not be diverted for any other purpose. Expenditure on environmental protection is being regularly submitted to Ministry and his Regional Office as a part of EC compliance report. Expenditure on

	plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.	Environment Protection (Capital cost & Recurring cost) from October 2022 to March 2023 is attached as per Annexure-6
5	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Complied with . Self-Environment audit is being regularly done for the continual improvement of environment quality in our plant. Self-Environment audit report attached as per Annexure-7 . Third party Environment audit report submitted in pervious compliance report October 2021 to March 2022.
6	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented. Miscellaneous:	Not relevant
X	Miscellaneous	
1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	We have advertised our Environmental Clearance in local new papers (Hindustan Times Ranchi, Hindi News Aaj), which are widely circulated in the region and copy of the same attached herewith as per Annexure-8.
2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in tun has to display the same for 30 days from the date of receipt.	Complied. We have submitted Environment Clearance copy to local Panchayat and other Govt. bodies, district head quarter. receiving copy of the same attached herewith as per Annexure-9
3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Complied.
4	The project proponent shall monitor the criteria pollutants level namely; PM_{10} , SO_2 . NO_x (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on	Complied . On-line environment monitoring data is being regularly displayed at factory main gate for the notice of public.

	the website of the company.	
5	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied.
6	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied Environment Statement in Form V is regularly submitted to JSPCB, Dhanbad & Ranchi. Last Environment Statement was submitted vide our letter no. DCBL/ENV-ES/21-22/01, Dated 20.09.2022.
7	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project	Date of final approval: 04.02.2019 for change of energy efficient motor in VRM mill (for 3.70 MTPA EC) Date of financial closure:10.10.2019 (for 3.70 MTPA EC) Date of Land development: There is no land development as the change happen due to change in energy efficient motor replaced 10.01.2020. Date of Production date: 06.03.2020 (3.70 MTPA)
7(I)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Noted & agreed.
7(II)	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee	Commitments and recommendations made in EIA/EMP is being complied. DCBL located in notified industrial area (BIADA), hence, Project exempted for public hearing.
8	It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned SEIAA, Regional Office of MoEF&CC at Ranchi, Jharkhand State Pollution Control Board(JSPCB) Ranchi, and Central Pollution Control Board(CPCB)	Noted & agreed

9	Concealing factual data or submission of false /Fabricated data and failure to comply with any of the conditions mentioned above may results in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act,1986.	Noted & agreed.
10	The SEIAA, Jharkhand or any other competent Authority may alter modify the above condition or stipulated any further condition in the interest of Environment Protection.	Noted & agreed
11	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted & agreed
12	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted & agreed
13	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions not satisfactory.	Noted & agreed
14	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted & agreed
15	The Regional Office of this Ministry 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.	Noted & agreed
16	The above conditions shall be enforced, interalia 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 Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble	Noted & agreed

	Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	
17	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 cf the National Green Tribunal Act,	Noted & agreed
18	This environmental clearance is valid for seven years from the date of issue.	Noted & Agreed

Annexure-1

DALMIA CEMENT BHARAT LIMITED, BOKARO

AMBIENT AIR QUALITY MONITORING REPORT FROM OCTOBER 2022 TO MARCH 2023

Ambient air quality monitoring report -Near Time office							
	SO2	NOx	PM-10	PM-2.5			
	μg/m3	μg/m3	μg/m3	μg/m3			
Octobrer,2022	8.1	17.4	52.8	23.6			
November,2022	6.7	16.5	53.1	25.1			
December,2022	7.5	19.6	54.3	26.4			
January,2023	8.1	17.1	51.6	23.6			
February,2023	9.0	18.2	54.9	27.8			
March,2023	10.2	19.3	56	29.4			
Min.	6.7	16.5	51.6	23.6			
Max.	10	19.6	56	29.4			
Avg.	8.2	18.0	53.8	26.0			

Amb	Ambient air quality monitoring report FH-3 Building							
	SO2	NOx	PM-10	PM-2.5				
	μg/m3	μg/m3	μg/m3	μg/m3				
Octobrer,2022	6.8	13.7	49.5	21.7				
November,2022	5.4	14.1	48.9	23.8				
December,2022	6.7	15.5	50.7	24.5				
January,2023	7.1	16.2	53.1	22.6				
February,2023	8.4	17.0	54.3	29.3				
March,2023	9.8	16.9	51.6	26.9				
Min	5.44	13.71	48.90	21.70				
Max.	9.80	17.03	54.30	29.27				
Avg.	7.43	15.53	51.41	24.97				

JSPCB Norms

SO ₂	NO_X	PM_{10}	PM _{2.5} (μg/m ³)	
$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$		
80	80	100	60	

AMBIENT AIR QUALITY MONITORING REPORT FROM OCTOBER 2022 TO MARCH 2023

Ambient air quality monitoring report: Near Wagon Tippler							
	SO2	NOx	PM-10	PM-2.5			
	μg/m3	μg/m3	μg/m3	μg/m3			
Octobrer,2022	9.0	16.5	51.6	24.0			
November,2022	6.8	18.6	52.5	27.0			
December,2022	8.1	16.5	53.6	26.4			
January,2023	7.6	17.2	54.2	25.2			
February,2023	8.4	19.7	53.8	26.3			
March,2023	9.7	15.6	54.0	28.4			
Min	6.79	15.56	51.59	23.97			
Max	9.71	19.73	54.17	28.41			
Average	8.26	17.35	53.28	26.23			

A	Ambient air quality monitoring report: Fabrication yard							
	SO2	NOx	PM-10	PM-2.5				
	μg/m3	μg/m3	μg/m3	μg/m3				
Octobrer,2022	5.6	19.0	52.6	25.4				
November,2022	7.5	24.0	54.8	24.4				
December,2022	8.3	23.1	53.4	27.3				
January,2023	6.2	22.1	55.0	26.1				
February,2023	9.3	19.3	55.9	30.3				
March,2023	7.8	21.8	56.1	31.4				
Min	5.6	19.0	52.6	24.4				
Max	9.3	24.0	56.1	31.4				
Average	7.4	21.6	54.6	27.5				

JSPCB Norms

SO ₂	O ₂ NO _X PM ₁₀		PM _{2.5}	
$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	
80	80	100	60	

MANUAL STACK EMISSION MONITORING REPORT OF VRM BAG HOUSE STACK FROM OCTOBER 2022 TO MARCH 2023.

Month	Min. mg/nm3	Max. mg/Nm3	Avg. mg/Nm3
Octobrer,2022	11.2	19.9	15.6
November,2022	14.3	25.3	19.8
December,2022	16.4	27.8	22.1
January,2023	12.4	26.8	19.6
February,2023	13.9	27.9	20.9
March,2023	18.3	26.2	22.3
Min.	11.2	19.9	15.6
Max.	18.3	27.9	22.3
Avg.	14.5	25.2	19.7

ONLINE STACK EMISSION MONITORING REPORT OF VRM BAG HOUSE STACK FROM OCTOBER 2022 TO MARCH 2023

Month	Min. mg/nm3	Max. mg/Nm3	Avg. mg/Nm3
Octobrer,2022	5.5	23.2	15.2
November,2022	13.6	22.9	20.3
December,2022	7.3	25.7	16.6
January,2023	12.8	24.1	19.7
February,2023	10.5	23.4	18.1
March,2023	12.4	26.5	20.9
Min.	5.5	22.9	15.2
Max.	13.6	26.5	20.9
Avg.	10.1	24.4	18.4

JSPCB Norms	30 mg/Nm3
-------------	-----------

NOISE LEVEL REPORT FROM OCTOBER 2022 TO MARCH 2023

	Near Time office						
	C	ay Time dB(A	A)		Nig	ht Time dB(A	3(A)
Month	Min.	Max.	Avg.		Min.	Max.	Avg.
Octobrer,2022	63.1	66.4	64.8		58.7	66.4	62.6
November,2022	62.8	68.3	65.6		53.3	67.1	60.2
December,2022	63.2	64.7	64.0		54.6	62.6	58.6
January,2023	63.5	66.7	65.1		64.1	68.3	66.2
February,2023	60.4	65.1	62.8		58.8	64.9	61.9
March,2023	61.4	64.5	63.0		55.9	61	58.5

	Near FH 3&4 Building						
		Day Time dB(A)			N	ight Time dB(A	١)
Month	Min.	Min. Max. Avg.			Min.	Max.	Avg.
Octobrer,2022	41.3	42.3	41.8		39.4	42.3	40.9
November,2022	43.8	44.5	44.2		41.2	43.1	42.2
December,2022	41.7	43.6	42.7		40.7	42.8	41.8
January,2023	42.0	42.8	42.4		39.1	41.4	40.3
February,2023	43.8	44.2	44.0		42.2	43.9	43.1
March,2023	41.5	43.1	42.3		39.5	43.2	41.4

			Wagan	Tri	ippler		
		Day Time dB(A)		Ni	ght Time dB(A)
	Min.	Max.	Avg.		Min.	Max.	Avg.
Octobrer,2022	64.3	65.7	65.00		60.9	64.5	62.7
November,2022	63.0	63.8	63.4		59.2	62.4	60.8
December,2022	62.5	67.2	64.9		60.4	65.7	63.1
January,2023	63.3	68.6	66.0		61.8	66.9	64.4
February,2023	65.5	66.1	65.8		62.9	64.8	63.9
March,2023	64.8	69.6	67.2		60.3	63.1	61.7

			Near Fabi	rica	tion yard		
		Day Time dB(A)			N	ight Time dB(A	N)
	Min.	Max.	Avg.		Min.	Max.	Avg.
Octobrer,2022	65.1	70.5	67.8		62.7	65.9	64.3
November,2022	68.4	69.7	69.1		63.6	68.5	66.1
December,2022	65.8	67.9	66.9		61.8	62.9	62.4
January,2023	63.7	68.5	66.1		60.5	65.9	63.2
February,2023	62.5	65.1	63.8		61.9	67.5	64.7
March,2023	64.6	66.3	65.5		62.1	63.9	63.0

FUGITIVE DUST EMISSION MONITORING REPORT FROM OCTOBER 2022 TO MARCH 2023

Sr. No	Date of monitoring	Near Mill area µg/m3	Near Coal yard μg/m3	Near Packing plant µg/m3	Near raw material yard µg/m3
1	02.10.2022	1254.1	1321.1	1136.6	1067.8
2	13.11.2022	1341.6	1193.7	972.7	1335.4
3	23.12.2022	1072.3	1036.6	1231.5	973.12
4	01.01.2023	1205.6	1243.5	1122.4	1033.75
5	18.02.2023	1315.7	1312.3	1235.7	1225.3
6	13.03.2023	1435.2	1268.5	1093.4	1194.5
	Min.	1072.3	1036.6	972.7	973.12
	Max.	1435.2	1321.1	1235.7	1335.4
	Avg.	1266.50	1216.68	1125.0875	1142.30

Fugitive dust CPCB Norms	2000 μg/m3
--------------------------	------------

GROUND WATER LEVEL REPORT OF SURROUNDING VILLAGES FROM OCTOBER 2022 TO MARCH 2023

Location	Coordinate of Site	Distance from Plant site (KM)		De	epth from gro	und (feet)		
			October-	November-	December-	January-	February-	March-
		Month	2022,	2022,	2022,	2023,	2023,	2023,
Pakhriatand								
(Near	23070'5590"N							
Anganwadi)	86006'2678" E	1	13'9"	14'5"	19'8"	21'7"	21'9"	22'3"
Tupkadi (Near	23071'3362"N							
Electric Pole)	86006'1573" E	1	12'0"	12'7"	16'9"	19'6"	20'2"	20'8"
Godawali	23068'7751"N							
(Near Temple)	86006'0031" E	1	3'6"	3'9"	6'3"	8'3"	8'6"	8'9"
Bhutkuru								
(Near primary	23070'4642"N							
School)	86005'1418" E	1	13.1'"	14'3"	17'1"	18'1"	19'5"	19'8"

DALMIA CEMENT BHARAT LIMITED, BOKARO STP OUTLET WATER QUALITY ANALYSIS REPORT

			Suspended	COD	BOD	Oil &
Sr. No	Parameter	PH	solids mg/lit	mg/lit	mg/lit	Grease mg/lit.
	Norms	5.5-9.0	100	250	30	10
7	Octobrer,2022	7.5	73	27	13	5.0
8	November,2022	7.8	85	74	18	4.8
9	December,2022	7.4	11	32	9	5.1
10	January,2023	7.3	12	36	11	5.8
11	February,2023	7.6	11.6	40	19	5.4
12	March,2023	7.6	14	42	8	4.8
·	Min.	7.3	11	27	8.1	4.8
	Max.	7.8	85	74	19	5.8
	Avg.	7.5	45	67	15.0	5.7

Ambient Air Quality monitoring report



Institute for Environmental Management





Certified By ISO 9001:2015 (QMS) & ISO 45001:2018

Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	0	0	9
Discipline: C	nemical					Group:	Atmo:	spher	ic Pol	lution	1		Sub-C	roup:	Ambi	ent Air		
Report Issue	Date: 2	5-03-2	2023					T	est Re	port	No.:	RN-2	30308	001A0	1			
Sample ID: 2	30321A	P1100	1					S	ample	Des	riptio	n: A	mbier	t Air				
Challan No./	P.O. No.	: 4548	302383	34/23	7			C	hallar	No./	P.No	. Da	te: 17-	09-20	22			
Pic	t No IV	A-7(P), Bok	aro I	ndus	d. (Jhari strial Are	a Ba	lidih		Nork	s)							
Plo Bo	t No IV	A-7(P), Bok	aro I	ndus		a Ba	lidih d Ind	ia			sent	ative:	Saniee	v Veri	ma		
Plo Bo	t No IV karo Ste stry: Cer	A-7(Peel Cit), Bok ty, Bol	aro I	ndus	strial Are	a Ba	lidih d Ind C	ia ustor	ner R	epre		ative: -2023 1	-				
Pic Bo Type of Indu Sample Drav	t No IV karo Ste stry: Cer vn by: I	A-7(Peel Cit ment EM Te), Bok ty, Bol eam	aro I karo-	ndus 8270	strial Are	ea Ba khane	lidih d Ind C Sa	ia ustor ampli	ner R ng Da	epre		ative: -2023 1	-				
Pic Bo Type of Indu	t No IV/ karo Ste stry: Cer vn by: II CB Guide	A-7(Peel Cit ment EM Te	eam	aro I karo- MS/30	ndus 8270	strial Are	ea Ba khane	lidih d Ind C Sa	ia ustor ampli	ner R ng Da	epre			-				
Pic Bo Type of Indu Sample Drav Protocol: CP	t No IV/ karo Ste stry: Cer vn by: II CB Guide ation: N	A-7(Peel Cit ment EM Te eline(f	eam NAAQN	AS/30	8270 6/20	strial Are	ea Ba khane IS Me	lidih d Ind C Sa ethod	ia ustor ampli	ner R ng Da	epre	7-03-	2023 1	-	3-202		to SE	

----Test Results----

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006	µg/m³	100	73.34
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24:2019	µg/m³	60	34.61
3.	Sulphur Dioxide (SO ₂)	IS 5182 Part-02	µg/m³	80	13.49
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06	µg/m³	80	28.19
5.	Ammonia (NH ₃)	IS 5182 Part 25	µg/m³	400	51.31
6.	OZONE (O ₃)	IS 5182 Part 09	µg/m³	100	27.10
7.	ARSENIC (as As)	USEPA I.O. 3.2	ng/m³		BDL (MDL-02)
8.	LEAD (as Pb)	IS 5182 Part 22	µg/m³	1.0	0.05
9.	NICKEL (Ni)	IS 5182 Part 26	ng/m ³		BDL (MDL-4)

-- End of Report---

	Elia di Report
Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -

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Quality Checked by administrationized Signatory

Dy. Quality Manager

S. C. Jain)

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

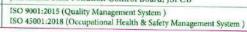
Ph - 8407804253, 8407804251, Email - icm2012@rediffmail.com



Institute for Environmental Management

Jharkhand State Pollution Control Board, JSPCB Accredited by

Certified by





Test Report

Discipline: Chemical	Group: Atmo	spheric Polluti	on S	ub-Group: Ambient Air
Report Issue Date: 25-03-2023			rt No.: RN-230	
Sample ID: 230321AP11001	<0° 3f		escription: Am	
Challan No./P.O. No.: 4548023834	/237		o./ P.No. Date	
	O-Ralidih Diet - Ro	kara Ibarkha	Plot IV/A-7(P),	
	O-Balidih, Dist: - Bo	-	ind 827014	
Type of Industry: Cement	PO-Balidih, Dist: - Bo	Customer	nd 827014 Representati	ve: Sanjeev Verma
Type of Industry: Cement Sample Drawn by: IEM Team	400	Customer Sampling I	Representati	
Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline(NAAQMS	5/36/2012-13) & IS Me	Customer Sampling I	Representati	ve: Sanjeev Verma
Type of Industry: Cement	5/36/2012-13) & IS Me	Customer Sampling I	Representati	ve: Sanjeev Verma
Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline(NAAQMS	5/36/2012-13) & IS Me	Customer Sampling I	Representati	ve: Sanjeev Verma 123 to 18-03-2023

Sample Receiving date: 21-03-2023 Testing Started: 21-03-2023 Testing Ended: 24-03-2023

SI.		Test Results		1	THE STATE OF THE S
No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m³		BDL (MDL-0.18)
2.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m³		BDL(MDL-1.8)

---End of Report----Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all Env. Condition of Lab. testing area as per IS 196:1966(C). Abbreviation MDL: Minimum Detection Limit, BDL: Below Detection Limit Limit is Specified As per the Environmental (Protection) Rule - 1986 Remark Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: ncific Contractual Notes: The laboratory accepts responsibility for content of this report.
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the basis of Quality Checked and Technical data verified by the Authorized signatory, the report Quality Checked ized Signatory (Shreya Sonal C. Jain) On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization. Dy. Quality Manager Director

ISO 9001:2015

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

ISO 45001-2018

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

Ph - 8407804254, 8407804251, Email - iem2012@rediffmail.com



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Test Report

ULR No.:	Т	C	1	1	5	1	5	2 3	0	0	0	0	0	0	0	1	0
Discipline: C	nemical		-			Group: A	tmo	spheric F	ollution	1		Sub-G	roup:	Ambi	ent Air		
Report Issue	Date: 2	5-03-2	023					Test	Report	No.:	RN-2	303080	001A02	2			
Sample ID: 2	30321AF	1100	2					Sam	le Des	criptio	on: A	mbien	t Air				
Challan No./	P.O. No.	: 4548	302383	4/23	7			Chall	an No.,	P.No	. Da	te: 17-	09-202	22			
Pic	t No IV	A-7(P), Bok	aro li	ndus	d. (Jhark strial Are	а Ва	lidih	Work	s)							
Plo Bo	t No IV/ karo Ste	A-7(P), Bok	aro li	ndus		а Ва	ilidih d India		-	sent	ative: (Saniee	v Verr	na		
Plo Bo Type of Indu	t No IV/ karo Ste stry: Cer	A-7(P el Cit nent), Bok y, Bok	aro li	ndus	strial Are	а Ва	lidih d India Cust	omer F	Repres	-	ative: 5	-		101		
Plo Bo Type of Indu Sample Drav	t No IV/ karo Ste stry: Cer vn by: Ii	A-7(Peel Cit ment EM Te), Bok y, Bok eam	aro li aro-	ndus 8270	strial Are 114 Jhark	a Ba han	lidih d India Cust	omer F	Repres	-	ative: 9	-		101		
Plo Bo Type of Indu	karo Ste stry: Cer vn by: Ii	A-7(Peel Cit ment EM Te), Bok y, Bok eam	aro li aro-l	8 27 0	strial Are 114 Jhark	a Ba han	lidih d India Cust	omer F	Repres	-	100000000000000000000000000000000000000	-		101		
Pic Bo Type of Indu Sample Drav Protocol: CP	karo Ste stry: Cer vn by: II CB Guide ration: N	A-7(Peel Cit ment EM Te eline(N), Bok y, Bok eam NAAQN abricat	aro-lis/36	8270 6/20: ard	strial Are 114 Jhark	a Ba han S M	lidih d India Cust	omer F ling Da 2 Serie	Repres	7-03-	2023 t	-	3-202	101	to SE	

----Test Results----

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006	µg/m³	100	79.25
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24:2019	µg/m³	60	31.00
3.	Sulphur Dioxide (SO ₂)	IS 5182 Part-02	µg/m³	80	18.88
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06	µg/m³	80	37.91
5.	Ammonia (NH ₃)	IS 5182 Part 25	μg/m³	400	47.30
6.	OZONE (O ₃)	IS 5182 Part 09	µg/m³	100	22.45
7.	ARSENIC (as As)	USEPA I.O. 3.2	ng/m ³		BDL (MDL-02)
8.	LEAD (as Pb)	IS 5182 Part 22	µg/m³	1.0	0.03
9.	NICKEL (Ni)	IS 5182 Part 26	ng/m³		BDL (MDL-4)

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Authorized Signatory Specific Contractual Notes: -Quality Check The laboratory accepts responsibility for content of this report.

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Corporate office - A-8, Modi Heights, Opp.-All India Radio Station. Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony. Ranchi-834002, Jharkhand, India

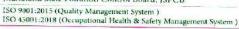
50 9001:2015 ISO 45001:2018

Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com



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Test Report

Discipline: Chemical	Group: Atm	ospheric Polluti	on	Sub-Gro	up: Ambient Air
Report Issue Date: 25-03-2023	Test Report No.: RN-230308001A02				
Sample ID: 230321AP11002			n: Ambient A		
Challan No./P.O. No.: 4548023834/	/237			Date: 17-09-	
Dalmia Cement (Bharat) Bokaro Industial Area, P	O-Balidih, Dist: - B	okaro. Jharkha	nd 8270	-7(P), 114	
Bokaro Industial Area, P	O-Balidih, Dist: - B	okaro, Jharkha	ind 8270	14	
Type of Industry: Cement	O-Balidih, Dist: - B	okaro, Jharkha Customer	nd 8270 Repres	14 entative: San	
Type of Industry: Cement Sample Drawn by: IEM Team	O-Balidih, Dist: - B	Customer Sampling	Represo	14	
Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline(NAAQMS)	'O-Balidih, Dist: - B /36/2012-13) & IS M	Customer Sampling	Represo	14 entative: San	
Type of Industry: Cement Sample Drawn by: IEM Team	'O-Balidih, Dist: - B /36/2012-13) & IS M	Customer Sampling	Represo	14 entative: San	
Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline(NAAQMS)	'O-Balidih, Dist: - B /36/2012-13) & IS M	Customer Sampling	Represe Date: 17-	14 entative: San	

----Test Results----

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m³		BDL (MDL-0.18)
2.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m³		BDL(MDL-1.8)

----End of Report----

Limit is Specified As per the Environmental (Protection) Rule – 1986	Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
	Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
	Limit is Specified	As per the Environmental (Protection) Rule - 1986
	Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes:

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150 9001:2015

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India Ph - 8407804254, 8407804251, Email - iem2012(a rediffmail.com

ISO 45001:2018



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National Accreditation Board for Testing Laboratory (NABL) vide TC-11515 Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	0	1	1
Discipline: C	nemical					Group: A	tmo	spher	ric Pol	lution	1		Sub-G	roup:	Ambi	ent Air		1
Report Issue	Date: 25	5-03-2	2023					T	est Re	port	No.:	RN-2	303080	001A0	3			
Sample ID: 2	30321AF	1100	3					S	ample	Des	riptio	n: A	mbien	t Air				
Challan No./	P.O. No.	: 4548	3023834	1/237	7			C	hallar	No./	P.No	. Da	te: 17-	09-202	22			
Plo	t No IV	A-7(P), Boka	ro Ir	ndus	i. (Jhark trial Are:	а Ва	lidih		Norks	3)							
Plo Bo	t No IV/ karo Ste	A-7(P), Boka	ro Ir	ndus		а Ва	lidih d Indi	ia		10							
Plo Bo Type of Indu	t No IV/ karo Ste stry: Cer	A-7(P el Cit nent), Boka ty, Bok	ro Ir	ndus	trial Are	а Ва	lidih d Indi C	ia ustor	ner R	epres		ative:		11 11 11 11 11 11			
Plo Bo Type of Indu Sample Drav	t No IV/ karo Ste stry: Cer vn by: II	A-7(Peel Cit ment EM Te), Boka ty, Boka eam	ro Ir aro-8	1dus 3270	trial Are 14 Jhark	a Ba han	lidih d Indi C Sa	ia ustor ampli	ner R	epres		ative: : 2023 t		11 11 11 11 11 11			
Pic Bo Type of Indu Sample Drav Protocol: CP	karo Ste stry: Cer vn by: II	A-7(Peel Cit ment EM Te), Boka ty, Boka eam NAAQM	ro Ir aro-8	1dus 3270	trial Are 14 Jhark	a Ba han	lidih d Indi C Sa	ia ustor ampli	ner R	epres				11 11 11 11 11 11			
Plo Bo Type of Indu Sample Drav	karo Ste stry: Cer vn by: II CB Guide ation: N	A-7(Peel Cit ment EM Te eline(N), Boka ty, Boka eam NAAQM olony	ro Ir aro-8	/201	trial Are 14 Jhark	a Ba han	lidih d Indi C Sa ethod	ia ustor ampli	ner R ng Da Serie	epres	7-03-	2023 t		3-202		o SE	

----Test Results----

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006	µg/m³	100	60.31
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24:2019	μg/m³	60	32.54
3.	Sulphur Dioxide (SO ₂)	IS 5182 Part-02	µg/m³	80	16.19
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06	µg/m³	80	32.08
5.	Ammonia (NH ₃)	IS 5182 Part 25	µg/m³	400	45.29
6.	OZONE (O ₃)	IS 5182 Part 09	µg/m³	100	23.70
7.	ARSENIC (as As)	USEPA I.O. 3.2	ng/m ³		BDL (MDL-02)
8.	LEAD (as Pb)	IS 5182 Part 22	µg/m³	1.0	0.04
9.	NICKEL (Ni)	IS 5182 Part 26	ng/m ³		BDL (MDL-4)

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Quality Checked by	Authorized Signatory
Total liability of Institute for Environmental Management will be limited to invoiced amount only.	Shrysond	FF.
In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com	(Shreya Sonal)	(Dr. S. C. Jain)
On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.	Dy. Quality Manager	Director

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

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Test Report

Discipline: Chemical	Group: Atmo	spheric Pollution	Sub-Gro	oup: Ambient Air	
Report Issue Date: 25-03-2023	Test Report No.: RN-230308001A03				
Sample ID: 230321AP11003	Sample Des	Sample Description: Ambient Air			
Challan No./P.O. No.: 4548023834/	237	Challan No.	P.No. Date: 17-09	-2022	
Plot No IV/A-7(P)4, Bok Bokaro Steel City, Boka Type of Industry: Cement	aro-827014 Jharkha	nd India	Representative: Sa	njeev Verma	
	Customer Representative: Sanjeev Verma Sampling Date: 17-03-2023 to 18-03-2023				
Sample Drawn by: IEM 182m		Sampling Da	te: 17-03-2023 to	18-03-2023	
	/36/2012-13) & IS M			18-03-2023	
Sample Drawn by: IEM Team Protocol: CPCB Guideline(NAAQMS, Sampling Location: Near Colony	/36/2012-13) & IS M			18-03-2023	
Protocol: CPCB Guideline(NAAQMS	/36/2012-13) & IS M			18-03-2023 W.D.: NW to SE	

----Test Results----

		, cor neodite			
SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m³	-	BDL (MDL-0.18)
2.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m³	(1999)	BDL(MDL-1.8)
3.	BENZENE (C ₆ H ₆₎	IS 5182 Part 11	µg/m³		BDL (MDL- 0.06)

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

ISO 9001:2015

Sample Drawn By: Rajiv Kumar Singh & Team

Quality Checked d Signatory Specific Contractual Notes: -Specific Contractual Notes:

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Dy. Quality Manager

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India Ph - 8407804254, 8407804251, Email - icm2012@rediffmail.com



Director



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Certified By ISO 9001:2015 (QMS) & ISO 45001:2018

Test Report

ULR No.:	T	C	1	1	5	1	5 2	3	0	0	0	0	0	0	0	1	2
Discipline: Che	nical			***	G	roup: At	mosphe	ric Poll	ution		5	ub-Gr	oup: A	mbie	nt Air	1	1
Report Issue Da	te: 25	-03-20	23		100	33		est Re	port N	lo.: R	-						
Sample ID: 230	321AP	11004		b	100	0 1		ample						-			0
Challan No./P.). No.:	45480	23834	1/237	1	271.8		hallan	-	-	_	-	and the same of th	,		70	
Issued to: Dalm Boka	a Cem	ent (E	Sharat Area,) Ltd. PO-B	(Jha alidih	rkhand n, Dist: -	Cemen Bokard	Works Jharl) Plo	t IV/A 8270	-7(P)						
Dalm Boka	o Indu	stial	Sharat Area,) Ltd. PO-B	(Jha alidih	rkhand n, Dist: -	Bokard	, Jhark	hand	8270	14		minov	Vorm	300		
Dalm	ro Indu y: Cem	ent	Area,) Ltd. PO-B	(Jha alidih	rkhand n, Dist: -	Bokard	, Jhari Custon	hand er Re	8270 epres	14 entat	ive: Sa					.4
Dalm Boka Type of Industr Sample Drawn	ro Indu y: Cem by: IEI	ent M Tea	Area,	РО-В	alidih	ı, Dist: -	Bokard	, Jhari Custon Samplir	hand er Re g Dat	8270 eprese e: 18-	14 entat	ive: Sa					
Dalm Boka Type of Industr Sample Drawn Protocol: CPCB	o Indu y: Cem by: IEI Guideli	ent M Tea ine(NA	Area,	PO-B S/36/	alidih 2012-	ı, Dist: -	Bokard	, Jhari Custon Samplir	hand er Re g Dat	8270 eprese e: 18-	14 entat	ive: Sa					
Dalm Boka Type of Industr Sample Drawn	o Indu y: Cem by: IEI Guideli ion: Ne	ent M Tea ine(NA ear Wa	Area, im AAQM: agon Ti	S/36/	alidih 2012-	ı, Dist: -	Metho	Uston Samplir	thand er Re ig Dat Series	8270 eprese e: 18-	14 entat -03-2	ive: Sa 023 to	19-03	-2023		SE	

	Marie Control of the	Test Results-			
SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006	µg/m³	100	81.24
2.	Particulate Matter (PM2.5)	IS 5182 Part 24:2019	µg/m³	60	35.92
3.	Sulphur Dioxide (SO ₂)	IS 5182 Part-02	µg/m³	80	14.84
4.	Nitrogen Dioxide (NO ₂)	IS 5182 Part-06	µg/m³	80	29.16
5.	Ammonia (NH ₃)	IS 5182 Part 25	µg/m³	400	41.28
6.	OZONE (O ₃)	IS 5182 Part 09	µg/m³	100	40.05
7.	ARSENIC (as As)	USEPA I.O. 3.2	ng/m³		BDL (MDL-02)
8.	LEAD (as Pb)	IS 5182 Part 22	µg/m³	1.0	0.03
9.	NICKEL (Ni)	IS 5182 Part 26	ng/m³		BDL (MDL-4)
10.	BENZENE (C6H6)	IS 5182 Part 11	µg/m³		BDL (MDL- 0.06)

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule – 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization. Authorized Signatory Quality Checked b (Shreya Sor Dy. Quality Mana Director

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

ISO 9001:2015 ISO 45001:2018

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ISO 9001:2015 (Quality Management System)

ISO 45001:2018 (Occupational Health & Safety Management System)



Test Report

Discipline: Chemical	Group: Atm	ospheric Pollut	ion Sub-G	roup: Ambient Air		
Report Issue Date: 25-03-2023	100	Test Report No.: RN-230308001A04				
Sample ID: 230321AP11004		escription: Ambien				
Challan No./P.O. No.: 4548023834	/237		o./ P.No. Date: 17-			
Bokaro Industial Area, F		, ontannin				
Type of Industry Coment	717	ACTIVITY OF THE				
Type of Industry: Cement Sample Drawn by: IEM Team			Representative: S			
Sample Drawn by: IEM Team	/25/2012 12\ Q (5 +	Sampling	Date: 18-03-2023 to			
Sample Drawn by: IEM Team Protocol: CPCB Guideline(NAAQMS		Sampling	Date: 18-03-2023 to			
Sample Drawn by: IEM Team Protocol: CPCB Guideline(NAAQMS Sampling Location: Near Wagon Tip		Sampling	Date: 18-03-2023 to			
		Sampling lethod 5182 Se	Date: 18-03-2023 to			

----Test Results---

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m³	3	BDL (MDL-0.18)
2.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m³		BDL(MDL-1.8)

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes:

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Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

- RO ISO 45001:2018

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

Ph - 8407804254, 8407804251, Email - iem2012@rediffmail.com

STACK EMISSION REPORT



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National Accreditation Board for Testing Laboratory (NABL) vide TC-11515 Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	0	2	3
Discipline: Chemical						Grou	p: Atr	mosp	heric	Pollut	ion	Sub-Group: Stack Emission						
Report Issue	Date: 26	5-03-2	023						Te	st Re	port N	lo.:	RN-23	30800	151			
Sample ID: 2	30321AF	1400	1		100	split f	00		Sa	mple	Desci	iptic	n: Sta	ck Em	ission			-8
Challan No./	P.O. No.	: 4548	30238	34/23	7	1 20		500	CH	allan	No./	P.No	. Date	: 17-0	9-2022	2		
Da	mia Cer	ment ((Bhara	at) Lt	d. (Jh	narkhan dih. Dis	d Ce	ment	Worl	(s) Pl	ot IV/	A-7(I	P),	A CO				
Во	karo Inc	lustri	(Bhara al Are	at) Lte a, PO	d. (Jh)-Bali	arkhan dih, Dis	d Cei	ment lokar	o, Jha	arkha	nd 82	7014		ive: Sa	njeev	Verm	a	
Da	karo Ind stry: Cer	lustria nent	al Are	at) Lte a, PO	d. (Jh	narkhan dih, Dis	id Cei	ment	o, Jha	arkha ustom	nd 82 ner Re	7014 pres			njeev	Verm	a	
Da Bo Type of Indu	karo Ind stry: Cer vn by: II	lustria ment EM Te	al Are	a, PO)-Bali	dih, Dis	st: - B	lokar	O, Jha	arkha ustom implin	nd 82 ner Re	7014 pres	l sentat		njeev	Verm	a	
Da Bo Type of Indu Sample Drav	karo Ind stry: Cer vn by: II CB Guide	nent EM Te eline (al Are	a, PO)-Bali	dih, Dis	st: - B	od 11	O, Jha	arkha ustom implin eries	nd 82 ner Re ng Dat	7014 epres e:19	l sentat			Verm		outh

The second secon		
Grinding Mill Unit Cement mill 1 & 2	Stack Height from Ground Level (m)	50
Induction Furnace	Port Hole Height from Ground Level (m)	30
Permanent	Inner Dimension of Stack (m)	3.7
Common	Type of Fuel Used	Electricity
Circular	Quantity of Fuel	- 6
Metal	Production Capacity	-
Available	Pollution Control Device (if any)	Bag Filter
֡֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜	Permanent Common Circular Metal	Stack Height from Ground Level (m)

SI. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Flue Gas Temperature	IS 11255 (Part-3)	°K	383	
2.	Flue Gas Velocity	IS 11255 (Part-3)	m/s	19.6	-
3.	Flue Gas Volumetric Flow Rate	IS 11255 (Part-3)	Nm³/hr.	578871.5	-
4.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	16.9	30.0

Dust	Kg/hr	9.78

	End of Report
Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

ISO 9001:2015 ISO 45001:2018

Sample Drawn By: Amit Sinha & Team

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Test Report

ULR No.:	T	С	1	1	5	1	15	2	3	0	0	0	0	0	0	0	2	4
Discipline:	Chemical		-			Grou		mosph	_	1	n	St	ıb-Gr	oup: S	tack	Emis	sion	
	ue Date: 26-	03-20	23			-	F			Repo		.: RN-	2303	08001	52			
	: 230321AP1	-			000	10-11	4	W.S.	Sam	ple D	escrip	tion:	Stack	Emis	sion			-0
	./P.O. No.:	_		4/237		33	LE	381	Cha	llan N	o./ P.	No. D	ate:	17-09	2022			719
lssued to: []	Dalmia Cem Bokaro Indu	ent (E stria	Bharat I Area	t) Ltd	. (Jhar Balidih	khan n, Dis	d Ce	ment \ okaro	Norks , Jhar) Plot khan	IV/A-	7(P), 014		Eg.		100		
Type of Inc	dustry: Cem	ent							Cus	tome	r Rep	reser	ntativ	e: Sar	jeev '	Verm	na	
Sample Drawn by: IEM Team							30	Sampling Date: 19-03-2023										
Protocol: (CPCB Guideli	ne (L	ATS/80	0/201	3-14) 8	& IS N	/letho	d 1125	55 Ser	ies	18		6			- 34		500
	eorological I				Temp				(%): 6		W.C.:	Clou	dy		W.D.	: Nor	th to	Sout
Sample Re	ceiving date	: 21-0	03-202	23	Te	esting	Star	ted: 2	1-03-2	023		Te	sting	Ended	1: 24-0	03-20	023	
- 1				14		Ge	neral F	Physical I	nformat	tion					-	-		
Stack Ider	ntification	F	ackin	g Yard	d Stack	- 4	Stac	k Heig	ht fro	m Gr	ound	Level	(m)		45	1000	1	
Emission I	Due to	8	-	Tile:			Por	Hole	Heigh	t fron	Gro	and Le	evel (m)	41			
Plat Form	150	F	Perma	nent		NY SY	Inne	er Dim	ensio	n of St	ack (n)		.20	0.55			
Stack Des	cription	5	Single		80%		Тур	e of Fu	iel Us	ed		TOP		77.	- (600)			
Shape of S	Stack	(Circula	r			Qua	ntity o	of Fue	133		1	000		(*) JOS (*)			
Construction Material Metal				100	Production Capacity						- 5° 63°							
Sampling Port -			mag	Pollution Control Device (if any)						130	Bag Filter							
	-		Dea I	TOTAL	100		Te	st Resi	ult		a Co			X			100	Lui d
SI. NO.	Pa	arame	ters	SIR	5	Test	t Meth	nods		Unit		wol	Re	sult	9	T	Lim	its
1	FI . C . T	Cos Tomporatura IS 11255 (Part 3) °V 315								15								

SI. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Flue Gas Temperature	IS 11255 (Part-3)	°K	315	-
2.	Flue Gas Velocity	IS 11255 (Part-3)	m/s	17.8	68 7
3.	Flue Gas Volumetric Flow Rate	IS 11255 (Part-3)	Nm³/hr.	14104.2	-
4.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm³	18.21	30.0

Dust	Kg/hr	0.26

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Amit Sinha & Team

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Dr. Quality Management of the Director of the Organization.

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Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

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Test Report

ULR No.:	T	С	1 1	. 5	1	5	2	3	0	0	0	0	0	0	0	2	5
Discipline: Cl	nemical	heric	heric Pollution Sub-Group: Stack Emission														
Report Issue			2023			J.					No.: R	N-230	30800	153	12		
Sample ID: 2	30321A	P1400	3		all A	Page 10	33	Sa	mple	Desci	riptio	n: Stac	k Emi	ssion			-00
Challan No./	P.O. No	.: 454	8023834/	237	2 21	T.K		C	nallan	No./	P.No.	Date:	17-09	-2022	2	- 5	M
Type of Indu	stry: Ce	ment	1 10		NOT.						-	entati		njeev	Verm	a	
Sample Drav	-	Account to the last of the las	eam		1		-3	Sa	mplir	ng Dat	te: 19	-03-20	23				
Protocol: CP				2013-1	4) & 15	Metho	od 11	255 S	eries		No.						
Field Meteor					mp. (°C			H. (%)		W.C	C.: Clo	udy	The same	W.D	.: Nor	th to S	outh
Sample Rece				1	Testin	ng Star	rted:	21-03	-2023		T	esting	Ende	d: 24-	03-20	23	
5.00	7				G	eneral	Physic	al Inform	nation		9	200		_	-		
Stack Identification Packing Yard Stack - 3 Stack Hei								eight f	rom G	iroun	d Leve	el (m)		45			

Stack Identification	Packing Yard Stack - 3	Stack Height from Ground Level (m)	45
Emission Due to	- ASSESSMENT	Port Hole Height from Ground Level (m)	41
Plat Form	Permanent	Inner Dimension of Stack (m)	0.55
Stack Description	Single	Type of Fuel Used	4 300
Shape of Stack	Circular	Quantity of Fuel	* 05
Construction Material	Metal	Production Capacity	
Sampling Port	Available	Pollution Control Device (if any)	Bag Filter

SI. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Flue Gas Temperature	IS 11255 (Part-3)	°K	317	-
2.	Flue Gas Velocity	IS 11255 (Part-3)	m/s	16.0	0) 7
3.	Flue Gas Volumetric Flow Rate	IS 11255 (Part-3)	Nm³/hr.	12575.3	100
4.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm³	16.47	30.0

Dust	Kg/hr	0.21
57. TV5.T		

	Elia di Roport
Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Amit Sinha & Team

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porized Signatory

(Shreya Son Director Dy. Quality Manage

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com



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Test Report

ULR No.:	Г	C	1	1	5	1	5	2	3	0	0	0	0	0	0	0	2	6
Discipline: Chemic	cal		200			Gro	up: A	tmosp	heric	Pollut	ion		ub-G	roup:	Stack	Emis	sion	-70.
Report Issue Date	: 26-	03-2	023				1		Te	est Re	port N	lo.: RI	N-230	30800	154	1		
Sample ID: 23032	1AP1	400	4		(2)	all.	100	308	Sa	mple	Descr	iptior	: Stac	k Emi	ssion			-63
Challan No./P.O.	No.:	4548	30238	34/2	237	1 1	PLE	-6	CI	nallan	No./	P.No.	Date:	17-09	-2022	2		0.0
Issued to: Dalmia Bokaro	Indu	stria							o, Jh	arkha	nd 82	7014	160					
Type of Industry:	_	-				100			_	uston			_	-	njeev	Verm	ıa	
Sample Drawn by		15117								mplir	g Dat	e: 19-	03-20	23				-
Protocol: CPCB Gu	iideli	ne (I	LATS/	80/	and the publishment of the last	-	ARTERIOR STATE	od 11	255 S	eries	1							
Field Meteorologi	cal I	nfor	matic	n	A. Te	emp. (°0	:): 27	R.I	H. (%)	: 61	W.C	.: Clo	Jdy	1	W.D.	: Nor	th to S	outh
Sample Receiving	date	: 21	-03-2	023	A			2,52,500,000	DESCRIPTION OF THE PARTY	-2023		T	esting	Ende	d: 24-	03-20	123	
			THE STATE OF		A THE SAN	100 NO.	Seneral	are assessment of the last	-	-		CANCE.	91825111811		1			
Stack Identification	on		Packi	ing \	ard S	tack - 2	Sta	ick He	ight f	rom G	round	Leve	I (m)		45			- 3
Emission Due to					100		Po	rt Hol	e Hei	tht fro	m Gr	ound	Level	(m)	41	-		
Plat Form	10		Perm	ane	nt		Inr	er Di	mensi	on of	Stack	(m)	7		0.5	55		
Stack Description			Single	e			Ty	oe of	Fuel L	sed		111		10	-		2	
Shape of Stack Circular					Quantity of Fuel -						130							
Construction Mat	terial		Meta	al		BELL	Pro	Production Capacity						10	· 20 60 60			
Sampling Port			Avail	able		-	Po	ollution Control Device (if any) Bag Filter										

SI. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Flue Gas Temperature	IS 11255 (Part-3)	°K	322	-
2.	Flue Gas Velocity	IS 11255 (Part-3)	m/s	18.0	a) ==
3.	Flue Gas Volumetric Flow Rate	IS 11255 (Part-3)	Nm³/hr.	13950.0	C. 14
	Double (DNA)	IC 113EE (Dort 1)	ma/Nm3	10.4	20.0

Dust	Kg/hr	0.27

	End of Report
Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Amit Sinha & Team

Specific	Contractual	Notes: -

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Quality Checke (Shreya Son

orized Signatory

S. C. Jain) Dy. Quality Manag

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com



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Test Report

ULR No.: T C	1	1	5	1	5	2	3	0	0	0	0	0	0	0	2	7
Discipline: Chemical	2000			Gro	up: A	tmosp	heric	Pollut	ion		Sub-G	roup	Stack	Emiss	sion	
Report Issue Date: 26-03	-2023				35	Test Report No.: RN-23030800155										
Sample ID: 230321AP140	005			rofil"	100	79.7	Sa	Sample Description: Stack Emission					10			
Challan No./P.O. No.: 45	48023834/237						Ch	allan	No./	P.No	. Date	: 17-0	9-2022	2		
Issued to: Dalmia Cemer Bokaro Indust	rial Are	rat) L ea, Po	td. (JI O-Bali	harkha idih, D	ind Co	ement Bokar	o, Jha	arkha	nd 82	7014		6	minau	Vorm		
Type of Industry: Cemen			-	334	-	-	_			-	entati		injeev	vern	d	
	anipio Dianii ayi izani				Sampling Date: 19-03-2023											
Protocol: CPCB Guideline	(LATS	80/2	013-1	4) & 15	Meth	od 11	255 Se	eries	5	100					- 4	3
Field Meteorological Info	ormatio	on	A. Tei	mp. (°(2): 27	R.H	1. (%):	61	W.C	:: Cl	oudy		W.D	.: Nor	th to S	outh
Sample Receiving date:	21-03-2	023	1	Testi	ng Sta	rted:	21-03-	-2023			Testing	Ende	ed: 24	-03-20	23	
13	5		AR	(General	Physica	I Inform	ation	nu.					Sec. Y		
Stack Identification	Pack	ing Ya	ard Sta	ack - 1	Sta	ck He	ight fi	rom G	roun	d Lev	el (m)		45			
Emission Due to		110	Lugi		Po	rt Hol	e Height from Ground Level (m)				41	4		180		
Plat Form	Perm	nanen	it		Inr	ner Dimension of Stack (m)			0.5	55		1				
Stack Description	Singl	e		Type of Fu			Fuel U	sed				19,	-		phil.	
Shape of Stack	Circu	lar	1011	Quantity of			of Fu	of Fuel			- 127 gran					
Construction Material	Meta	al	198		Pro	oducti	on Ca	pacity	,		SHA		- 100			7
Sampling Port	Avail	able			Po	llution	Cont	rol De	evice	(if an	y)		Ba	g Filte	er	

SI. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Flue Gas Temperature	IS 11255 (Part-3)	°K	318	-
2.	Flue Gas Velocity	IS 11255 (Part-3)	m/s	16.4	68 T
3.	Flue Gas Volumetric Flow Rate	IS 11255 (Part-3)	Nm³/hr.	12865.6	-
4.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm ³	18.1	30.0

Test Result

0.23
AND DESCRIPTION OF THE PERSON

	Elid of Report
Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Amit Sinha & Team

Specific Contractual Notes: -	Quality Checked by Authorized Signatory
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In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com	(Shreya Schain)
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Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com

STP INLET & OUTLET WATER ANALYSIS REPORT



Institute for Environmental Management Accredited by Jharkhand State Pollution Control Board, JSPCB

ISO 9001:2015 (Quality Management System)
ISO 45001:2018 (Occupational Health & Safety Management System) Certified by



Test Report

Discipline: Chemical	Group: Pollution	& Environment	Sub-Group: Waste Water	
Report Issue Date: 25-03-20	Issue Date: 25-03-2023 Test Rej		t No.: RN-230308001WW02	
Sample ID: 230321PE02002	230321PE02002 Sampl		le Description: Waste Water (STP)	
Challan No./P.O. No.: 45480	023834/237	Challan No	./ P.No. Date: 17-09-2022	
	Bh <mark>arat) Ltd. (Jharkhand C</mark> I Area, PO-Balidih, Dist: -			
Type of Industry: Cement	F67	Customer Rei	presentative: Sanjeev Verma	
			presentative. Sanjeev verma	
Sample Drawn by: IEM Tea	ım	Sampling Date		

Sampling Location: NEAR STP PLANT (INLET)

Field Meteorological Information A. Temp. (°C): 27 R.H. (%): 61 W.C.: Cloudy W.D.: North to South

Sample Receiving date: 21-03-2023 Testing Started: 21-03-2023 Testing Ended: 24-03-2023

--Test Result-SI. No. **Tested Parameters** Method No. Limits Results IS 3025 (Part-11) 7.23 pH value at 25°C Total Suspended Solids (TSS) IS 3025 (Part-17) 735.0 2. mg/l Biochemical Oxygen Demand (BOD) IS 3025 (Part-44) 12.4 3. mg/l IS 3025 (Part-58) 68.0 Chemical Oxygen Demand (COD) mg/l 4 5. Oil & Grease mg/l IS 3025 (Part-39) 7.6

--- End of Report--Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C). Env. Condition of Lab. Abbreviation MDL: Minimum Detection Limit, BDL: Below Detection Limit Limit is Specified

Tested By: Punya Harsit Dadel

ISO 9001:2015

Sample Drawn By: Rajiv Kumar Singh & Team

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Dy. Quality Manage

ued by the Director of the Organization.

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Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Iharkhand, India

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Test Report

Discipline: Chemical	Group: Pollution & Environn	nent Sub-Group: Waste Wate	
Report Issue Date: 25-03-2023		Test Report No.: RN-230308001WW01	
Sample ID: 230321PE02001		Sample Description: Waste Water (STP)	
Challan No./P.O. No.: 4548023834/237		Challan No./ P.No. Date: 17-09-2022	

Dalmia Cement (Bharat) Ltd. (Jharkhand Cement Works) Plot IV/A-7(P), Bokaro Industrial Area, PO-Balidih, Dist: - Bokaro, Jharkhand 827014

Type of Industry: Cement Customer Representative: Sanjeev Verma Sample Drawn by: IEM Team Sampling Date: 19-03-2023

Protocol: CPCB Guideline& IS Method 3025 Part-01 Sampling Location: NEAR STP PLANT (OUTLET)

Field Meteorological Information A. Temp. (°C): 27 R.H. (%): 61 W.C.: Cloudy W.D.: North to South

Testing Started: 21-03-2023 Testing Ended: 24-03-2023 Sample Receiving date: 21-03-2023

	Test Result					
SI. No.	Tested Parameters	Unit	Method No.	Limits	Results	
1.	pH value at 25°C		IS 3025 (Part-11)	6.5 to 9.0	7.58	
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	14.0	
3.	Biochemical Oxygen Demand (BOD)	mg/l	IS 3025 (Part-44)	30	8.1	
4.	Chemical Oxygen Demand (COD)	mg/l	IS 3025 (Part-58)	250	42.0	
5.	Oil & Grease	mg/l	IS 3025 (Part-39)	10	4.8	

-Fnd of Report-

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Punya Harsit Dadel

Sample Drawn By: Rajiv Kumar Singh & Team

ISO 9001:2015

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issued by the Director of the Organization.

Quality Checked by

Sirector

ized Signatory

(Shreya Sonal Dy. Quality Manage

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Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India Ph - 8407804254, 8407804251, Email - icm2012@rediffmail.com

ISO 45001:2018

Fugitive Dust Emission report



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Test Report

Discipline: Chemical	Grou	up: Atmospheric Po	llution	Sub-Group:	Work Environ	nment & Indoor Air	
Report Issue Date: 26-03-2023			Test	Test Report No.: RN-230308001FE01			
Sample ID: 230321AP12001			Sam	ple Description	n: Fugitive E	mission	
Challan No./P.O. No.: 454	48023834/	237	Cha	lan No./ P.No	Date: 17-09	-2022	
	al Area, P	Ltd. (Jharkhand C O-Balidih, Dist: - E	Bokaro, JI	arkhand 827		nieev Verma	
Sample Drawn by: IEM	OTHER DESIGNATION AND ADDRESS OF THE PERSON		-	Sampling Date: 18-03-2023			
Protocol: CPCB Guideline	(NAAQMS	/36/2012-13) & IS N			16		
Sampling Location: Trans	porting Ar	ea					
Field Meteorological Info	rmation	A. Temp. (°C): 26	R.H. (%):	59 W.C.	: Cloudy	W.D.: West to East	
Sample Receiving date: 2		Testing Sta			Testing En		

Test Results-

SI. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	µg/m³	2000	1562.90

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As Per G.S.R. 414 (E), Dated 30th May 2008.
Remark	Sample comply with the prescribed spefication.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -

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orized Signatory

(Shreya Sonal) Dy. Quality Manage

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Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India Ph - 8407804254, 8407804251, Email - iem2012@rediffmail.com



Certified by





Test Report

Discipline: Chemical	Grou	up: Atmospheric Po	llution	Sub-Group:	Sub-Group: Work Environment & Indoor Air		
Report Issue Date: 26-03-2023			Test	Test Report No.: RN-230308001FE2			
Sample ID: 230321AP12002			Samp	Sample Description: Fugitive Emission			
Challan No./P.O. No.: 454	8023834/	237	Chall	an No./ P.No	Date: 17-09	-2022	
		Ltd. (Jharkhand C					
Bokaro Industia	l Area, P	O-Balidih, Dist: - E	Bokaro, Jh	arkhand 827	014	nieev Verma	
Bokaro Industia Type of Industry: Cement	al Area, P		Bokaro, Jha Cust	arkhand 827 omer Repre	'014 sentative: Sar	njeev Verma	
Bokaro Industia Type of Industry: Cement Sample Drawn by: IEM To	al Area, P	O-Balidih, Dist: - E	Bokaro, Jha Custo Samp	arkhand 827 omer Repre bling Date: 1	'014 sentative: Sar	njeev Verma	
Bokaro Industra Type of Industry: Cement Sample Drawn by: IEM To Protocol: CPCB Guideline(eam NAAQMS	O-Balidih, Dist: - E	Bokaro, Jha Custo Samp	arkhand 827 omer Repre bling Date: 1	'014 sentative: Sar	njeev Verma	
	eam NAAQMS	O-Balidih, Dist: - E	Bokaro, Jha Custo Samp	omer Repre- pling Date: 18 32 Series	'014 sentative: Sar	njeev Verma W.D.: West to East	

				Warner Committee of the	and the second s
SI. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	µg/m³	2000	1176.88

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As Per G.S.R. 414 (E), Dated 30th May 2008.
Remark	Sample comply with the prescribed spefication.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

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ISO 9001:2015

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India Ph - 8407804254, 8407804251, Email - iem2012@rediffmail.com





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ISO 45001:2018 (Occupational Health & Safety Management System)

Test Report

Discipline: Chemical	Grou	oup: Atmospheric Pollution Sub-Group:			: Work Enviro	nment & Indoor Air	
Report Issue Date: 26-03-2023			Test	Test Report No.: RN-230308001FE3			
Sample ID: 230321AP12003	3	110		The second second second	ion: Fugitive E		
Challan No./P.O. No.: 4548	023834/2	237			o. Date: 17-09		
Bokaro Industial	Area. Po	Ltd. (Jharkhand	Bokaro III	orks) Plot IV	A-7(P),		
Bokaro Industial	Area, Po	D-Balidih, Dist: -	Bokaro, Ji	narkhand 82	7014	and the same of th	
Bokaro Industial Type of Industry: Cement	Area, Po	D-Balidih, Dist: -	Bokaro, Ji Cus	narkhand 82 tomer Repre	7014 esentative: Sa	njeev Verma	
Bokaro Industial Type of Industry: Cement Sample Drawn by: IEM Tea	Area, Po	O-Balidih, Dist: -	Bokaro, Ji Cus Sam	narkhand 82 tomer Repre pling Date: 1	7014 esentative: Sa	njeev Verma	
Bokaro Industial Type of Industry: Cement Sample Drawn by: IEM Tea	Area, Po	O-Balidih, Dist: -	Bokaro, Ji Cus Sam	narkhand 82 tomer Repre pling Date: 1	7014 esentative: Sa	njeev Verma	
Bokaro Industial Type of Industry: Cement Sample Drawn by: IEM Tea Protocol: CPCB Guideline(N	Area, Po am AAQMS/	O-Balidih, Dist: -	Bokaro, Ji Cus Sam	narkhand 82 tomer Repre pling Date: 1	7014 esentative: Sa	njeev Verma	
Bokaro Industial Type of Industry: Cement Sample Drawn by: IEM Tea Protocol: CPCB Guideline(N. Sampling Location: Near Mi Field Meteorological Inform	Area, Po am AAQMS/ ill Area	O-Balidih, Dist: -	Bokaro, Ji Cus Sam Method 51	tomer Repre pling Date: 1 82 Series	7014 esentative: Sa	njeev Verma W.D.: West to East	

		Test Nesults			
SI. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	ua/m³	2000	1818.98

-- End of Report--

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As Per G.S.R. 414 (E), Dated 30th May 2008.
Remark	Sample comply with the prescribed spefication.

Tested By: Akanksha Sourabh

ISO 9001:2015

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -Authorized Signatory Specific Contractual notes:

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Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India Ph - 8407804254, 8407804251, Email - iem2012@rediffmail.com





Certified by

ISO 9001:2015 (Quality Management System)
ISO 45001:2018 (Occupational Health & Safety Management System)



Test Report

Discipline: Chemical	Grou	ip: Atmospheric Po	llution	Sub-Group: Work Environment & Indoor Air			
Report Issue Date: 26-03-2023			Test	Test Report No.: RN-230308001FE4			
Sample ID: 230321AP12004			Sami	ple Descri	ption: Fugitive E	mission	
Challan No./P.O. No.: 454	8023834/	237	Chall	lan No./ P	.No. Date: 17-09	9-2022	
Dannia Comen	(Dilaiat)	Ltd. (Jharkhand C	Cilionic WC	ikaj i iot	207044		
Bokaro Industia	al Area, P	O-Balidih, Dist: - E	Bokaro, Jh	arkhand 8	827014	pology Vorma	
Bokaro Industia Type of Industry: Cement	al Area, P	O-Balidih, Dist: - E	Bokaro, Jh Cust	arkhand tomer Rep	327014 presentative: Sa	njeev Verma	
Bokaro Industia Type of Industry: Cement Sample Drawn by: IEM T	al Area, P	O-Balidih, Dist: - E	Bokaro, Jh Cust Sam	arkhand l tomer Rep pling Date	827014	njeev Verma	
Bokaro Industia	eam	O-Balidih, Dist: - E	Bokaro, Jh Cust Sam	arkhand l tomer Rep pling Date	327014 presentative: Sa	anjeev Verma	
Bokaro Industia Type of Industry: Cement Sample Drawn by: IEM T Protocol: CPCB Guideline(eam NAAQMS	O-Balidih, Dist: - E	Cust Sam Method 51	tomer Rep pling Date 82 Series	327014 presentative: Sa	injeev Verma W.D.: West to East	

		lest hesuits			
SI. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	ug/m³	2000	1480.03

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As Per G.S.R. 414 (E), Dated 30th May 2008.
Remark	Sample comply with the prescribed spefication.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Teal

Specific Contractual Notes: -	Quality Checked by comer Adhorized Signatory
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Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

ISO 45001:2018

Laboratory Site - H.No. – A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

Fh - 8407804254, 8407804251, Email - iem2012@rediffmail.com

Work place monitoring report



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Test Report

Discipline: Chemical	Grou	p: Atmospheric Po	llution	Sub-Group:	Work Enviror	nment & Indoor Air		
Report Issue Date: 26-03	-2023		Test Report No.: RN-230308001FE5					
Sample ID: 230321AP12005		Sample Description: Work Zone						
Challan No./P.O. No.: 454	48023834/	237	Chal	lan No./ P.No	Date: 17-09	-2022		
Bokaro Steel C	ity, Bokar	ro Industrial Area o-827014 Jharkha	nd India	omer Repre	sentative: Sa	njeev Verma		
Sample Drawn by: IEM				pling Date: 1				
Protocol: CPCB Guideline		/36/2012-13) & IS N						
FIGURE CE CO GUIGCIIIC								
Sampling Location: Truck	Loading A	rea						
		A. Temp. (°C): 26	R.H. (%):	59 W.C	.: Cloudy	W.D.: West to East ded: 24-03-2023		

---Test Results----

			WAS IN THE RESIDENCE OF THE PROPERTY OF THE PR							
SI. No.	Parameters	Test Method No.	Unit	Limit	Results					
1	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	mg/m³	10	7.02					

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL. Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As Per Factories Act, 1948.(8 hrs. Basis)
Remark	Sample Comply With the Prescribred Spefication.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Authorized Signatory Specific Contractual Notes: pecific Contractual Notes:

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150 45001:2018

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ISO 9001:2015



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1SO 9001:2015 (Quality Management System)

1SO 45001:2018 (Occupational Health & Safety Management System)

Carl Service

Test Report

Discipline: Chemical	Grou	ip: Atmospheric P	ollution					
Report Issue Date: 26-03-2023			Test Report No.: RN-230308001FE6					
Sample ID: 230321AP12006 Challan No./P.O. No.: 4548023834/237			Sam	Sample Description: Work Zone				
			Cha	llan No./ P	No. Date: 17-09	-2022		
Plot No IV/A-7/I	PIA Boka	ro Industrial Area	Balidih	nt Works)				
Plot No IV/A-7(I Bokaro Steel C	P)4, Boka ity, Bokar	ro Industrial Area o-827014 Jharkh	a Balidih and India			njeev Verma		
Plot No IV/A-7(I	P)4, Boka ity, Bokar	ro Industrial Area	a Balidih and India Cus	stomer Re	presentative: Sar e: 18-03-2023	njeev Verma		
Plot No IV/A-7(I Bokaro Steel C Type of Industry: Cement Sample Drawn by: IEM T	P)4, Bokar ity, Bokar eam	ro Industrial Area o-827014 Jharkh	a Balidih and India Cus San	stomer Re	presentative: Sar e: 18-03-2023	njeev Verma		
Plot No IV/A-7(I Bokaro Steel C Type of Industry: Cement Sample Drawn by: IEM T Protocol: CPCB Guideline(P)4, Bokar ity, Bokar eam NAAQMS/	ro Industrial Area co-827014 Jharkh /36/2012-13) & IS	a Balidih and India Cus San	stomer Re	presentative: Sar e: 18-03-2023	njeev Verma		
Plot No IV/A-7(I Bokaro Steel C Type of Industry: Cement	P)4, Bokar ity, Bokar eam NAAQMS/ n Loading	ro Industrial Area co-827014 Jharkh /36/2012-13) & IS	Balidih and India Cus San Method 5	stomer Re ppling Date 182 Series	presentative: Sar e: 18-03-2023	njeev Verma W.D.: West to East		

----Test Results---

Test Results							
SI. No.	Parameters	Test Method No.	Unit	Limit	Results		
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	mg/m ³	10	5.40		

End of Report					
Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).				
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit				
Limit is Specified	As Per Factories Act, 1948.(8 hrs. Basis)				
Remark	Sample Comply With the Prescribred Spefication.				

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

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Dy. Quality Manager.

Director

ISO 9001:2015

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Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India
Ph - 8407804254, 8407804251, Email - iem2012@rediffmail.com





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Test Report

Discipline: Chemical	Grou	ip: Atm	nospheric Po	llution	Sub-G	roup: \	Work Environm	nent & Indoor Air
Report Issue Date: 26-03-	2023			Test Report No.: RN-230308001FE7				
Sample ID: 230321AP12007			Sam	Sample Description: Work Zone				
Challan No./P.O. No.: 454	8023834/	237		Chal	llan No.	/ P.No.	Date: 17-09-2	022
			d. (Jharkhar			-,		
Plot No IV/A-7(I Bokaro Steel C	P)4, Boka ity, Bokar	ro Indu	ustrial Area	Balidih nd India			entative: Sanje	eev Verma
Plot No IV/A-7(Bokaro Steel C Type of Industry: Cement	P)4, Boka ity, Bokar	ro Indu	ustrial Area	Balidih nd India Cus	tomer F	Repres	entative: Sanje -03-2023	eev Verma
Plot No IV/A-7(I Bokaro Steel C Type of Industry: Cement Sample Drawn by: IEM T	P)4, Boka ity, Bokar eam	ro Indu o-8270	ustrial Area 014 Jharkha	Balidih nd India Cus Sam	tomer F	Repres ate: 18	-	eev Verma
Plot No IV/A-7(I Bokaro Steel C Type of Industry: Cement Sample Drawn by: IEM T Protocol: CPCB Guideline	P)4, Boka ity, Bokar eam NAAQMS	ro Indu o-8270	ustrial Area 014 Jharkha	Balidih nd India Cus Sam	tomer F	Repres ate: 18	-	
Plot No IV/A-7(I Bokaro Steel C	P)4, Boka ity, Bokar eam NAAQMS, rea	ro Indu ro-8270 /36/20	ustrial Area 014 Jharkha	Balidih nd India Cus Sam Method 51	tomer F pling D 82 Serie	Repres ate: 18 es	-	eev Verma W.D.: West to East

----Test Results----

SI. No.	Parameters	Test Method No.	Unit	Limit	Results
1. 8	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	mg/m ³	10	7.10

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all
Env. Condition of Lab.	testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As Per Factories Act, 1948.(8 hrs. Basis)
Remark	Sample Comply With the Prescribred Spefication.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

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Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Iharkhand - 834001

ISO 45001:2018

Laboratory Site - H.No. A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi -834002, Iharkhand, India

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Test Report

Discipline: Chemical	Grou	ip: Atmospheric Po	llution	Sub-Group	: Work Environ	ment & Indoor Air		
Report Issue Date: 26-03-	2023		Test Report No.: RN-230308001FE8					
			Samp	Sample Description: Work Zone				
			Chall	an No./ P.N	o. Date: 17-09-2	2022		
	DIA Dale	Idecadaint Aman	Dalidik					
Bokaro Steel C	ity, Bokar	ro Industrial Area o-827014 Jharkha	nd India	omer Repre	sentative: Sani	ieev Verma		
Bokaro Steel C Type of Industry: Cement	ity, Bokar		nd India Cust	omer Repre	sentative: Sanj 8-03-2023	jeev Verma		
Bokaro Steel C Type of Industry: Cement Sample Drawn by: IEM T	ity, Bokar eam	o-827014 Jharkha	nd India Cust Sam	pling Date: 1		jeev Verma		
Bokaro Steel C Type of Industry: Cement Sample Drawn by: IEM T Protocol: CPCB Guideline	eam (NAAQMS/	o-827014 Jharkha	nd India Cust Sam	pling Date: 1		jeev Verma		
Bokaro Steel C	eam (NAAQMS/	o-827014 Jharkha	nd India Cust Samp Method 51	pling Date: 1 82 Series		jeev Verma W.D.: West to East		

----Test Results----

					i jere i je do sa kontrologijano korini								
SI. No.	Parameters	Test Method No.	Unit	Limit	Results								
1	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	mg/m³	10	7.71								

	End of Report
Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL Minimum Detection Limit BDL Below Detection Limit
Limit is Specified	As Per Factories Act, 1948.(8 hrs. Basis)
Remark	Sample Comply With the Prescribred Spefication.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: Specific Contractual Motes:

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Quality Checked by Authorized Signatory

(Shreya Sona) S. C. Jain) Dy. Quality Manager Director



Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001 Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony,

Ranchi-834002, Jharkhand, India Ph - 8407804254, 8407804251, Email - jem2012 a rediffmail.com

Noise Level Report



Institute for Environmental Management

Jharkhand State Pollution Control Board, JSPCB National Accreditation Board for Testing Laboratory (NABL) vide TC-11515 Accredited by

ISO 9001:2015 (QMS) & ISO 45001:2018 Certified By



Test Report

ULR No.:	T	C 1	1	5	1	5 2	3	0	0	0	0	0	0	0	1	6
Discipline: Ch	nemical	Gro	up: At	mosp	heric P	llution	Sub-	Grou	up: An	nbient	Noise	Leve	s (Exc	luding	y Vibra	ation
Report Issue	Date: 2	6-03-2023			- B		Test	Rep	ort No	.: RN	-23030	08001	N1			
Sample ID:23	30321AF	13001		100	7 80	128	Sam	ole D	Descri	ption:	Ambi	ent N	oise			
Challan No./	P.O. No	: 45480238	34/237		LAG	No.	Chal	an N	No./P	.No. D	ate: 1	7-09-	2022			
Type of Indu		dustrial Are ment	.,				-	_			CT CT TO THE PARTY	e: San	jeev V	erma		
Sample Drav				202								3 to 18	100000000000000000000000000000000000000			2000
Protocol: CP			thod	9989	:1981		34		,				-		- 6	
						100	San	are to	THE REAL PROPERTY.			-3.7			Jul 10	
	cation: N	Vear Main G	ate												1000	
Sampling Loc Field Meteor		A STATE OF THE PARTY OF THE PAR	-	. Tem	ıp. (°C):	25 R.	H. (%): 5	5	w.c.	: Clou	dy		W.D.	: NW -	- SE	

-Test Result-

SI. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	65.7	58.3	D-75 N-70

End of Reports---

- Day time shall mean from 6.00 a.m. to 10.00 p.m.
 Night time shall mean from 10.00 p.m. to 6.00 a.m.

- 2. Night time shall mean from 1000 p.m. to 0.00 a.m.
 3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
 4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
 5.A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

6.Leq: It is an energy mean of the noise level, over a specified period

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Amit Sinha& Team

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is issued by the Director of the Organization.

Quality Checked by conment Authorized Signatory

(Shreya So

Dy. Quality Mana

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

ISO 9001;2015 ISO 45001;2018

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National Accreditation Board for Testing Laboratory (NABL) vide TC-11515 Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



Test Report

ULR No.:	T	C	1	1	5	1	5 2	3	0	0	0	0	0	0	0	1	7
Discipline: Che	emical		Grou	p: Atı	nospl	neric Pol	ution	Sub	Grou	p: Am	bient N	Noise	Levels	(Exc	ludin	g Vibr	ation
Report Issue D	Date: 26	-03-20	023			- 1		Test	Repo	rt No	.: RN-2	30308	3001N	12	1		-3
Sample ID: 23	0321AP	13002		200	- 19	2 8 10 3		Sam	ple D	escrip	tion: A	mbie	nt No	ise			200
Challan No./P	O. No.:	45480	23834	1/237	6	11/6-1	440	Chal	lan N	o./ P.	No. Da	te: 17	-09-2	022			
Bok	aro Indu	ustrial	Sharat Area) Ltd. PO-	. (Jha Balidi	rkhand ih, Dist:	Cemei - Boka	ro, Jha	ırkhaı	nd 82	7014					10	
Dain Bok Type of Indust	aro Indu try: Cem	ustrial ent	Area) Ltd. PO-l	(Jha Balidi	rkhand ih, Dist:	Cemei - Boka	ro, Jha	rkhai tomei	nd 82 r Rep	7014 resent	ative:	-	-	-	100	
Dain Bok Type of Indust Sample Draw	aro Indu try: Cem n by: IE	ent M Tea	Area	, PO-I	Balidi	ih, Dist:	Cemei - Boka	ro, Jha	rkhai tomei	nd 82 r Rep	7014	ative:	-	-	-	100	
Dain Bok Type of Indust Sample Draw Protocol: CPC	aro Indu try: Cem n by: IE B Guidel	ent M Tea ine &	Area	PO-l	Balidi	ih, Dist:	Cemei - Boka	ro, Jha	rkhai tomei	nd 82 r Rep	7014 resent	ative:	-	-	-		
Dain Bok Type of Indust	aro Indu try: Cem n by: IE B Guidel ntion: Ne	ent M Tea ine & ear Fab	Area m IS Met	hod S	Balidi 9989::	ih, Dist:	- Boka	ro, Jha	tomer pling	nd 82 r Rep Date:	7014 resent	ative: -2023	to 18	-03-2	-	No	- OT

SI. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	69.3	60.4	D-75 N-70

End of Reports

Note: -

- 1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
- 2. Night time shall mean from 10.00 p.m. to 6.00 a.m.

- 3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
 4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
 5.A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- 6. Leq: It is an energy mean of the noise level, over a specified period

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh Sample Drawn By: Amit Sinha& Team

Specific Contractual Notes: -	Quality Checked by	Authorized Signatory
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Total liability of institute for Environmental Management will be limited to invoiced amount only. In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com	(Shreya Sonal)	(Dr. S. C. Jain)
On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.	Dy. Quality Manager	Director

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

ISO 9001:2015 ISO 45001:2018

Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com



Accredited by Jharkhand State Pollution Control Board, JSPCB National Accreditation Board for Testing Laboratory (NABL) vide TC-11515

Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



Test Report

ULR No.:	Т	С	1	1	5	1	5	2	3	0	0	0	0	0	0	0	1	8
Discipline: Ch	emical		Grou	p: Atı	mospl	heric Po	llutio	n	Sub-	Group	: Amb	oient N	loise	Levels	(Exclu	uding '	Vibrat	ion)
Report Issue	Date: 26	-03-20)23			20			Test	Repo	rt No.	RN-2	30308	3001N	3			
Sample ID: 23				4		P 3 10	02	207	Samp	ole De	escript	ion: A	mbie	nt No	ise			
Challan No./F	.O. No.:	45480	23834	/237		14/4	WAT TO		Chall	an No	o./ P.N	lo. Da	te: 17	-09-20	022		180	
Issued to: Dal Bol	mia Cem	nent (B ustrial	Sharat Area) Ltd PO-	. (Jha Balidi	rkhand ih, Dist:	Cem	ent karc	Work o, Jha	s) Plo rkhar	ot IV/A	-7(P), 014						
Dal Bol	caro Indi	ustrial	Sharat Area) Ltd PO-	. (Jha Balidi	rkhand ih, Dist:	Cem - Bo	ent	o, Jha	rkhar	nd 827	014		Casia		3000		
Dal Bol Type of Indus	try:Cem	ustrial ent	Area	PO-	. (Jha Balidi	rkhand ih, Dist:	Cem - Bo	ent	o, Jha Cust	rkhar omer	nd 827 Repr	'014 esent	ative:	Sanje				-
Dal Bol Type of Indus Sample Draw	try:Cem	ustrial ent M Tea	Area	PO-	Balidi	ih, Dist:	Cem - Bo	ent	o, Jha Cust	rkhar omer	nd 827 Repr	'014 esent	ative:	Sanje to 18-				0)1
Dal Bol Type of Indus	try:Cem	ustrial ent M Tea	Area	PO-	Balidi	ih, Dist:	Cem - Bo	ent	o, Jha Cust	rkhar omer	nd 827 Repr	'014 esent	ative:					0)
Dal Bol Type of Indus Sample Draw	try:Cem n by: IE B Guide	ent M Tea line & I	Area m IS Met	PO-	Balidi	ih, Dist:	Cem - Bo	nent okaro	o, Jha Cust	rkhar omer	nd 827 Repr	'014 esent	ative:					0)
Dal Bol Type of Indus Sample Draw Protocol: CPC	try:Cem n by: IE B Guide ation: No	ent M Tea line & I ear Col	Metalony	PO-	9989:	ih, Dist:	- Bo	kard	o, Jha Cust	rkhar omer pling	Repr Date:	'014 esent	ative: -2023	to 18-	-03-20		SE	0))

----Test Result----

SI. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	47.1	43.5	D-75 N-70
2011	100	End of Repo	rts	CONTRACTOR OF THE PARTY OF THE	CP 4	1

Note: -

- 1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
- 2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
- 3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

 4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- 5.A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

6. Leq: It is an energy mean of the noise level, over a specified period.

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Amit Sinha& Team

Specific Contractual Notes: -

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In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Quality Checked townent

(Shreya Sonal

S. C. Jain)

Authorized Signatory

Dy. Quality Managera Director

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi~834002, Jharkhand, India

Ph - 8407804253, 8407804251, Email - icm2012@rediffmail.com

ISO 9001:2015 ISO 45001:2018



National Accreditation Board for Testing Laboratory (NABL) vide TC-11515

ISO 9001:2015 (QMS) & ISO 45001:2018 Certified By



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	0	1	9
Discipline: Che	mical		Grou	p: Atı	mosp	heric Po	llutio	n	Sub-0	Group	: Am	bient I	Noise	Levels	(Excl	uding '	Vibrat	ion
Report Issue D		-03-20				18		- 3				.: RN-2						
Sample ID: 230		All the Control of th			0	97/10	11	10	Samp	ole De	escrip	tion: A	mbie	nt No	ise			N.
Challan No./P.				1/237		18/60	Tours		Chall	an N	o./ P.I	No. Da	te: 17	-09-2	022		1	
Issued to: Dalm Bok	ia Cem aro Indi	nent (E ustrial	Sharat Area) Ltd PO-	. (Jha Balid	rkhand ih, Dist:	Cem	nent	Work o, Jha	s) Plo	ot IV//	A-7(P) 7014	200					
Dalm Boka	aro Indi	ustrial	Sharat Area,) Ltd PO-	. (Jha Balid	rkhand ih, Dist	Cem - Bo	nent	o, Jha	rkhai	nd 82	7014	5.	Camie	au Va		N.	
Dain Boke Type of Indust	ro Indi ry: Cem	ustrial nent	Area) Ltd PO-	. (Jha Balid	irkhand ih, Dist	Cem - Bo	nent	o, Jha Cust	rkhai omei	nd 82 Rep	7014 resent	ative:					-33
Dain Boke Type of Indust Sample Draw	ro Indi ry: Cem n by: IE	ustrial nent M Tea	Area,	PO-	Balid	ih, Dist	Cem - Bo	nent	o, Jha Cust	rkhai omei	nd 82 Rep	7014	ative:					8
Dain Boke Type of Indust	ro Indi ry: Cem n by: IE	ustrial nent M Tea	Area,	PO-	Balid	ih, Dist	Cem - Bo	nent	o, Jha Cust	rkhai omei	nd 82 Rep	7014 resent	ative:				-265	6
Dain Boke Type of Indust Sample Draw	ry: Cem by: IE Guide	nent M Tea line &	am IS Met	PO-	Balid 9989:	ih, Dist	Cem - Bo	nent	o, Jha Cust	rkhai omei	nd 82 Rep	7014 resent	ative:	to 18	-03-20	023		85
Daim Boka Type of Indust Sample Drawi Protocol: CPCE	ry: Cem by: IE Guidel tion: No	nent M Tea line & ear Wa	am IS Met	hod sipple	Balid 9989:	ih, Dist	- Bo	okar	o, Jha Cust	omei oling	Reproduction Repro	7014 resent	ative: -2023	to 18	-03-20 W.D.:)23 NW - :	SE	8

SI. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	61.9	55.6	D-75 N-70
- 55	- AU	End of Repo	rts	ACC. ST	0.0	di di

Note: -

- 1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
- 2. Night time shall mean from 10.00 p.m. to 6.00 a.m.

- 3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

 4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

 5. A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

6. Leq: It is an energy mean of the noise level, over a specified period.

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Amit Sinha& Team

Specific Contractual Notes: -

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5. Total liability of Institute for Environmental Management will be limited to invoiced amount only.

6. In case of feedback complaints, please send an email at qm.lemeco@gmail.com

On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Quality Checked by

(Shreya Sonal)

Dy. Quality Manage

Authorized Signatory

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

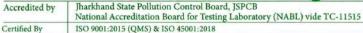
ISO 9001:2015 ISO 45001:2018

Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com

GROUND WATER QUALITY REPORT NEAR VILLAGE AREA



Institute for Environmental Management Accredited by Jharkhand State Pollution Control Board, JSPCB





Test Report

ULR No.:	T	С	1	1	5	1	5	2	3	0	0	0	0	0	0	0	0	5
Discipline: Cl	hemical					Grou	40	Sub-Group: Ground Water					r					
Report Issue Date: 27-03-2023									Te	st Re	port N	No.: F	N-230	30800	1GW	1		
Sample ID: 2	7 1	0.1	PA.	Sa	mple	Descr	riptic	n: Gro	und V	Vater	(Dug v	vell)						
Challan No./	P.O. No	.: 4548	80238	34/23	7	LW6	- 10		Ch	allan	No./	P.No	. Date	: 17-09	9-202	2		
						narkhan dih, Dis												
Во	karo Ind	dustri				dih, Dis			o, Jha	arkha	nd 82	7014	la-	ve: Sa	nieev	Verm	а	
	karo Ind stry: Cer	dustri ment	al Are						o, Jha	arkha ustom	nd 82 ner Re	7014 pres		2.	njeev	Verm	а	0
Bo Type of Indu Sample Drav	karo Ind stry: Cer wn by: I	dustri ment EM Te	al Are	a, PC)-Bali	dih, Dis	it: - E		o, Jha	arkha ustom	nd 82 ner Re	7014 pres	l entati	2.	njeev	Verm	a	0
Bo Type of Indu Sample Drav	karo Ind stry: Cer wn by: I CB Guide	ment EM Te eline&	al Are	a, PC)-Bali	dih, Dis	it: - E		o, Jha	arkha ustom	nd 82 ner Re	7014 pres	l entati	2.	njeev	Verm	a	0
Type of Indu Sample Drav Protocol: CPC	karo Ind stry: Cer wn by: I CB Guide cation: E	ment EM Te eline& Shutku	eam IS Me	a, PC	3025	dih, Dis	t: - E	Bokar	o, Jha	arkha ustom mplir	nd 82 ner Re	27014 epres e: 19	entati 0-03-20)23		C	a to Sou	th

-Test Result-

SI.	Total Doministra	11-14	Method No.	Li	mit	Results
No.	Tested Parameter	Unit	Method No.	Acceptable	Permissible	Results
1.	pH value at 25°C		IS 3025 (Part-11)	6.5 - 8.5	No Relaxation	7.09
2.	Turbidity	NTU	IS 3025 (Part-10)	1	5	4.1
3.	Colour	Hazen	IS 3025 (Part-04)	5	15	5.0
4.	Odour		IS 3025 (Part-05)	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part-16)	500	2000	693.0
6.	Calcium (as Ca+2)	mg/l	IS 3025 (Part-40)	75	200	110.62
7.	Total Alkalinity (as CaCO3)	mg/l	IS 3025 (Part-23)	200	600	225.0
8.	Total Hardness (as CaCO3)	mg/l	IS 3025 (Part-21)	200	600	452.0
9.	Chloride (as Cl ⁻)	mg/l	IS 3025 (Part-32)	250	1000	89.33
10.	Free Residual Chlorine	mg/l	IS 3025 (Part-26)	0.2	1.0	BDL(MDL-2.0)
11.	Sulphate (as SO ₄ -2)	mg/l	IS 3025 (Part-24)	200	400	95.67
12.	Magnesium (as Mg+2)	mg/l	IS 3025 (Part-46)	30	100	42.77

----END Report----Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing Env. Condition of Lab. area as per IS 196:1966(C). Abbreviation MDL: Minimum Detection Limit, BDL: Below Detection Limit Limit is Specified IS 10500 :2021 Remark Sample Comply with prescribed specification

Tested By: Anshu Gupta

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report

is issued by the Director of the Organization.

Quality Checked

ized Signatory

Dy. Quality Manager Director

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

ISO 9001:2015 ISO 45001:2018

Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com



ISO 9001:2015 (Quality Management System)
ISO 45001:2018 (Occupational Health & Safety Management System) Certified by



Test Report

Discipline: Chemical	Group: V	Vater	Sub-Gro	oup: Ground Water
Report Issue Date: 27-03-2023	100	Test	Report No.: RN-230	308001GW1
Sample ID: 230321WA01001	1111	Samı	ole Description: Gro	ound Water (Dug well)
Challan No./P.O. No.: 4548023834/	/237	Chall	an No./ P.No. Date	: 17-09-2022
Dalmia Cement (Bharat)				
Bokaro Industrial Area,		Bokaro, Jhark	hand 827014	
Bokaro Industrial Area, Type of Industry: Cement		Bokaro, Jhark Cust	hand 827014 omer Representati	The state of the s
Bokaro Industrial Area, Type of Industry: Cement Sample Drawn by: IEM Team	PO-Balidih, Dist: -	Bokaro, Jhark Cust	hand 827014	The state of the s
Bokaro Industrial Area, Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline& IS Meth	PO-Balidih, Dist: -	Bokaro, Jhark Cust	hand 827014 omer Representati	The state of the s
Bokaro Industrial Area, Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline& IS Meth	PO-Balidih, Dist: -	Bokaro, Jhark Cust	hand 827014 omer Representati	The state of the s
	PO-Balidih, Dist: -	Bokaro, Jhark Cust	hand 827014 omer Representati	The state of the s

-- Test Result-

SI.	Total December	11-14	Method No.	Li	Results	
No.	lested Parameter	Tested Parameter Unit	Method No.	Acceptable	Permissible	Results
1.	Taste		IS 3025 (Part-07)	Agreeable	Agreeable	Agreeable
2.	Nitrate (as NO3)	mg/l	IS 3025 (Part-34)	45	No Relaxation	8.30
3.	Fluoride (as F-)	mg/l	IS 3025 (Part-60)	1.0	1.5	1.09

----END Report----Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing Env. Condition of Lab. area as per IS 196:1966(C) Abbreviation MDL: Minimum Detection Limit, BDL: Below Detection Limit Limit is Specified IS 10500 :2021 Remark Sample Comply with prescribed specification.

Tested By: Anshu Gupta

ISO 9001:2015

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -Authorized Signatory Quality Checked by The laboratory accepts responsibility for content of this report. This report shall not be reproduced except in full, without written approval of the MD. This report is intended for only guidance and not for legal purpose or for advertisement. Any complaint about this report should be communicated in writing within 7 days of its issue Total liability of Institute for Environmental Management will be limited to invoiced amount only. Jain) In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com (Shreya Sona On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report Dy. Quality Manager Director is issued by the Director of the Organization

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

Ph - 8407804254, 8407804251, Email - iem2012@rediffmail.com



Accredited by Jharkhand State Pollution Control Board, JSPCB
National Accreditation Board for Testing Laboratory (NABL) vide TC-11515
Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	0	0	7
Discipline: C	nemical		Grou	p: Re	sidues	and Co	onta	minar	nts in W	/ater		Sub-Gr	oup:	race	Metal	s eleme	nts	
Report Issue Date: 27-03-2023								T	est Re	port l	No.:	RN-230	03080	01GW	/1	dan		
Sample ID: 2	30321RC	01001			41/2	10		S	ample	Desc	ripti	on: Gro	ound \	Nater	(Dug	well)		
Challan No./	P.O. No.	: 45480	2383	4/237	7	T. H.	PE	(hallan	No./	P.N	o. Date	: 17-0	9-202	22		- 6	100
	mia Cer karo Ind																	
Во	karo Inc	lustrial						okar	o, Jhar	khan	d 82	7014	300	aniee	v Vern	na		
	karo Ind stry: Cer	lustrial nent	Area					okar		khan ier R	d 82 epre	7014 sentat	ive: S	anjee	v Vern	na	9	
Type of Indu Sample Drav	karo Ind stry: Cer vn by: IE	lustrial nent EM Tear	Area	, PO				okar	o, Jhar Custom	khan ier R	d 82 epre	7014 sentat	ive: S	anjee	v Vern	na	9	
Type of Indu	karo Ind stry: Cer vn by: IE Method &	nent EM Tear & CPCB	Area m Guide	, PO				okar	o, Jhar Custom	khan ier R	d 82 epre	7014 sentat	ive: S	anjee	v Vern	na	9	2
Type of Indu Sample Drav Protocol: IS I	karo Ind stry: Cer wn by: IE Method & cation: B	nent EM Tear & CPCB hutkuru	M m Guide	, PO	-Balidi		t: - B	Sokar	o, Jhar Custom	khan ner R ng Da	epre	7014 sentat	ive: Sa 023		200	na North to	Sout	h

----Test Result----

SI. No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Copper	mg/l	APHA 3111 B.2017	0.5-1.5	BDL (MDL - 0.01)
2.	Chromium	mg/l	APHA 3111 B.2017	0.05 - No Relaxation	BDL (MDL - 0.04)
3.	Lead (Pb)	mg/I	APHA 3111 B.2017	0.01 - No Relaxation	BDL (MDL - 0.04)
4.	Manganese (Mn)	mg/l	APHA 3111 B.2017	0.1 - 0.3	BDL (MDL - 0.08)

----End Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2022
Remark	Sample Comply with prescribed specification.

Tested By: Anshu Gupta

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: 1. The laboratory accepts responsibility for content of this report.
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On the basis of Quality Checked by Authorized Signatory

(Shreya Sonal)

(Shreya Sonal)

Dy. Quality Manage

Pancti

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Panc

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

Ranchi-834002, Jharkhand, India Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com

ISO 9001:2015 ISO 45001:2018



Certified by

ISO 9001:2015 (Quality Management System)
ISO 45001:2018 (Occupational Health & Safety Management System)



Test Report

Discipline: Chemical	Group:	Residues and Contar	minants in Water	Sub-Group: Tr	ace Metals elements		
Report Issue Date: 27-03	3-2023	76/2	Test Report No.: RN-230308001GW1				
Sample ID: 230321RC01		Sample Descr	iption: Ground W	ater (Dug well)			
Challan No./P.O. No.: 45	48023834/	237	Challan No./ F	P.No. Date: 17-09	-2022		
Dalmia Cemer	of (Bharat)	i to Linarkhand Cei	ment Works) Plot	IVIA-/IPI			
Bokaro Indus	trial Area, l	Ltd. (Jharkhand Ce PO-Balidih, Dist: - B	okaro, Jharkhano	827014	nieev Verma		
Bokaro Indus Type of Industry: Cemer Sample Drawn by: IEM	trial Area, I	PO-Balidih, Dist: - B	okaro, Jharkhano	l 827014 presentative: Sar	njeev Verma		
Bokaro Indus Type of Industry: Cemer Sample Drawn by: IEM	trial Area, I nt Team	PO-Balidih, Dist: - B	Customer Re	l 827014 presentative: Sar	njeev Verma		
Bokaro Indus Type of Industry: Cemer Sample Drawn by: IEM Protocol: IS Method & C	trial Area, I nt Team PCB Guideli	PO-Balidih, Dist: - B	Customer Re	l 827014 presentative: Sar	njeev Verma		
Bokaro Indus Type of Industry: Cemer	trial Area, I nt Team PCB Guideli kuru	PO-Balidih, Dist: - B	Customer Re	l 827014 presentative: Sar	njeev Verma W.D.: North to South		

			lest Result	Contract of the Contract of th	
SI. No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Iron (Fe)	mg/l	APHA 3111 B.2017	1.0 - No Relaxation	0.25
2.	Aluminium (Al	mg/l	IS 3025 Part - 55	0.03 - 0.2	BDL (MDL - 0.01)

----End Report----

	end ricport
Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2022
Remark	Sample Comply with prescribed specification.

Tested By: Anshu Gupta

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes:

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orized Signatory

(Shreya Son

S. C. Jain) Dy. Quality Manage Director

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

Ph - 8407804254, 8407804251, Email - iem2012@rediffmail.com

ISO 45001:2018



ISO 9001:2015 (Quality Management System)
ISO 45001:2018 (Occupational Health & Safety Management System) Certified by



W.D.: North to South

Testing Ended: 24-03-2023

Test Report

Discipline: Biological	Group: Water		Sub-Group: Ground Water			
Report Issue Date: 27-03-2023	3/1/2	Test Report No.: RN-230308001GW01				
Sample ID: 230321MB01001	100° M	Sample Desc	ription: Ground Water (Dug well)			
Challan No./P.O. No.: 4548023834/2	37	Challan No./	P.No. Date: 17-09-2022			
Bokaro Industrial Area, P	O-Balidih, Dist: - Boka	ro, Jharkhand 82				
Type of Industry: Cement	7.5	Customer R	ADDITION AND THE PARTY OF THE P			
Type of Industry: Cement Sample Drawn by: IEM Team	100		epresentative: Sanjeev Verma te: 19-03-2023			
	d 3025 Part-01		epresentative: Sanjeev Verma			
Sample Drawn by: IEM Team	d 3025 Part-01		epresentative: Sanjeev Verma			

Testing Started: 21-03-2023 -Test Result-

A. Temp. (°C): 27 R.H. (%): 61 W.C.: Cloudy

	- Test nesure								
SI. No.	Tested Parameter	Unit	Method No.	Limit	Results				
1.	Total Coliform	mg/l	IS 1622: 1981	Shall not be detectable in any 100 ml sample	BDL (MDL-1.8)				
2.	E. Coli	mg/l	IS 1622: 1981	Shall not be detectable in any 100 ml	BDL (MDL-1.8)				

-END Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 20C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2022
Remark	Sample Comply with prescribed specification.

Tested By: Khushi

ISO 9001:2015

Sample Drawn By: Rajiv Kr. Singh & Team

Field Meteorological Information

Sample Receiving date: 21-03-2023

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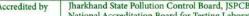
ISO 45001:2018

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ISO 9001:2015 (QMS) & ISO 45001:2018



Test Report

ULR No.:	T	C	1	1	5	1 !	2	3	0	0	0	0	0	0	0	0	6
Discipline: Ch	emical		65			Group	Water	10	15//		Sub	-Gro	up: G	round	Wate		
Report Issue Date: 27-03-2023										Test Report No.: RN-230308001GW2							
Sample ID: 2	30321W	A010	02		97	410	CAR	Sa	mple	Desci	ription	: Gro	und W	/ater	(Dug v	rell)	
Challan No./	.O. No.	: 4548	3023834	4/237	7	L47-	1000	CI	nallan	No./	P.No. I	Date:	17-09	-2022	2	30	
						narkhand dih, Dist											
Bol	caro Inc	lustri						ro, Jh	arkha	and 82	7014			-1		30	
Type of Indus	caro Inc stry: Cer	lustri: nent	al Area					ro, Jh	arkha uston	nd 82 ner Re	7014 eprese	ntativ		njeev	Verma	3	
Type of Indus Sample Drav	caro Inc stry: Cer on by: Il	nent EM Te	al Area	, PO	-Bali	dih, Dist		ro, Jh	arkha uston	nd 82 ner Re	7014	ntativ		njeev	Verma	1	
Type of Indus Sample Drav Protocol: CPC	caro Inc etry: Cer on by: II B Guide	nent EM Te eline&	al Area	, PO	-Bali	dih, Dist		ro, Jh	arkha uston	nd 82 ner Re	7014 eprese	ntativ		njeev	Verma	1	
Type of Indus Sample Drav Protocol: CPC Sampling Loc	caro Inc etry: Cer on by: II B Guide ation: P	ment EM Te eline&	eam IS Met	hod i	- Bali 3025	Part-01	- Bok	C Sa	arkha uston implir	ner Reng Dat	27014 eprese e: 19-0	ntativ 03-20	23			000	
Type of Indus Sample Drav	caro Inc etry: Cer on by: II B Guide ation: P	ment EM Te eline&	eam IS Met	hod i	- Bali 3025	dih, Dist	- Bok	ro, Jh	arkha uston implir	ner Reng Dat	7014 eprese	ntativ 03-20	23		Verma	000	th

--- Test Result---

			Lear Meanit-				
SI.	Tested Parameter	Unit	Method No.	Li	mit	Results	
No.	rested Parameter	Unit	Method No.	Acceptable	Permissible	Results	
1.	pH value at 25°C		IS 3025 (Part-11)	6.5 - 8.5	No Relaxation	6.81	
2.	Turbidity	NTU	IS 3025 (Part-10)	1	5	1.2	
3.	Colour	Hazen	IS 3025 (Part-04)	5	15	5.0	
4.	Odour		IS 3025 (Part-05)	Agreeable	Agreeable	Agreeable	
5.	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part-16)	500	2000	363.0	
6.	Calcium (as Ca+2)	mg/l	IS 3025 (Part-40)	75	200	38.48	
7.	Total Alkalinity (as CaCO3)	mg/l	IS 3025 (Part-23)	200	600	170.0	
8.	Total Hardness (as CaCO3)	mg/l	IS 3025 (Part-21)	200	600	164.0	
9.	Chloride (as Cl ⁻)	mg/l	IS 3025 (Part-32)	250	1000	31.76	
10.	Free Residual Chlorine	mg/l	IS 3025 (Part-26)	0.2	1.0	BDL(MDL-2.0)	
11.	Sulphate (as SO ₄ -2)	mg/l	IS 3025 (Part-24)	200	400	51.22	
12.	Magnesium (as Mg+2)	mg/l	IS 3025 (Part-46)	30	100	16.52	

----END Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2021
Remark	Sample Comply with prescribed specification.

Tested By: Anshu Gupta

Sample Drawn By: Rajiv Kumar Singh & Team

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Test Report

Discipline: Chemical	Group: V	Vater	Sub-Gr	roup: Ground Water			
Report Issue Date: 27-03-2023	10,	Test	Test Report No.: RN-230308001GW2				
Sample ID: 230321WA01002		Sam	Sample Description: Ground Water (Dug well)				
Challan No./P.O. No.: 4548023834	/237	Chal	lan No./ P.No. Date	e: 17-09-2022			
Dalmia Cement (Bharat) Bokaro Industrial Area, Type of Industry: Cement		Bokaro, Jharl	chand 827014	tive: Sanjeev Verma			
Sample Drawn by: IEM Team	0		Sampling Date: 19-03-2023				
Protocol: CPCB Guideline& IS Meth	od 3025 Part-01	A CONTRACTOR					
Sampling Location: POKHARIA TAND		OIL DESCRIPTION	1774				
Field Meteorological Information	A. Temp. (°C): 27	R.H. (%): 61	W.C.: Cloudy	W.D.: North to South			
Sample Receiving date: 21-03-2023	Testing Sta	rted: 21-03-20	123 Testing	Ended: 24-03-2023			

-- Test Result-

SI.	48	11-14		Li	mit	Desutte
No.	Tested Parameter	Unit	Method No.	Acceptable	Permissible	Results
1.	Taste		IS 3025 (Part-07)	Agreeable	Agreeable	Agreeable
2.	Nitrate (as NO3)	mg/l	IS 3025 (Part-34)	45	No Relaxation	6.60
3.	Fluoride (as F-)	mg/l	IS 3025 (Part-60)	1.0	1.5	1.03

--END Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2021
Remark	Sample Comply with prescribed specification.

Tested By: Anshu Gupta

ISO 9001:2015

Sample Drawn By: Rajiv Kumar Singh & Team

Authorized Signatory Specific Contractual Notes: -Quality Checker citic Contractual Notes:

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Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	0	0	8
Discipline: Ch	emical		Gro	up: Re	esidue	s and C	onta	mina	nts in V	Vater		Sub-Gr	oup:	race	Metal	s elem	ents	
Report Issue	Date: 2	7-03-2	023			11/1	H	1	est Re	port I	No.:	RN-230	03080	01GW	2	14		Π
Sample ID: 23	0321R	0100	2		300	-66 3	9		ample	Desc	ript	ion: Gr	ound \	Nater	(Dug	well)		П
Challan No./	.O. No.	: 4548	30238	34/23	7	7 81	F G	(hallan	No./	P.N	lo. Date	: 17-0	9-202	2	- 02	- 6	
						arkhand lih, Dis						/A-7(P) 27014						
Bol	aro Inc	lustria						Bokar	o, Jhai	rkhan	d 8	27014		anieev	/ Vern	na		_
	try: Cer	lustria nent	al Are					Bokar	o, Jhai Custon	rkhan ner R	d 8: epre		ive: S	anjeev	/ Vern	na		
Bol Type of Indus Sample Draw	try: Cer n by: II	nent EM Te	al Are	a, PO	-Balic			Bokar	o, Jhai Custon	rkhan ner R	d 8: epre	27014 esentat	ive: S	anjeev	/ Vern	na	6	100
Type of Indus Sample Draw	try: Cer n by: If	nent EM Te & CPC	al Are	deline	-Balic			Bokar	o, Jhai Custon	rkhan ner R	d 8: epre	27014 esentat	ive: S	anjeev	/ Vern	na		100
Type of Indus Sample Draw Protocol: IS M	try: Cer n by: Il lethod	ment EM Te & CPC OKHAF	al Are	deline	-Balic		t: - B	Bokar	o, Jhai Custon	rkhan ner Re ng Da	eprete: 1	27014 esentat	ive: Sa 023	10	7000	na North to	Sout	1

---Test Result----

			rest mesure		
SI. No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Copper	mg/l	APHA 3111 B.2017	0.5-1.5	BDL (MDL - 0.01)
2.	Chromium	mg/l	APHA 3111 B.2017	0.05 - No Relaxation	BDL (MDL - 0.04)
3.	Lead (Pb)	mg/l	APHA 3111 B.2017	0.01 - No Relaxation	BDL (MDL - 0.04)
4.	Manganese (Mn)	mg/l	APHA 3111 B.2017	0.1 - 0.3	BDL (MDL - 0.08)

Elia Keport							
Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).						
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit						
Limit is Specified	IS 10500 :2022						
Remark	Sample Comply with prescribed specification.						

Tested By: Anshu Gupta

Sample Drawn By: Rajiv Kumar Singh & Team

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Test Report

Discipline: Chemical	Group: Residues and	Contaminants in Water	Sub-Group: Trace Metals elements		
Report Issue Date: 27-03	3-2023	Test Report No	Test Report No.: RN-230308001GW2		
Sample ID: 230321RC01002		Sample Description: Ground Water (Dug well)			
Challan No./P.O. No.: 45	hallan No./P.O. No.: 4548023834/237 Challan No./ P.No. Date: 17-09-2022				
	nt (Bharat) Ltd. (Jharkhai trial Area, PO-Balidih, Di				
Type of Industry: Cemer	it	Customer Rep	Customer Representative: Sanjeev Verma		
Sample Drawn by: IEM Team Sampling Date			: 19-03-2023		
Destarable IC Mathed 9 C	ncn cuidelles	Carried District Control			

Protocol: IS Method & CPCB Guideline Sampling Location: POKHARIA TAND

Field Meteorological Information A. Temp. (°C): 27 R.H. (%): Sample Receiving date: 21-03-2023 Testing Started: 21-03-2023 W.C.: Cloudy R.H. (%): 61 W.D.: North to South **Testing Ended: 24-03-2023**

-Test Result--

			TCOL TICOURT		
SI. No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Iron (Fe)	mg/l	APHA 3111 B.2017	1.0 - No Relaxation	0.22
2.	Aluminium (Al	mg/l	IS 3025 Part - 55	0.03 - 0.2	BDL (MDL - 0.01)

----End Report----Env. Condition of Lab. Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C). Abbreviation MDL: Minimum Detection Limit, BDL: Below Detection Limit Limit is Specified IS 10500 :2022

Sample Comply with prescribed specification

Tested By: Anshu Gupta

Remark

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Quality Checked by	Authorized Signatory
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ISO 45001:2018

Test Report

Discipline: Biological	Group: Water		Sub-Group: Ground Water
Report Issue Date: 27-03-2023		Test Report No.: RN-230308001GW02	
Sample ID: 230321MB01002		Sample Descri	ption: Ground Water (Dug well)
Challan No./P.O. No.: 454802383			
		ro barkhand 877	-7(P),
Bokaro Industrial Area Type of Industry: Cement	a, PO-Balldin, Dist: - Boka	mineral process (proper processes)	014
Type of Industry: Cement	a, PO-Ballolli, Dist Boka	mineral process (proper processes)	7014 presentative: Sanjeev Verma
Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline& IS Met		Customer Rep	7014 presentative: Sanjeev Verma

W.D.: North to South A. Temp. (°C): 27 R.H. (%): 61 W.C.: Cloudy Field Meteorological Information Testing Ended: 24-03-2023 Testing Started: 21-03-2023 Sample Receiving date: 21-03-2023

----Test Result--

SI. No.	Tested Parameter	Unit	Method No.	Limit	Results
1,	Total Coliform	mg/l	IS 1622: 1981	Shall not be detectable in any 100 ml sample	BDL (MDL-1.8)
2.	E. Coli	mg/l	IS 1622: 1981	Shall not be detectable in any 100 ml sample	BDL (MDL-1.8)

----END Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2oC and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2022
Remark	Sample Comply with prescribed specification.

Tested By: Khushi

ISO 9001:2015

Sample Drawn By: Rajiv Kr. Singh & Team

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DALMIA CEMENT (BHARAT) LIMTED, BOKARO

TREE PLANTATION DETAILS

Total greenbelt development area is 23.25 acres (more than 33 %) of total land 69.19 Acres to improve the aesthetic value and to arrest dust and also to mitigate noise pollution.

YEAR WISE TREE PLANTATION DETAILS GIVEN AS FOLLOWS

SL. No	Year	Number of plants	Area (in Acres)
1	1st (2011-2012)	5000	5
2	2nd (2012-2013)	2030	4
3	3rd (2013-2014)	2820	3
4	4th (2014-2015)	7620	5
5	5th (2015-2016)	5100	4
6	6th (2016-2017)	1500	1
7	7th (2017-2018)	500	0.55
8	8th (2018-2019)	69	0.3
9	9th (2019-2020)	100	0.4
10	10th (2020-2021)	150	Plantation done in
11	11 th (2021-2022)	500	the place of dead tree
12	12 th (2022-2023)	350	
	Total	25739	23.25

S.N	Year	Name of Species tree planted
1	2011-2012	Gulmohar,Amaltash,Neem,Mihigini,shisham,Ashoka,Teak,
		Mango,Amala, Shiv Babool, Chatni
2	2012-2013	Gulmohar,Amaltash,Neem,Mihigini,shisham,Ashoka,Teak,Mango, Amala
3	2013-2014	Ashoka,Chatni,Gulmohar,Amaltash,Neem,Mihigini, Shisham
4	2014-2015	Ashoka,Chatni,Gulmohar,Amaltash,Neem,Mihigini, Shisham
5	2015-2016	Chatni,Gulmohar,Neem,Mehegani,Shisham,Pipal,Teak,
6	2016-2017	Gulmohar,Chatni,Neem,Guava,Shiv Baboo,Mango,Jamun
7	2017-2018	Chatni,Gulmoha,Amaltash,Neem,shisham,Guava,Pipal
8	2018-2019	Chatni,Gulmohar,Neem,Mihigini,Guava,Mango,Amala,Neem
9	2019-2020	Chatni,Mihigini,Botal Pam,Mango,Amala,Lemon,Jamu
10	2020-2021	Chatni,Mihigini,,Mango,Kaaju.
11	2021-2022	Chatni,Mihigini,,Mango,Kaaju,Amala, Neem, Gulmohar
12	2022-2023	Chatni,Mihigini,,Mango, Neem, Gulmohar

DALMIA CEMENT (BHARAT) LIMITED, BOKARO

Carbon emission and carbon neutrality action plan

Cement is the basic building block of the housing and infrastructure development in the country. Unlike developed countries, India is uniquely positioned to maintain the growth, provide basic infrastructure and housing to its growing population and maintain the GHG emissions.

Globally, cement industry is classified as basic heavy-industry. As a result, European Union has put the cement industry in a unique position until 2030 where carbon allowances are provided free of cost (100%) to the cement and lime industries because it is not possible to pass on the cost of making carbon neutral cement or concrete to the customers in Europe, where per capita income of the population is way higher than in India.

Hence, a public-private approach to decarbonise the basic heavy-industry in India needs to be unique while serving the reasonable developmental expectations of the country and its people.

Despite the challenge of cement decarbonisation, Dalmia cement has been taking actions to reduce the GHG emissions. Dalmia Cement (Bharat) Limited (DCBL) is a leading cement manufacturer Dalmia Cement is one of India's pioneering homegrown cement companies, operating since 1939. Dalmia is one of the lowest carbon footprint cement producers globally and one of the most profitable cement company in India which reiterates its business philosophy of Clean and Green is Profitable and Sustainable.

Dalmia has served as climate catalyst in the global heavy-industry. It is the first triple joiner company globally to RE 100; EP 100; and EV 100 (significant transition to electric vehicles). Dalmia also aims to eliminate fossil fuels in the cement kiln.

Dalmia Cement is the leading voice on zero carbon transition at platforms such as United Nations, World Economic Forum and Annual Conference of Parties (COP) serving to the United Nations Framework Convention on Climate Change (UNFCCC). Dalmia has aligned its operations to Sustainable Development Goals (SDGs) within and beyond boundary through its Corporate Responsibility arm Dalmia Bharat Foundation.

Dalmia is founding member of the Leadership Group for Industry Transition (LEADIT), Chaired by India and Sweden to drive transformation in hard-to-decarbonize and energy-intensive sectors.

Dalmia is a founding member of First Movers Coalition (FMC), an initiative endorsed by US President and aims at creating green products demand globally. In a major push to EV transition, Dalmia has procured 22 heavy-duty electric vehicles for its raw material transport. Dalmia has a target to become 50-million-ton cement group by 2025. It is already 13.3 times water positive and committed to become 20 times water positive by 2025.

The commitments and leadership of Dalmia on zero carbon transition offers a whole new set of opportunities for the global heavy industry sector to relook at the processes, technologies and techno-commercial models for decarbonization and/ or reduction of the carbon footprint.

Dalmia Cement (Bharat) Limited is a cement grinding unit which is located at Bokaro Jharkhand for the manufacturing of PSC (Portland Slag Cement) and CC (Composite Cement) with production capacity of 4.5 MTPA.

DCBL Bokaro using fuel for the moisture removing in raw materials and material transportation in vehicles. Electricity is used for plant operation.

The GHG emission is classified under two scope - Scope-1-Direct emission and Scope-2 Indirect emission from electricity consumption for cement manufacturing.,.

- **1. GHG Emission from fuel consumption:** Direct GHG emission occur from that are owned or controlled by the company (Scope 1).
 - 1. Coal consumption in FBC (Indian Coal)
 - 2. Diesel Consumption in FBC for light up
 - 3. Own vehicles and hiring equipment' by the company & fuel consumed process activities.

GHG Emission from fuels

Scope	Categories	UoM	2017-18	2018-19	2019- 20	2020- 21	2021- 22
1	Emissions from Cement Manufacturing		53.42	58.41	51.92	41.20	42.78

- **2. GHG emission from power consumption:** Indirect GHG Emissions (Scope 2), accounts of GHG emission from the purchased electricity consumed by the company. Emission cannot be controlled at the sources it can be only controlled by changing the type of electricity consumed.
- 1. Electricity consumption from Grid.

Scope	Categories	UoM	2017-18	2018-19	2019-20	2020-21	2021- 22
2	Emissions from Electricity consumed	Kg CO2 /Tone of Cement	58.91	60.58	41.89	44.22	45.73

Summary report of GHG emission last five years in below table

Scope	Categories	UoM		2017-18	2018-19	2019-20	2020-21	2021- 22
1	Emissions from Cement Manufacturing	Kg /Tone Cement	CO2 of	53.42	58.41	51.92	41.20	42.78
2	Emissions from Electricity consumed	Kg /Tone Cement	CO2 of	58.91	60.58	41.89	44.22	45.73

The emission intensity of GHG emission of our unit scope -1 and scope -2 decreases continuously from previous years on account of the actions taken.

Mitigation plan for reduction of GHG emission

DCBL Bokaro is working on GHG mitigation Plan to bring down the GHG emissions from fuel usage and electricity usage. One of the main mitigation opportunities, as an immediate lever, is -to increase share of renewal energy for the electricity consumption.

The carbon footprint accounting has been implemented as per the international best practice and it is used for internal as well as external benchmarking..

1. GHG emission mitigation:

Enhancing energy efficient of plant equipment's, use of renewal energy for electricity consumption and use of clean fuel /alternative fuel such as biodiesel in FBC.

(a) Reduction of GHG emission by the process optimization:

- 1. We are continually reducing clinker consumption for cement manufacturing.
- 2. We are planning for construction of new clinker silo for the storage of clinker to reduces road

transportation

3. We have continually increase rail transportation for inwards and outwards materials, reduce

road transportation.

(b) GHG emission reduction by improving energy efficiency plant equipment

We are regular working for reduction of power consumption in plant. energy efficient enhanced by working on the areas such as energy benchmarking study to identify the gaps in specific energy consumption such as process fan and other high energy consuming equipment's. To overcome the gaps, best practice could be followed to reduce the energy consumption. These measures for improving energy efficiency would proportionally result in reduce GHG emission due to increased energy efficiency and decreased energy consumption.

Implementation of ISO 50001:2018

We are in process for implementation of ISO 50001:2018 specific requirements for establishing, implementing, maintaining, and improving an energy management system (EnMS). The intended outcome is to enable an organization to follow a systematic approach in achieving continual improvement of energy performance and EnMS.

(C). Increasing power sourcing from renewal energy

We are working to increase share of renewal energy for the electricity consumption. The percentage of emissions could be reduced by improving the percentage of renewable energy either by onside installation (solar rooftop system) or offsite renewable energy consumption through PPA or Open Access. The higher amount of renewable energy consumption would lead to lesser GHG emissions over the period. Dalmia Cement (Bharat) Limited, Bokaro unit will work on procuring 100% Renewable energy in long -term and eliminate emissions from Grid electricity.

- (d) We have installed solar light & LED light in plant and colony area for the reduction of power consumption.
- (e) Tree plantation regularly done in plant & village area and maintaining the green belt. This will also help to reduce GHG emission.

2. Regular Assessment of GHG Emissions and Strengthening of Inventory

Dalmia Cement (Bharat) Limited plants including Bokaro unit carry out regular GHG assessment and a third party assured yearly inventory to ascertain as well as find reduction opportunities from the major sources of GHG emissions.

GHG Reduction Targets:

- (a). To drive innovation resources are involved from various departments to reduce the emission. This will bring buy-in from all the stockholders involved and help in driving innovation to reduce the GHG emission.
- (b) To improve cost efficiency: cost saving can be made by identifying opportunities to increase resources and energy efficiency. This may help to improve our competitive advantage
- (c) Organization will setup ambitious targets, measuring managing, reporting and reducing GHG emissions.
- (d) Organization will be conduct internal as well external energy audit reduction of GHG emission
- (e) It will help in raising awareness among consumers and employees on what role they can play in reducing impact of GHG emission

(f) Dalmia Cement (Bharat) Limited Bokaro unit will continually analysis the GHG Reduction potential opportunities identified, priorities and implement them to achieve GHG emission reduction target as well as associated cost benefit.

Annexure:4

BOKARO CEMENT MANUFACTURING WORKS DALMIA CEMENT (BHARAT) LIMITED

CORPORATE RESPONSIBILITY ENVORONMENT PROTECTION (CREP) ACTIVITIES DONE SURROUNDING VILLAGE AREA FOR THE YEAR 2022-23

S. N	CREP Activities	Village/Town	Total Amount Rs.
1	Well & Pond renovation	Bhutkuru	554599
2	Stone pitching drain at Badka pond	Gorabali	402380
3	Ghat Construction	Gorabali	533367
4	Tree Planation	Gorabali	6000
5	Water Storage, Sanitation work and MS Grilling work at Manav Sewa Ashram	Bokaro	53287
6	Common hall construction at Govind Vidyalaya including toilets	Balidih	1357000
7	Fire station renovation	Bokaro	212399
8	Vocational training for local youth	Bokaro	2043747
	Total		5162779

DETAILS OF CREP ACTIVITIES DONE FOR THE YEAR 2022-23

A. Well Renovation: -





Before After

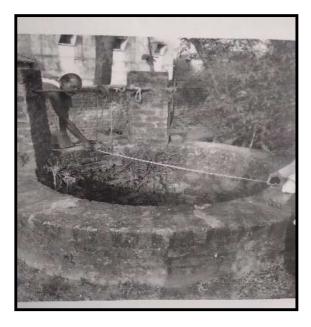
Beneficiary Name: Lakhan Mohli Village Name: Bhutkuru





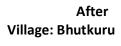
Before After

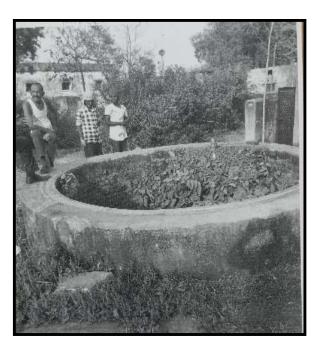
Beneficiary Name: Milan Mohli Village Name: Bhutkuru





Before Beneficiary Name: Ramchandra Singh







Before After

Beneficiary Name: Roop Lal Singh Village Name : Bhutkuru





Before After

o Beneficiary Name: Vimlendra Prasad Mohli

O Village Name: Bhutkuru





Before After

o Beneficiary Name: Wakil Singh

O Village Name: Bhutkuru

B. Stone Pitching: -





Place: Badka TalabVillage Name: Gorabali

C. Godat Pond Ghat, Gorabal





C. Dustbin Construction



Place: Godat TalabVillage Name: Gorabali

Lotan Pond Ghat Construction



Place: Lotan PondVillage Name: Gorabal

CORPORATE ENVIRONMENT POLICY

DALMIA BHARAT LIMITED

Regd. Office: Dalmiapuram – 621651, Dist: Tiruchirapalli, Tamil Nadu [CIN: L40109TN2006PLC058818]

Tel. No.: (04329) 235132 Website: www.dalmiabl.com; E-mail: invhelp1@dalmiabharat.com

BUSINESS RESPONSIBILITY POLICY

[Adopted by the Board of Directors at its meeting held on 17-8-2016]

Preface

Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, vide its clause 34(2)(f), mandates that the Annual Report of top five hundred listed entities based on market capitalization (calculated as on March 31 of every financial year) shall contain a Business Responsibility Report describing the initiatives taken by the Company from an environmental, social and governance perspective, in the format as specified by the SEBI from time to time.

SEBI vide Circular No. CIR/CFD/CMD/10/2015 dated November 04, 2015 has prescribed nine key principles to assess the fulfillment of listed entities and a description of the core elements under these principles. This Policy is accordingly framed to address the nine principles prescribed by SEBI in the said circular.

Stakeholders

The relevant stakeholders are Shareholders, Security Holders, Subsidiary Companies, Joint Venture Companies, Employees, Suppliers, Distributors, Public, Customers and Society at large.

Principle 1 - Ethics, Transparency and Accountability

Dalmia Bharat Limited (the "Company") is committed to ensure adherence, while conducting in all its sphere of activities and while dealing with both the internal and external stakeholder, to the following:

- Promote values as well as demonstrate commitment to uphold its ethics principles wherever operate in conjunction with business partners.
- Not do or give or receive, directly or indirectly for business or financial gain, any financial inducement or improper advantage, or engage in any form of unethical conduct or exercise undue influence over any other third party.
- Not indulge in giving extravagant, lavish or uncustomary gifts to Authorities which may
 obligate or inappropriately influence the recipient.
- Ensure vouch for completeness, validity and accuracy of the records, financial or otherwise and the validity of all information. Systematically identify and engage in an effective and transparent manner with all the stakeholders to create sustainable, long term value for our stakeholders.
- Take the contractual obligations seriously and ensure to pay suppliers, employees and other entitled to receive money according to agreed contracts/terms.
 - Not to engage in or promote practices which are corrupt and anti-competitive and comply with the competition laws.

- Encourage all associated parties to comply with these principles and avoid complicity with anyone that violates above principles.
- · Comply with all the laws and regulations as applicable.

Principle 2 - Sustainability

The Company is committed to offer goods which are safe and have a positive contribution on environment and society. To achieve this objective, we are committed to:

- Adopt most energy efficient technologies in manufacturing process, improve the energy efficiency of equipment.
- Make continuous effort to increase the use of renewable energy and fuels, coprocessing wastes to reduce our greenhouse gases.
- Invest in research and development.
- Make continuous efforts to reduce water intensity and fresh water usage by increased use of harvested and recycled water in our operations.
- Assess biodiversity quality in all our extraction sites and strive to create positive impact
- Continuously strive to improve the quality of products, processes and services.
- Encourage recognition and respect for rights of owners of intellectual property.
- Promote free competition and freedom of choice to consumers.
- Identify stakeholders to understand their concerns.
- Implement suitable grievance handling mechanism, wherever required.

Principle 3 - Wellbeing of Employees

The Company being a strong value driven, people oriented and accountable organization is committed to offer the best working environment to all its employees. To achieve this objective, we are committed to:

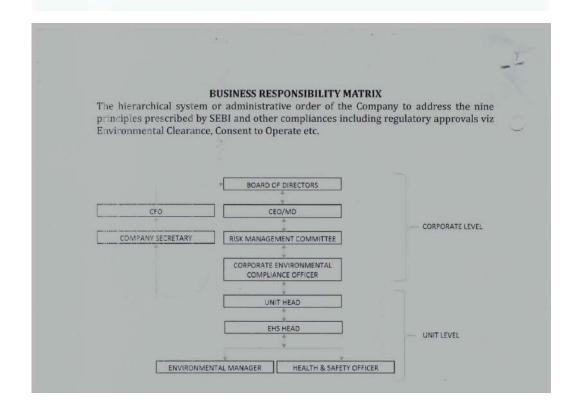
- Maintain good working conditions promote a harmonious and productive atmosphere in the workplace and provide fair and equal employment opportunity for all employees to maximize their career growth with enhanced skills and to create a favourable environment to work as an effective team.
- Ensure no harm anywhere to any one in our entire operations as part of our commitment towards health and safety of all people involved.
- We shall provide Safe and secure workplace free from harassment, discrimination or other intimidating behaviors of all kinds and shall follow the procedures, principles and rules prescribed by the Government under Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and rules made thereunder.
- We shall ensure equal opportunities and fair treatment to all employees including eligible applicants for employment in the Company irrespective of their caste, creed, religion, gender, marital status, age starting from the process of employee's acquisition till grant of all terminal benefits and will not tolerate discrimination of any kind. We shall recruit, retain and develop people based on suitability of role and the opportunity for personal and professional growth.
- We shall promote well being and work life balance of people to let them live a happy life and honour individuality of every employee.
- We shall not engage any person to work who is unwilling or below the age of 18 years.
- We shall respect the right of freedom of association, participation and collective bargaining.

Independent Audit / Evaluation of working of the Policy

Independent Audit / evaluation of working of the Policy shall be done by the Internal Auditor atleast once a year and report the same to the Chief Financial Officer and Whole Time Director, being designated by the Board of Directors as responsible Director for the preparation and implementation of the Business Responsibility Policy.

Conclusion

This Policy will be reviewed as and when deemed necessary in view of the revision/amendment in the Regulations notified from time to time or otherwise.



CAPITAL COST INVESTMENT ON ENVIRONMENT PROTECTION AT DCBL BOKARO UP MARCH 2023

	M/S DALMIA CEMENT (BHARAT) LIMITED, BOKARO				
	Plot No. IV/A-7(P),Bokaro Industrial Area,Balidih ,Bokaro Steel City,Jharkhand -827014				
C/	APITAL COST INVESTMENT ON ENVIRONMENT PROTEC	TION AT DCBL B	OKARO UP TO N	/larch 2023	
S.N	PARTICULARS	Asset no	Investment in Rs.	Investment in Crores	
1	INVESTMENT ON AIR POLLUTION CONTROL MEASURES				
а	Bag House cement mill	5500000007	193983042.2		
b	Bag house fan	5500000014	13972406.4		
С	Bag house for cement mill	5500000037	9901023.02		
d	Bag house fan	5500000046	185484.52		
е	Sprs Bag house fan -mill -1	5500000016	6300867.1		
f	Sprs Bag house fan -mill -2	5500000017	6300867.53		
g	Bag filter from silo to packing plant EEL India limited		21000000	29.05	
h	Bag filter clair Packing plant area		4800000		
i	Bag filter at Wagon Tippler		28150000		
i i	Bag filter Dry fly ash silo Top storage bin		900000		
h	Bag filter Dry fly ash silo Top storage bin Sep-		1300000		
i	Packer 4 Bag filter		3700000	1	
	5		290493690.8		
2	INVESTMENT ON FUGITIVE DUST EMISSION CONTROL				
а	Construction of Tarpaulin shed near packing plant	5200000052	1741749.73	1	
f	Road Swapping machine	5900000085	128981]	
g	Water spray tanker	5060000016	100000	8.64	
h	Delexo Road Swapping Machine	5500000172	2452009.2	8.64	
i	Steel Silo for storage of PCC	5500000185	28115894.14		
J	Plant Roads construction	5200000010	53848342.83		
			86386976.9		
3	INVESTMENT IN WATER POLLUTION CONTROL MEASUR	ES			
а	Rain water Harvesting	5200000034	56547.38		
b	Sewar line connected to plant toilet to STP	5200000054	958795.98		
С	Bio Toilet at Wagon Tippler & Railway penal Yard	5200000055	99308.58		
d	Construction of Sewage treatment Plant	5200000067	4772895.03		
e	Water treatment plant	5040000011	133559.51	0.70	
f	Toilets & Bathroom for Labour Camp	5200000056	1074911.5	0.78	
g	Water treatment plant	5040000013	682090.06		
			7778108.04		

4	ENVIRONMENT POLLUTION MONITORING EQUIPMEN	IT		
1	CAAQM -S02 & NOx Analyzer	5500000068	1308596	
2	Laboratory balance	5500000074	19244	
3	Opacity meter From Chemtrols industries LTD	5900000033	88889.55	
4	Opacity meter From Chemtrols industries LTD	590000034	88889.55	
5	Data connectivity to CPCB Server	580000003	188100	
6	Stack monitoring kit from form forebes marshal	5010000067	10596.16	
7	Incubator	5500000029	13000.32	
8	On line CAAQM station Environment SA	5500000066	2522852.76	
9	Up gradation Software of CAAQMS	5800000003	490800	
10	Construction of 2.no CAAQMS Room	5200000035	454879	0.61
11	Respirable Dust Sampler 460 BL PM -10 ,4no	Environment Lab	280000	
12	Respirable Dust Sampler 460 BL PM- 2.5 ,4no	Environment Lab	300000	
13	Vayubodhan Stack monitoring Kit VSS1	Environment Lab	75000	
14	Spectrophotomer	Environment Lab	280000	
			6120847.34	
	Capital cost Investment from April 22 to September 22			Nil
	Total Capital Cost Investment on Environment measures up to March 2022			39.08

DALMIA CEMENT (BHARAT) LIMITED,BOKARO			
RECUE	RRING EXPENDITURE ON VARIOUS ENVIRONMEN	NTAL ACTIVITIES	
October -2022-March-2023			
S.No.	Environmental activities	Cost (Rs. In Lacs)	
1	Operation and maintenance cost of Pollution Control E	quipment	
	Cost on Schedule maintenance		
1	Bags replacement with new bags, Bags cleaning, De dusting line checking, cleaning and repairing work. Bag filters fan maintenance etc)	28.2	
2	Power consumption in Pollution control equipment (Bag House & Bag Filter) 13093696 KWH X5.35	700.05	
2	Environmental Monitoring & Analysis	0.85	
3	AMC of CEMS Data transmission to JSPCB& CPCB	0.15	
4	AMC of CAAQMS Maintenance, servicing Calibration,	0.64	
5	AMC of CAAQMS Data transmission to JSPCB & CPCB	0.50	
5	Calibration of Pollution Monitoring Equipments (CEMS)	1.40	
6	Calibration of Pollution monitoring instrument (RDS &Stack VSSI,Noise level meter)	0.15	
6	Air Pollution Monitoring Accessories	1.00	
7	Water Pollution Management (AMC of STP, R.O Plant, D.M. Plant, & Softener Plant), Cleaning of Nala,	0.15	
8	STP Operation & Maintenance	1.94	
9	Road Sweeping Machine Operation & Maintenance	2.09	
8	Disposal of Bio medical waste	0.09	
9	Fuel consumption in water sprinkling tanker of water on dusty area	2.50	
10	Green Belt Development	6.79	
TOTAI	COST (Rs)	746.50	

DALMIA CEMENT (BHARAT) LIMITED, BOKARO

Environment Internal audit report

October 2022-March-2023

Date: 26.02.2023

Sr. No	Environment internal audit observation points	Auditee Status	Auditor Status
1.	Review status of Statutory compliance - Consent to Operate (CTO) & Environment Clearance (EC) compliance condition	Complied. Timely submitted EC Compliance report to JSPCB /MOEF&CC /CPCB/SEIAA.	Complied
2.	Review status of Statutory compliance - E- Waste Management	Complied. Timely submitted E-Waste return to JSPCB Ranchi and Dhanbad.	Complied
3.	Statutory compliance - Hazardous waste management	Complied. Timely submitted Hazardous waste return Form-IV JSPCB & Dhanbad	Complied
4.	Review status of Statutory compliance Condition of OHC, CTO and Authorization of Bio medical waste compliance condition under Bio- Medical Waste Management.	Complied. Timely submitted Hazardous waste return Form-IV JSPCB Ranchi & Dhanbad.	Complied
5	Checked On Line CEMS & CAAQMS data at JSPCB & CPCB Server	Complied, On line CEMS & CAAQMS Data updated in JSPCB & CPCB server	Complied
6	Checked Calibration certificate record of Pollution monitoring equipment.	Complied. On line CEMS & CAAQMS calibrated with in time.	Complied
7	On Line monitoring data display at factory main gate.	Complied. Online Environment monitoring data displayed at main gate	Complied.

8	Checked Third party Environment monitoring report.	Complied, third party Environment monitoring report done on quarterly basis.	Complied.
9	Checked Drinking water quality	Complied, Drinking water quality regular checked.	Complied.
10	Checked status validity of CTO & EC	Complied. within time limit	Complied.
11	Checked fugitive dust emission records	Complied	Complied

Advertisement in newspaper for receiving of EC from SEIAA



EC Copy submitted to local authority & other Govt. Department





0/0

newthink! cement! sugar! refractories! power!

To,

Date: 03.10.2019

भूल पन्न utilegional Director

harkhand Industrial Area Development Authority (JIADA)

Bokaro Steel City

Bokaro - 827014

Sub: Environment Clearance for "Upgradation of Technology at existing standalone Cement Grinding unit from 3.0 MTPA to 3.70 MTPA of M/s Dalmia Cement (Bharat) Ltd. at Plot no.-IV/A-7(P), Bokaro Industrial Area Bokaro"

Dear Sir,

At the outset we extend our sincere thanks for the cooperation extended to us by the JIADA for seamless operation of our cement plant at Bokaro. We had applied for grant of Environment Clearance for enhancement of production capacity from 3.0 MTPA to 3.7 MTPA for which finally **EC** has been granted by State Level Environment Assessment Authority (SEIAA) vide letter no. EC/SEIAA/2018-19/2138/2019/474 dated 23rd September 2019 (Copy of EC enclosed)

This is submitted for your kind information & record please

Thanks & Regards

Yours Sincerely

For Dalmia Cement (Bharat) Limited

Mukesh Kumar Garg

(Unit Head & Assistant Executive Director)

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Encl A/a

Dalmia Cement (Bharat) Limited

Works: Plot No. - IV/A-7(P) Bokaro Industrial Area, Ballalih, Bokaro Steel City - 827014. Hurkband, India
LN: ESS/91TN/996PL-0035963

Registered Office; Dalmiapuran, Dist. Trechtragalii, Tamil Nada 621651, India
A Dalmia Bharat Group company
wew definiberaries.om