

**Dalmia**  
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**FUTURE TODAY**

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To  
The Member Secretary,  
State Level Environment Impact Assessment Authority, Jharkhand  
Nursery Complex, Near Dhurwa Bus Stand, Dhurwa,  
Ranchi-Jharkhand -834004

Date: 21.11.2023

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

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

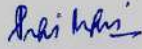
Dear Sir,

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

Thanking you.

Yours Sincerely,

For **Dalmia Cement (Bharat) Limited, Bokaro**



**Authorized Signatory**

**Copy:**

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:**

1. 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, Jharkhand, India  
T +91 6542 253 278 / +91 6542 253 047 Toll Free 1800 2020 W www.dalmiacement.com CIN: U65191TN1996PLC035963  
Registered Office: Dalmiapuram, District Tiruchirappalli - 621 651, Tamil Nadu, India  
A Dalmia Bharat Group company, www.dalmiabharat.com

# **DALMIA CEMENT (BHARAT) LIMITED, BOKARO**

**Environment Clearance compliance report of Dalmia Cement (Bharat) Limited from April 2023 to September 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**

# DALMIA CEMENT BHARAT LIMITED.BOKARO

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 APRIL 2023 TO SEPTEMBER 2023

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

	EC Compliance Condition	EC Compliance Status
I	<b>Specific Condition</b>	
	<p>This Environmental Clearance is valid subject to the following condition below —</p> <p>That this project has-</p> <p>a. Obtained all legal rights to operate at concerned place.</p> <p>b. Complied with all existing concerned laws of the land and</p> <p>c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.</p>	<p><b>Complied with.</b></p> <p>a. Obtained all necessary statutory clearance to operate our stand-alone cement Grinding Unit.</p> <p>b. Complied all legal law of land with respect to our unit</p> <p>c. Complied with.</p>
II	<b>Statutory Compliance</b>	
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.	<p><b>Not Applicable.</b></p> <p>The unit is located in notified Industrial area at JIADA, Bokaro, Jharkhand with due allocation through Govt of Jharkhand.</p>
2	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	<p><b>Not Applicable.</b></p> <p>There is no wild life sanctuary within 10 km radius of our unit.</p>
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)	<p><b>Not Applicable.</b> 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.</p>

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.	<b>Complied with.</b> 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	<b>Complied with.</b> 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	<b>Complied with.</b> 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.	<b>Not Applicable</b> 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.	<b>Agreeable</b>
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.	<b>Not applicable.</b> The unit is located in notified Industrial area at BIADA, 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 respective merits, no rights will vest in or	<b>Not applicable.</b> 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.	
<b>III</b>	<b>Air quality monitoring and preservation</b>	
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 9 <sup>th</sup> 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.	<b>Complied with.</b> 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.).	<b>Complied with.</b> We are regularly monitoring fugitive dust emission in our plant by JSPCB & NABL approved laboratory. Copy of all Environmental monitoring reports from April 2023 to September 2023 is attached as per <b>Annexure-1</b>
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 SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)	<b>Complied with.</b> 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 attached as per <b>Annxure-1</b>
4	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual	<b>Complied.</b> Six monthly environmental monitoring reports from April 2023 to September 2023

	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	is attached as per <b>Annexure-1</b>
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.	<b>Complied.</b> 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/Nm <sup>3</sup> . 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 2 nos 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.	<b>Complied.</b> 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.	<b>Complied.</b> 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.	<b>Complied.</b> Regular road sweeping and floor cleaning is being done by 2 nos of 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.	<b>Complied.</b> 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;	<b>Complied.</b> 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.	<b>Complied.</b> 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.	<b>Complied.</b> 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.	<b>Complied.</b> Air ventilation system arrangement done for adequate air change in motor houses and packing plant area.
IV	<b>Water quality monitoring and preservation:</b>	
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.	<b>Complied with.</b> We are taking water from BIADA for plant operation and domestic use. 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 <b>Annexure-1</b>

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 <b>Annexure-1</b>
4	Adhere to 'Zero Liquid Discharge	<b>Complied with.</b> Zero Liquid Discharge is being maintained.
5	Sewage Treatment Plant shall be provided for treatment of domestic waste water to meet the prescribed standards.	<b>Complied with.</b> 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 <b>Annexure-1</b>
6	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	<b>Complied with.</b> 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.	<b>Complied with.</b> 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.	<b>Complied.</b> 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.	<b>Complied.</b> Optimum use of water is practiced and all necessary efforts has been made to reduce water consumption in our plant.
<b>V</b>	<b>Noise monitoring and prevention</b>	



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.	<b>Compiled</b> 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 six-monthly EC Compliance report. Six monthly noise level report (April 2023 to September 2023) attached as per <b>Annexure-1</b>
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.	<b>Being complied.</b>
<b>VI</b>	<b>Energy Conservation measures:</b>	
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.	<b>Complied with.</b> 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,	<b>Complied with.</b> 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	<b>Complied with.</b> Slag and fly ash are being used as a raw material for cement manufacturing as per BIS norms.
<b>VII</b>	<b>Waste management</b>	
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.	<b>Complied with.</b> Hazardous waste Authorization obtained from JSPCB vide letter no JSPCB/HO/RNC/HWM-9675664/2021/26, Dated 09.04.2021, which is valid up to 31.12. 2026. Hazardous waste such as used oil, waste oil disposed through authorized vendor.
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)	<b>Complied with.</b> Kitchen waste composted and used in greenbelt development.
<b>VIII</b>	<b>Green Belt and EMP:</b>	

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	<b>Complied with.</b> We have developed greenbelt in 33% of the total land of unit. Tree plantation report attached as per <b>Annexure-2</b>
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 <b>Annexure-3</b> .
<b>IX</b>	<b>Public hearing and Human health issues</b>	
1	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	<b>Complied with.</b> 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.	<b>Complied with.</b> 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.	<b>Complied with.</b> 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	<b>Complied</b> Periodic medical health checkup is being regularly done to all employees and workers every six months. reports are being maintained as per Factory Act.

<b>X</b>	<b>Corporate Environment Responsibility</b>	
1	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1 <sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.	<p><b>Being Complied.</b> we are regularly doing CER surrounding village area which is as follows:</p> <ol style="list-style-type: none"> <li>1.Wells &amp; Pond renovation done surrounding village area for water conservation.</li> <li>2. street light &amp; solar light installed in village</li> <li>3.Tree plantation done surrounding village</li> <li>4 Toilet constructed in schools</li> <li>5. Renovation of school building, community hall and Aganwadi surrounding village area.</li> </ol> <p>CER &amp; CSR report for the period April 2023 to September 2023 attached as per <b>Annexure: 4</b></p>
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.	<p><b>Complied with.</b> DCBL Bokaro have Environmental Management Policy duly approved from Board of Director. copy of Environment policy attached herewith as per <b>Annexure-5</b></p>
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.	<p><b>Complied.</b> 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.</p>
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.	<p>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</p>

	Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.	Environment Protection (Capital cost & Recurring cost) from April 2023 to September 2023 is attached as per <b>Annexure-6</b>
5	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	<b>Complied with.</b> Self-Environment audit is being regularly done for the continual improvement of environment quality in our plant. Self-Environment audit report attached as per <b>Annexure-7</b> . 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
<b>X</b>	<b>Miscellaneous</b>	
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 <b>Annexure-8</b> .
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 <b>Annexure-9</b>
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.	<b>Complied.</b>
4	The project proponent shall monitor the criteria pollutants level namely; PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient	<b>Complied.</b> On-line environment monitoring data is being regularly displayed at factory main gate for the notice of public.

	location for disclosure to the public and put on 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.	<b>Complied.</b>
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.	<b>Complied</b> Environment Statement in Form V is regularly submitted to JSPCB, Dhanbad & Ranchi. Last Environment Statement was submitted vide our letter no. DCBL/ENV-ES/22-23/01, Dated 18.09.2023.
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, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and 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 of 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 APRIL 2023 TO SEPTEMBER 2023

<b>Ambient air quality monitoring report -Near Time office</b>				
	<b>SO2</b>	<b>NOx</b>	<b>PM-10</b>	<b>PM-2.5</b>
	<b>µg/m3</b>	<b>µg/m3</b>	<b>µg/m3</b>	<b>µg/m3</b>
April-2023,	9.43	20.01	54.98	29.0
May-2023,	12.19	19.08	55.21	26.4
June-2023,	10.89	17.45	53.86	30.4
July-2023,	11.08	18.98	51.75	21.7
August-2023,	8.2	19.03	46.37	19.8
September-2023,	7.3	22.5	49.9	21.9
<b>Min.</b>	<b>7.3</b>	<b>17.5</b>	<b>46.4</b>	<b>19.8</b>
<b>Max.</b>	<b>11.1</b>	<b>22.5</b>	<b>55.2</b>	<b>30.4</b>
<b>Avg.</b>	<b>9.8</b>	<b>20.2</b>	<b>52.0</b>	<b>25.4</b>

<b>Ambient air quality monitoring report FH-3 Building</b>				
	<b>SO2</b>	<b>NOx</b>	<b>PM-10</b>	<b>PM-2.5</b>
	<b>µg/m3</b>	<b>µg/m3</b>	<b>µg/m3</b>	<b>µg/m3</b>
April-2023,	9.2	17.2	52.6	28.3
May-2023,	8.4	16.8	52.3	27.8
June-2023,	10.5	15.1	50.6	26.4
July-2023,	6.8	16.8	46.3	18.8
August-2023,	7.8	17.3	44.0	19.6
September-2023,	6.4	15.8	45.5	17.3
<b>Min</b>	<b>6.4</b>	<b>15.1</b>	<b>44.0</b>	<b>17.3</b>
<b>Max.</b>	<b>10.5</b>	<b>17.3</b>	<b>52.6</b>	<b>28.3</b>
<b>Avg.</b>	<b>8.4</b>	<b>16.4</b>	<b>48.5</b>	<b>22.9</b>

#### JSPCB Norms

<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>(µg/m<sup>3</sup>)</b>	<b>(µg/m<sup>3</sup>)</b>	<b>(µg/m<sup>3</sup>)</b>	<b>(µg/m<sup>3</sup>)</b>
80	80	100	60



## DALMIA CEMENT BHARAT LIMITED, BOKARO

### AMBIENT AIR QUALITY MONITORING REPORT FROM APRIL 2023 TO SEPTEMBER 2023

<b>Ambient air quality monitoring report: Near Wagon Tippler</b>				
	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM-10</b>	<b>PM-2.5</b>
	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>
April-2023,	10.7	18.6	53.4	29.6
May-2023,	11.2	19.5	54.6	30.4
June-2023,	12.6	15.8	52.2	28.9
July-2023,	7.5	17.8	50.8	23.4
August-2023,	9.1	23.4	51.4	25.1
September-2023,	13.2	22.1	49.2	21.8
<b>Min</b>	<b>7.5</b>	<b>15.8</b>	<b>49.2</b>	<b>21.8</b>
<b>Max</b>	<b>12.6</b>	<b>23.4</b>	<b>54.6</b>	<b>30.4</b>
<b>Average</b>	<b>10.4</b>	<b>21.0</b>	<b>51.1</b>	<b>26.3</b>

<b>Ambient air quality monitoring report: Fabrication yard</b>				
	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM-10</b>	<b>PM-2.5</b>
	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>
April-2023,	11.0	22.1	55.7	30.2
May-2023,	10.5	21.6	56.4	31.8
June-2023,	8.9	20.3	54.1	25.0
July-2023,	9.2	19.0	49.2	21.7
August-2023,	8.3	17.8	53.0	28.3
September-2023,	7.4	24.7	50.4	23.5
<b>Min</b>	<b>7.4</b>	<b>19.0</b>	<b>49.2</b>	<b>21.7</b>
<b>Max</b>	<b>11.9</b>	<b>24.7</b>	<b>56.4</b>	<b>31.8</b>
<b>Average</b>	<b>9.0</b>	<b>22.1</b>	<b>53.1</b>	<b>27.8</b>

### JSPCB Norms

<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>(µg/m<sup>3</sup>)</b>	<b>(µg/m<sup>3</sup>)</b>	<b>(µg/m<sup>3</sup>)</b>	<b>(µg/m<sup>3</sup>)</b>
80	80	100	60

## DALMIA CEMENT BHARAT LIMITED, BOKARO

### MANUAL STACK EMISSION MONITORING REPORT OF VRM BAG HOUSE STACK FROM APRIL 2023 TO SEPTEMBER 2023.

Month	Min.	Max.	Avg.
April-2023,	19.7	26.9	23.3
May-2023,	16.9	27.3	22.1
June-2023,	14.7	21.8	18.2
July-2023,	12.8	22.4	17.1
August-2023,	13.8	25.2	19.5
September-2023,	14.6	20.9	17.8
<b>Min.</b>	<b>12.8</b>	<b>20.9</b>	<b>17.1</b>
<b>Max.</b>	<b>19.7</b>	<b>27.3</b>	<b>23.3</b>
<b>Avg.</b>	<b>15.6</b>	<b>24.0</b>	<b>19.8</b>

### ONLINE STACK EMISSION MONITORING REPORT OF VRM BAG HOUSE STACK FROM APRIL 2023 TO SEPTEMBER 2023

Month	Min.	Max.	Avg.
April-2023,	9.43	25.51	18.7
May-2023,	10.39	21.26	17.1
June-2023,	7.5	28.0	19.5
July-2023,	5.26	23.7	17.9
August-2023,	6.45	22.21	14.7
September-2023,	9.86	23.23	19.2
<b>Min.</b>	<b>5.3</b>	<b>21.2</b>	<b>14.7</b>
<b>Max.</b>	<b>10.4</b>	<b>28.0</b>	<b>19.5</b>
<b>Avg.</b>	<b>8.1</b>	<b>24.8</b>	<b>17.9</b>

JSPCB Norms	30 mg/Nm <sup>3</sup>
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# DALMIA CEMENT BHARAT LIMITED, BOKARO

## NOISE LEVEL REPORT FROM APRIL 2023 TO SEPTEMBER 2023

Near Time office							
Month	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
April-2023,	61.5	64.7	62.6		57.5	61.4	59.7
May-2023,	62.3	63.6	63.2		55.8	60.3	58.2
June-2023,	63.7	65.1	64.1		54.7	59.2	56.8
July-2023,	61.1	64.2	63.0		58.4	62.5	60.5
August-2023,	62.7	66.9	64.7		54.1	63.9	61.4
September-2023,	61.5	64.2	62.3		56.4	61.5	59.9

Near FH 3&4 Building							
Month	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
April-2023,	40.3	44.9	42.4		39.8	42.9	41.3
May-2023,	42.9	43.5	43.2		41.6	43.3	42.5
June-2023,	41.6	42.1	41.7		42.7	46.2	44.1
July-2023,	43.1	44.3	42.8		37.9	41.7	40.3
August-2023,	42.8	43.7	43.1		40.6	43.5	41.8
September-2023,	40.6	42.2	41.7		39.9	42.5	41.0

Wagon Tippler							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
April-2023,	65.3	69.1	67.6		63.3	65.6	64.3
May-2023,	63.8	65.6	64.7		62.4	63.2	61.8
June-2023,	64.9	68.6	66.0		61.6	62.7	62.7
July-2023,	62.3	67.8	65.0		60.3	65.2	64.6
August-2023,	63.5	68.1	66.8		61.9	64.5	63.2
September-2023,	64.3	67.8	65.0		60.8	63.9	62.4

Near Fabrication yard							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
April-2023,	62.6	69.1	67.1		63.3	65.6	64.3
May-2023,	64.2	67.1	65.4		59.4	61.6	60.4
June-2023,	65.7	68.2	66.8		58.6	62.9	61.7
July-2023,	63.3	69.1	67.2		61.9	65.3	63.6
August-2023,	65.7	69.4	66.8		60.5	64.1	62.3
September-2023,	64.9	67.7	65.3		59.3	62.1	60.9

## DALMIA CEMENT BHARAT LIMITED, BOKARO

### FUGITIVE DUST EMISSION MONITORING REPORT FROM APRIL 2023 TO SEPTEMBER 2023

Sr. No	Date of monitoring	Near Mill area µg/m <sup>3</sup>	Near Coal yard µg/m <sup>3</sup>	Near Packing plant µg/m <sup>3</sup>	Near raw material yard µg/m <sup>3</sup>
1	April-2023,	1137.1	1042.1	1027.6	1157.8
2	May-2023,	1253.6	1193.7	887.9	1073.4
3	June-2023,	1270.3	936.6	1131.5	893.12
4	July-2023,	963.6	843.5	1322.4	932.75
5	August-2023,	826.7	912.3	1035.7	725.3
6	September-2023,	785.2	968.5	993.4	1024.5
	<b>Min.</b>	<b>785.2</b>	<b>843.5</b>	<b>887.9</b>	<b>725.3</b>
	<b>Max.</b>	<b>1270.3</b>	<b>1193.7</b>	<b>1322.4</b>	<b>1157.8</b>
	<b>Avg.</b>	<b>1036.50</b>	<b>991.74</b>	<b>1076.1</b>	<b>961.25</b>

<b>Fugitive dust CPCB Norms</b>	<b>2000 µg/m<sup>3</sup></b>
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### GROUND WATER LEVEL REPORT OF SURROUNDING VILLAGES FROM APRIL 2023 TO SEPTEMBER 2023

Location	Coordinate of Site	Distance from Plant site (KM)	Depth from ground (feet)					
			Month	April-2023,	May-2023,	June-2023,	July-2023,	August-2023,
Pakhriatand (Near Anganwadi)	23070'5590"N 86006'2678" E	1	20'5"	23'4"	25'2"	23'5"	17'6"	19'10"
Tupkadi (Near Electric Pole)	23071'3362"N 86006'1573" E	1	16'0"	16'8"	19'0"	18'1"	15'4"	18'1"
Godawali (Near Temple)	23068'7751"N 86006'0031" E	1	6'9"	6'9"	8'5"	6'7"	2'5"	2'10"
Bhutkuru (Near primary School)	23070'4642"N 86005'1418" E	1	17'9"	18'3"	20'1"	18'4"	15'3"	12'8"

# DALMIA CEMENT BHARAT LIMITED, BOKARO

## STP OUTLET WATER QUALITY ANALYSIS REPORT

STP OUTLET WATER QUALITY ANALYSIS REPORT FROM APRIL 2023 TO SEPTEMBER 2023 (OUTLET)						
Sr. No	Parameter	PH	Suspended solids mg/lit	COD	BOD mg/lit	Oil & Grease mg/lit.
	Norms	5.5-9.0		mg/lit		
1	April-,2023	7.6	13	40	8.5	4.3
2	May-,2023	7.5	15	45	7.2	6.1
3	June-,2023	7.1	18	48	8.6	6.0
4	July -2023	7.6	21	44	6.0	4.8
5	August,2023	7.5	22	40	5.1	4.4
6	September,2023	7.2	18	32	BDL	7.2
	<b>Min.</b>	<b>7.1</b>	<b>13</b>	<b>32</b>	<b>5.1</b>	<b>4.3</b>
	<b>Max.</b>	<b>7.63</b>	<b>22</b>	<b>48</b>	<b>8.6</b>	<b>7.2</b>
	<b>Avg.</b>	<b>7.41</b>	<b>18</b>	<b>41</b>	<b>7.0</b>	<b>5.5</b>

# THIRD PARTY ENVIRONMENT MONITORING REPORT OF SEPTEMBER 2023

## Ambient Air Quality monitoring report



### Institute for Environmental Management

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	1	2	1	3
Discipline: Chemical	Group: Atmospheric Pollution										Sub-Group: Ambient Air							
Report Issue Date: 20-09-2023											Test Report No.: RN-230308001A01							
Sample ID: 230915AP01001											Sample Description: Ambient Air							
Challan No./P.O. No.: 4548023834/237											Challan No./ P.No. Date: 17-09-2022							
Issued to: Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India																		
Type of Industry: Cement										Customer Representative: Sanjeev Verma								
Sample Drawn by: IEM Team										Sampling Date: 13-09-2023 to 14-09-2023								
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																		
Sampling Location: Near Main Gate																		
Field Meteorological Information					A. Temp. (°C): 29				R.H. (%): 62			W.C.: Sunny				W.D.: NW to SE		
Sample Receiving date: 15-09-2023					Testing Started: 15-09-2023					Testing Ended: 19-09-2023								

#### ---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006	µg/m <sup>3</sup>	100	69.8
2.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 Part 24:2019	µg/m <sup>3</sup>	60	28.9
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part-02	µg/m <sup>3</sup>	80	11.4
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part-06	µg/m <sup>3</sup>	80	24.9
5.	Ammonia (NH <sub>3</sub> )	IS 5182 Part 25	µg/m <sup>3</sup>	400	44.5
6.	OZONE (O <sub>3</sub> )	IS 5182 Part 09	µg/m <sup>3</sup>	100	20.1
7.	ARSENIC (as As)	USEPA I.O. 3.2	ng/m <sup>3</sup>	----	BDL (MDL-02)
8.	LEAD (as Pb)	IS 5182 Part 22	µg/m <sup>3</sup>	1.0	0.04
9.	NICKEL (Ni)	IS 5182 Part 26	ng/m <sup>3</sup>	----	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: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

<b>Specific Contractual Notes -</b> 1. The laboratory accepts responsibility for content of this report. 2. This report shall not be reproduced except in full, without written approval of the MD. 3. This report is intended for only guidance and not for legal purpose or for advertisement. 4. Any complaint about this report should be communicated in writing within 7 days of its issue. 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 <a href="mailto:qm.iemeco@gmail.com">qm.iemeco@gmail.com</a> 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	Authorized Signatory
	(Shreya Sonal) Dy. Quality Manager	(Dr. S. C. Jain) 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](mailto:icm2012@rediffmail.com)

ISO 9001:2015  
ISO 45001:2018



# Institute for Environmental Management



Accredited by Jharkhand State Pollution Control Board, JSPCB  
 Certified by ISO 9001:2015 (Quality Management System)  
 ISO 45001:2018 (Occupational Health & Safety Management System)

## Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Ambient Air
<b>Report Issue Date:</b> 20-09-2023	<b>Test Report No.:</b> RN-230308001A01	
<b>Sample ID:</b> 230915AP01001	<b>Sample Description:</b> Ambient Air	
<b>Challan No./P.O. No.:</b> 4548023834/237	<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India		
<b>Type of Industry:</b> Cement	<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team	<b>Sampling Date:</b> 13-09-2023 to 14-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
<b>Sampling Location:</b> Near Main Gate		
<b>Field Meteorological Information</b>	<b>A. Temp. (°C):</b> 29	<b>R.H. (%):</b> 62
	<b>W.C.:</b> Sunny	<b>W.D.:</b> NW to SE
<b>Sample Receiving date:</b> 15-09-2023	<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023

### ----Test Results----

Sl. 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/m <sup>3</sup>	----	BDL (MDL-0.18)
2.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m <sup>3</sup>	----	BDL(MDL-1.8)
3.	BENZENE (C <sub>6</sub> H <sub>6</sub> )	IS 5182 Part 11	µg/m <sup>3</sup>	----	BDL (MDL- 0.06)

### ----End of Report----

<b>Env. Condition of Lab.</b>	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
<b>Abbreviation</b>	MDL: Minimum Detection Limit, BDL: Below Detection Limit
<b>Norms** is Specified</b>	National Ambient Air Quality Standards (NAAQS), 2009.
<b>Remark</b>	Sample Comply with prescribed specification.

Tested By: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

#### Specific Contractual Notes :-

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- In case of feedback/ complaints, please send an email at [gm\\_iemeco@gmail.com](mailto:gm_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 by	Authorized Signatory
(Shreya Sonal)	(Dr. S. C. Jain)
Dy. Quality Manager	Director



Corporate office - A-8, Medi 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](mailto:iem2012@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	1	2	1	4
Discipline:	Chemical		Group: Atmospheric Pollution						Sub-Group: Ambient Air									
Report Issue Date:	20-09-2023									Test Report No.: RN-230308001A02								
Sample ID:	230915AP01002									Sample Description: Ambient Air								
Challan No./P.O. No.:	4548023834/237									Challan No./ P.No. Date: 17-09-2022								
Issued to: Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India																		
Type of Industry:	Cement									Customer Representative: Sanjeev Verma								
Sample Drawn by:	IEM Team									Sampling Date: 13-09-2023 to 14-09-2023								
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																		
Sampling Location: Near Fabrication Yard																		
Field Meteorological Information	A. Temp. (°C): 29			R.H. (%): 62			W.C.: Sunny			W.D.: NW to SE								
Sample Receiving date:	15-09-2023			Testing Started:			15-09-2023			Testing Ended:						19-09-2023		

### ----Test Results----

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006	µg/m <sup>3</sup>	100	67.9
2.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 Part 24:2019	µg/m <sup>3</sup>	60	28.5
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part-02	µg/m <sup>3</sup>	80	14.2
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part-06	µg/m <sup>3</sup>	80	31.0
5.	Ammonia (NH <sub>3</sub> )	IS 5182 Part 25	µg/m <sup>3</sup>	400	39.4
6.	OZONE (O <sub>3</sub> )	IS 5182 Part 09	µg/m <sup>3</sup>	100	17.8
7.	ARSENIC (as As)	USEPA I.O. 3.2	ng/m <sup>3</sup>	----	BDL (MDL-02)
8.	LEAD (as Pb)	IS 5182 Part 22	µg/m <sup>3</sup>	1.0	0.03
9.	NICKEL (Ni)	IS 5182 Part 26	ng/m <sup>3</sup>	----	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: Neema Kumari

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.

Quality Checked by	Authorized Signatory
(Shreya Sonal) Dy. Quality Manager	(Dr. S. C. Jain) 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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# Institute for Environmental Management



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

## Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Ambient Air
<b>Report Issue Date:</b> 20-09-2023	<b>Test Report No.:</b> RN-230308001A02	
<b>Sample ID:</b> 230915AP01002	<b>Sample Description:</b> Ambient Air	
<b>Challan No./P.O. No.:</b> 4548023834/237	<b>Challan No./P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India		
<b>Type of Industry:</b> Cement	<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team	<b>Sampling Date:</b> 13-09-2023 to 14-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
<b>Sampling Location:</b> Near Fabrication Yard		
<b>Field Meteorological Information</b>	A. Temp. (°C): 29	R.H. (%): 62
	W.C.: Sunny	W.D.: NW to SE
<b>Sample Receiving date:</b> 15-09-2023	<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023

### ---Test Results---

Sl. 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/m <sup>3</sup>	----	BDL (MDL-0.18)
2.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m <sup>3</sup>	----	BDL(MDL-1.8)
3.	BENZENE (C <sub>6</sub> H <sub>6</sub> )	IS 5182 Part 11	µg/m <sup>3</sup>	----	BDL (MDL-0.06)

### ---End of Report---

<b>Env. Condition of Lab.</b>	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
<b>Abbreviation</b>	MDL: Minimum Detection Limit, BDL: Below Detection Limit
<b>Norms** is Specified</b>	National Ambient Air Quality Standards (NAAQS), 2009.
<b>Remark</b>	Sample Comply with prescribed specification.

Tested By: Neema Kumari

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.

Quality Checked by	Authorized Signatory
(Shreya Sonal)	(Dr. 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

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## Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	2	1	6
Discipline:	Chemical		Group: Atmospheric Pollution						Sub-Group: Ambient Air									
Report Issue Date:	20-09-2023									Test Report No.: RN-230308001A04								
Sample ID:	230915AP01004									Sample Description: Ambient Air								
Challan No./P.O. No.:	4548023834/237									Challan No./ P.No. Date: 17-09-2022								
Issued to:																		
Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India																		
Type of Industry: Cement									Customer Representative: Sanjeev Verma									
Sample Drawn by: IEM Team									Sampling Date: 13-09-2023 to 14-09-2023									
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																		
Sampling Location: Near Wagon Tippler																		
Field Meteorological Information			A. Temp. (°C): 29			R.H. (%): 62			W.C.: Sunny			W.D.: NW to SE						
Sample Receiving date: 15-09-2023					Testing Started: 15-09-2023					Testing Ended: 19-09-2023								

### ---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006	µg/m <sup>3</sup>	100	65.2
2.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 Part 24:2019	µg/m <sup>3</sup>	60	30.9
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part-02	µg/m <sup>3</sup>	80	13.5
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part-06	µg/m <sup>3</sup>	80	25.0
5.	Ammonia (NH <sub>3</sub> )	IS 5182 Part 25	µg/m <sup>3</sup>	400	34.8
6.	OZONE (O <sub>3</sub> )	IS 5182 Part 09	µg/m <sup>3</sup>	100	33.9
7.	ARSENIC (as As)	USEPA I.O. 3.2	ng/m <sup>3</sup>	----	BDL (MDL-02)
8.	LEAD (as Pb)	IS 5182 Part 22	µg/m <sup>3</sup>	1.0	0.04
9.	NICKEL (Ni)	IS 5182 Part 26	ng/m <sup>3</sup>	----	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: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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Quality Checked by \_\_\_\_\_ Authorized Signatory

*Shreya Sonali*  
(Shreya Sonali)

Dy. Quality Manager \* Ranchi \* 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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ISO 45001:2018





# Institute for Environmental Management



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

## Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Ambient Air
<b>Report Issue Date:</b> 20-09-2023	<b>Test Report No.:</b> RN-230308001A04	
<b>Sample ID:</b> 230915AP01004	<b>Sample Description:</b> Ambient Air	
<b>Challan No./P.O. No.:</b> 4548023834/237	<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India		
<b>Type of Industry:</b> Cement	<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team	<b>Sampling Date:</b> 13-09-2023 to 14-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
<b>Sampling Location:</b> Near Wagon Tippler		
<b>Field Meteorological Information</b>	A. Temp. (°C): 29	R.H. (%): 62
	W.C.: Sunny	W.D.: NW to SE
<b>Sample Receiving date:</b> 15-09-2023	<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023

### ---Test Results---

Sl. 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/m <sup>3</sup>	----	BDL (MDL-0.18)
2.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m <sup>3</sup>	----	BDL(MDL-1.8)
3.	BENZENE (C <sub>6</sub> H <sub>6</sub> )	IS 5182 Part 11	µg/m <sup>3</sup>	----	BDL (MDL- 0.06)

### ---End of Report---

<b>Env. Condition of Lab.</b>	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
<b>Abbreviation</b>	MDL: Minimum Detection Limit, BDL: Below Detection Limit
<b>Norms** is Specified</b>	National Ambient Air Quality Standards (NAAQS), 2009.
<b>Remark</b>	Sample Comply with prescribed specification.

Tested By: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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Quality Checked by \_\_\_\_\_ Authorized Signatory

Shreyas  
 (Shreya Saha)  
 Dy. Quality Manager

(Dr. S. C. Jain)  
 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](mailto:iem2012@rediffmail.com)



# STACK EMISSION REPORT



## Institute for Environmental Management

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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	1	2	3	3
Discipline: Chemical			Group: Atmospheric Pollution						Sub-Group: Stack Emission								
Report Issue Date: 20-09-2023										Test Report No.: RN-23030800151							
Sample ID: 230915AP04001										Sample Description: Stack Emission							
Challan No./P.O. No.: 4548023834/237										Challan No./ P.No. Date: 17-09-2022							
Issued to: <b>Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works)</b> <b>Plot No IV/A-7(P), Bokaro Industrial Area Balidih</b> <b>Bokaro Steel City, Bokaro-827014 Jharkhand India</b>																	
Type of Industry: Cement										Customer Representative: Sanjeev Verma							
Sample Drawn by: IEM Team										Sampling Date: 14-09-2023							
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																	
Field Meteorological Information			A. Temp. (°C): 28			R.H. (%): 64			W.C.: Sunny			W.D.: North to South					
Sample Receiving date: 15-09-2023					Testing Started: 15-09-2023					Testing Ended: 19-09-2023							

#### General Physical Information

Stack Identification	BAG HOUSE MILL	Stack Height from Ground Level (m)	50
Emission Due to	Induction Furnace	Port Hole Height from Ground Level (m)	30
Plat Form	Permanent	Inner Dimension of Stack (m)	3.7
Stack Description	Common	Type of Fuel Used	Electricity
Shape of Stack	Circular	Quantity of Fuel	-
Construction Material	Metal	Production Capacity	-
Sampling Port	Available	Pollution Control Device (if any)	Bag Filter

#### Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Flue Gas Temperature	IS 11255 (Part-3)	°K	369	--
2.	Flue Gas Velocity	IS 11255 (Part-3)	m/s	13.5	--
3.	Flue Gas Volumetric Flow Rate	IS 11255 (Part-3)	Nm <sup>3</sup> /hr.	409767.4	--
4.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm <sup>3</sup>	18.6	--

Dust	Kg/hr	7.6
------	-------	-----

#### ---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: Neema Kumari

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.	 (S. C. Jain) 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 - [iem2012@rediffmail.com](mailto:iem2012@rediffmail.com)

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# STP INLET & OUTLET WATER ANALYSIS REPORT



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



### Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Pollution & Environment	<b>Sub-Group:</b> Waste Water
<b>Report Issue Date:</b> 16-09-2023	<b>Test Report No.:</b> RN-230308001WW01	
<b>Sample ID:</b> 230914PE01001	<b>Sample Description:</b> Waste Water (STP)	
<b>Challan No./P.O. No.:</b> 4548023834/237	<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India		
<b>Type of Industry:</b> Cement	<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team	<b>Sampling Date:</b> 13-09-2023	
<b>Protocol:</b> CPCB Guideline & IS Method 3025 Part-01		
<b>Sampling Location:</b> NEAR STP PLANT (INLET)		
<b>Sample Receiving date:</b> 14-09-2023	<b>Testing Started:</b> 14-09-2023	<b>Testing Ended:</b> 16-09-2023

---Test Result---

Sl. No.	Tested Parameters	Unit	Method No.	Norms**	Results
1.	pH value at 25°C	----	IS 3025 (Part-11)	--	8.0
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	--	48
3.	Biochemical Oxygen Demand (BOD)	mg/l	IS 3025 (Part-44)	--	16.0
4.	Chemical Oxygen Demand (COD)	mg/l	IS 3025 (Part-58)	--	96.0
5.	Oil & Grease	mg/l	IS 3025 (Part-39)	--	39.6

---End of Report---

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

**Tested By:** Amisha Kumari

**Sample Drawn By:** Deepak Kumar Singh & Team

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Quality Checked by \_\_\_\_\_ Authorized Signatory \_\_\_\_\_

(Shreya Sobal) (Dr. S. C. Jain)  
 Dy. Quality Manager Director



Corporate office - A-8, Medi 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,  
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## Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Pollution & Environment	<b>Sub-Group:</b> Waste Water
<b>Report Issue Date:</b> 16-09-2023	<b>Test Report No.:</b> RN-230308001WW02	
<b>Sample ID:</b> 230914PE01002	<b>Sample Description:</b> Waste Water (STP)	
<b>Challan No./P.O. No.:</b> 4548023834/237	<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India		
<b>Type of Industry:</b> Cement	<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team	<b>Sampling Date:</b> 13-09-2023	
<b>Protocol:</b> CPCB Guideline & IS Method 3025 Part-01		
<b>Sampling Location:</b> NEAR STP PLANT (OUTLET)		
<b>Sample Receiving date:</b> 14-09-2023	<b>Testing Started:</b> 14-09-2023	<b>Testing Ended:</b> 16-09-2023

### ----Test Result----

Sl. No.	Tested Parameters	Unit	Method No.	Norms**	Results
1.	pH value at 25°C	----	IS 3025 (Part-11)	5.5 to 9.0	7.21
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	18.0
3.	Biochemical Oxygen Demand (BOD)	mg/l	IS 3025 (Part-44)	30	BDL(MDL 0.2)
4.	Chemical Oxygen Demand (COD)	mg/l	IS 3025 (Part-58)	250	32.0
5.	Oil & Grease	mg/l	IS 3025 (Part-39)	10	7.2

### ----End of Report----

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

Tested By: Amisha Kumari

Sample Drawn By: Deepak Kumar Singh & Team

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Quality Checked by \_\_\_\_\_ Authorized Signatory

   
 (Shreya Sonal) (Dr. S. C. Jain)

Dy. Quality Manager \* Ranchi \* 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](mailto:iem2012@rediffmail.com)





## Fugitive Dust Emission report



### Institute for Environmental Management

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



#### Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Work Environment & Indoor Air
<b>Report Issue Date:</b> 20-09-2023	<b>Test Report No.:</b> RN-230308001FE04	
<b>Sample ID:</b> 230915AP02004	<b>Sample Description:</b> Fugitive Emission	
<b>Challan No./P.O. No.:</b> 4548023834/237	<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India		
<b>Type of Industry:</b> Cement	<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team	<b>Sampling Date:</b> 14-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
<b>Sampling Location:</b> Near Packing Plant		
<b>Field Meteorological Information</b>	<b>A. Temp. (°C):</b> 28	<b>R.H. (%):</b> 65
	<b>W.C.:</b> Sunny	<b>W.D.:</b> NW to SE
<b>Sample Receiving date:</b> 15-09-2023	<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023

#### ----Test Results----

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Particulate Matter (SPM)	IS 5182 Part - 04	µg/m <sup>3</sup>	2000	1005.6

#### ----End of Report----

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

**Tested By:** Neema Kumari

**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.

<b>Quality Checked by</b>	<b>Authorized Signatory</b>
 (Shreya Boral) Dy. Quality Manager	 (Dr. S. C. Jain) 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 - [icm2012@rediffmail.com](mailto:icm2012@rediffmail.com)





# Institute for Environmental Management



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

## Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Work Environment & Indoor Air	
<b>Report Issue Date:</b> 20-09-2023	<b>Test Report No.:</b> RN-230308001FE03		
<b>Sample ID:</b> 230915AP02003	<b>Sample Description:</b> Fugitive Emission		
<b>Challan No./P.O. No.:</b> 4548023834/237	<b>Challan No./ P.No. Date:</b> 17-09-2022		
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India			
<b>Type of Industry:</b> Cement		<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team		<b>Sampling Date:</b> 14-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series			
<b>Sampling Location:</b> Near Mill Area			
<b>Field Meteorological Information</b>	<b>A. Temp. (°C):</b> 28	<b>R.H. (%):</b> 65	<b>W.C.:</b> Sunny
			<b>W.D.:</b> NW to SE
<b>Sample Receiving date:</b> 15-09-2023	<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023	

### ----Test Results----

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Particulate Matter (SPM)	IS 5182 Part - 04	µg/m <sup>3</sup>	2000	1058.4

### ----End of Report----

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

Tested By: Neema Kumari

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 by: \_\_\_\_\_ Authorized Signatory

*Shreya Soni*   
 (Shreya Soni) (Dr. 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 - [iem2012@rediffmail.com](mailto:iem2012@rediffmail.com)







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

## Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Work Environment & Indoor Air
Report Issue Date: 20-09-2023	Test Report No.: RN-230308001FE01	
Sample ID: 230915AP02001	Sample Description: Fugitive Emission	
Challan No./P.O. No.: 4548023834/237	Challan No./ P.No. Date: 17-09-2022	
Issued to: Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India		
Type of Industry: Cement	Customer Representative: Sanjeev Verma	
Sample Drawn by: IEM Team	Sampling Date: 14-09-2023	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: Truck Parking Area		
Field Meteorological Information	A. Temp. (°C): 28	R.H. (%): 65
	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date: 15-09-2023	Testing Started: 15-09-2023	Testing Ended: 19-09-2023

### ---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Particulate Matter (SPM)	IS 5182 Part - 04	µg/m <sup>3</sup>	2000	1167.3

### ---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 30 <sup>th</sup> May 2008.
Remark	Sample comply with the prescribed specification.

Tested By: Neema Kumari

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 by	Authorized Signatory
(Shreya Sonah)	(Dr. 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 - [iem2012@rediffmail.com](mailto:iem2012@rediffmail.com)





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## Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Work Environment & Indoor Air
<b>Report Issue Date:</b> 20-09-2023	<b>Test Report No.:</b> RN-230308001FE02	
<b>Sample ID:</b> 230915AP02002	<b>Sample Description:</b> Fugitive Emission	
<b>Challan No./P.O. No.:</b> 4548023834/237	<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India		
<b>Type of Industry:</b> Cement	<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team	<b>Sampling Date:</b> 14-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
<b>Sampling Location:</b> Near Clinker Silo(Raw material yard)		
<b>Field Meteorological Information</b>	<b>A. Temp. (°C):</b> 28	<b>R.H. (%):</b> 65
	<b>W.C.:</b> Sunny	<b>W.D.:</b> NW to SE
<b>Sample Receiving date:</b> 15-09-2023	<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023

### ----Test Results----

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Particulate Matter (SPM)	IS 5182 Part - 04	µg/m <sup>3</sup>	2000	997.9

### ----End of Report----

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

Tested By: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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	(Shreya Sonali)	(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

Ph - 8407804254, 8407804251, Email - [icm2012@rediffmail.com](mailto:icm2012@rediffmail.com)





# Work place monitoring report



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### Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Work Environment & Indoor Air	
<b>Report Issue Date:</b> 20-09-2023		<b>Test Report No.:</b> RN-230308001WPM03	
<b>Sample ID:</b> 230915AP02010		<b>Sample Description:</b> Work Zone	
<b>Challan No./P.O. No.:</b> 4548023834/237		<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India			
<b>Type of Industry:</b> Cement		<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team		<b>Sampling Date:</b> 15-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series			
<b>Sampling Location:</b> WAGON LOADING AREA			
<b>Field Meteorological Information</b>			
<b>A. Temp. (°C):</b> 27	<b>R.H. (%):</b> 68	<b>W.C.:</b> Partly Sunny	<b>W.D.:</b> NW to SE
<b>Sample Receiving date:</b> 15-09-2023	<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023	

---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Particulate Matter (SPM)	IS 5182 Part - 04	mg/m <sup>3</sup>	10	5.3

---End of Report---

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

Tested By: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

<b>Specific Contractual Notes: -</b> 1. The laboratory accepts responsibility for content of this report. 2. This report shall not be reproduced except in full, without written approval of the MD. 3. This report is intended for only guidance and not for legal purpose or for advertisement. 4. Any complaint about this report should be communicated in writing within 7 days of its issue. 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 <a href="mailto:qm.iemeco@gmail.com">qm.iemeco@gmail.com</a>	Quality Checked by _____ Authorized Signatory	
	 (Shreya Sohal)	 (Dr. 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,  
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## Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Work Environment & Indoor Air	
<b>Report Issue Date:</b> 20-09-2023		<b>Test Report No.:</b> RN-230308001WPM02	
<b>Sample ID:</b> 230915AP02009		<b>Sample Description:</b> Work Zone	
<b>Challan No./P.O. No.:</b> 4548023834/237		<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India			
<b>Type of Industry:</b> Cement		<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team		<b>Sampling Date:</b> 15-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series			
<b>Sampling Location:</b> MILL AREA			
<b>Field Meteorological Information</b>		<b>A. Temp. (°C):</b> 27	<b>R.H. (%):</b> 68
		<b>W.C.:</b> Partly Sunny	<b>W.D.:</b> NW to SE
<b>Sample Receiving date:</b> 15-09-2023		<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023

### ---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Particulate Matter (SPM)	IS 5182 Part - 04	mg/m <sup>3</sup>	10	6.6

### ---End of Report---

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

Tested By: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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	(Shreya Sonal)	Dr. 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 Bhowan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India

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## Test Report

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Work Environment & Indoor Air	
<b>Report Issue Date:</b> 20-09-2023		<b>Test Report No.:</b> RN-230308001WPM01	
<b>Sample ID:</b> 230915AP02008		<b>Sample Description:</b> Work Place Monitoring	
<b>Challan No./P.O. No.:</b> 4548023834/237		<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India			
<b>Type of Industry:</b> Cement		<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team		<b>Sampling Date:</b> 15-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series			
<b>Sampling Location:</b> PACKING FLOOR AREA			
<b>Field Meteorological Information</b>		<b>A. Temp. (°C):</b> 27	<b>R.H. (%):</b> 68
		<b>W.C.:</b> Partly Sunny	<b>W.D.:</b> NW to SE
<b>Sample Receiving date:</b> 15-09-2023		<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023

### ---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Particulate Matter (SPM)	IS 5182 Part - 04	mg/m <sup>3</sup>	10	7.5

### ---End of Report---

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

Tested By: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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	(Shreya Sonal)	(Dr. S. C. Jain)
	Dy. Quality Manager	Director



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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

<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution	<b>Sub-Group:</b> Work Environment & Indoor Air	
<b>Report Issue Date:</b> 20-09-2023		<b>Test Report No.:</b> RN-230308001WPM04	
<b>Sample ID:</b> 230915AP02A001		<b>Sample Description:</b> Work Zone	
<b>Challan No./P.O. No.:</b> 4548023834/237		<b>Challan No./ P.No. Date:</b> 17-09-2022	
<b>Issued to:</b> Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India			
<b>Type of Industry:</b> Cement		<b>Customer Representative:</b> Sanjeev Verma	
<b>Sample Drawn by:</b> IEM Team		<b>Sampling Date:</b> 15-09-2023	
<b>Protocol:</b> CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series			
<b>Sampling Location:</b> TRUCK LOADING AREA			
<b>Field Meteorological Information</b>	<b>A. Temp. (°C):</b> 27	<b>R.H. (%):</b> 68	<b>W.C.:</b> Partly Sunny <b>W.D.:</b> NW to SE
<b>Sample Receiving date:</b> 15-09-2023	<b>Testing Started:</b> 15-09-2023	<b>Testing Ended:</b> 19-09-2023	

### ---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Particulate Matter (SPM)	IS 5182 Part - 04	mg/m <sup>3</sup>	10	6.8

### ---End of Report---

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

Tested By: Neema Kumari

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.

Quality Checked by Authorized Signatory

*Shreya Sohal* *(Signature)*  
 (Shreya Sohal) (Dr. S. C. Jain)  
 Dy. Quality Manager, Ranchi 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](mailto:iem2012@rediffmail.com)





# Noise Level Report



## Institute for Environmental Management

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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	1	2	2	1	
Discipline:	Chemical		Group: Atmospheric Pollution						Sub-Group: Ambient Noise Levels (Excluding Vibration)										
Report Issue Date:	20-09-2023								Test Report No.: RN-230308001N1										
Sample ID:	230915AP03001								Sample Description: Ambient Noise										
Challan No./P.O. No.:	4548023834/237								Challan No./ P.No. Date: 17-09-2022										
Issued to:																			
Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India																			
Type of Industry: Cement									Customer Representative: Sanjeev Verma										
Sample Drawn by: IEM Team									Sampling Date: 13-09-2023 to 14-09-2023										
Protocol: CPCB Guideline & IS Method 9989:1981																			
Sampling Location: Near Main Gate																			
Field Meteorological Information			A. Temp. (°C): 29			R.H. (%): 65			W.C.: Sunny			W.D.: NW to SE							
Sample Receiving date: 15-09-2023					Testing Started: 15-09-2023					Testing Ended: 19-09-2023									

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	65.9	59.4	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: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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	 (Shreya Sonal)	 (Dr. S. C. Jain)
	Dy. Quality Manager	Director
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, Medi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

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

Ph - 8407804253, 8407804251, Email - [iem2012@rediffmail.com](mailto: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	1	2	2	2
Discipline: Chemical	Group: Atmospheric Pollution					Sub-Group: Ambient Noise Levels (Excluding Vibration)												
Report Issue Date: 20-09-2023	Test Report No.: RN-230308001N2																	
Sample ID: 230915AP03002	Sample Description: Ambient Noise																	
Challan No./P.O. No.: 4548023834/237	Challan No./ P.No. Date: 17-09-2022																	
Issued to: Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India																		
Type of Industry: Cement									Customer Representative: Sanjeev Verma									
Sample Drawn by: IEM Team									Sampling Date: 13-09-2023 to 14-09-2023									
Protocol: CPCB Guideline & IS Method 9989:1981																		
Sampling Location: Near Fabrication Yard																		
Field Meteorological Information			A. Temp. (°C): 29			R.H. (%): 65			W.C.: Sunny			W.D.: NW to SE						
Sample Receiving date: 15-09-2023					Testing Started: 15-09-2023					Testing Ended: 19-09-2023								

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	71.9	61.3	D-75 N-70

---End of Reports---

### Note: -

- 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.
- Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- 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.
- 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: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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	 (Shreya Sonal) Dy. Quality Manager	 (Dr. S. C. Jain) Director

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

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

Fh - 8407804253, 8407804251, Email - [iem2012@rediffmail.com](mailto: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	1	2	2	3
Discipline: Chemical	Group: Atmospheric Pollution					Sub-Group: Ambient Noise Levels (Excluding Vibration)												
Report Issue Date: 20-09-2023									Test Report No.: RN-230308001N3									
Sample ID: 230915AP03003									Sample Description: Ambient Noise									
Challan No./P.O. No.: 4548023834/237									Challan No./ P.No. Date: 17-09-2022									
Issued to: <b>Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works)</b> <b>Plot No IV/A-7(P), Bokaro Industrial Area Balidih</b> <b>Bokaro Steel City, Bokaro-827014 Jharkhand India</b>																		
Type of Industry: Cement									Customer Representative: Sanjeev Verma									
Sample Drawn by: IEM Team									Sampling Date: 13-09-2023 to 14-09-2023									
Protocol: CPCB Guideline & IS Method 9989:1981																		
Sampling Location: Near Colony																		
Field Meteorological Information			A. Temp. (°C): 29			R.H. (%): 65			W.C.: Sunny			W.D.: NW to SE						
Sample Receiving date: 15-09-2023						Testing Started: 15-09-2023						Testing Ended: 19-09-2023						

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	49.9	44.2	D-75 N-70

---End of Reports---

### Note: -

- 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.
- Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- 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.
- 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: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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	(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

Ph - 8407804253, 8407804251, Email - [icm2012@rediffmail.com](mailto:icm2012@rediffmail.com)

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## Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	2	2	4				
Discipline: Chemical	Group: Atmospheric Pollution					Sub-Group: Ambient Noise Levels (Excluding Vibration)																
Report Issue Date: 20-09-2023	Test Report No.: RN-230308001N4																					
Sample ID: 230915AP03004	Sample Description: Ambient Noise																					
Challan No./P.O. No.: 4548023834/237	Challan No./ P.No. Date: 17-09-2022																					
Issued to: Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India																						
Type of Industry: Cement									Customer Representative: Sanjeev Verma													
Sample Drawn by: IEM Team									Sampling Date: 13-09-2023 to 14-09-2023													
Protocol: CPCB Guideline & IS Method 9989:1981																						
Sampling Location: Near Wagon Tippler																						
Field Meteorological Information					A. Temp. (°C): 29				R.H. (%): 65				W.C.: Sunny				W.D.: NW to SE					
Sample Receiving date: 15-09-2023						Testing Started: 15-09-2023						Testing Ended: 19-09-2023										

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	64.4	57.2	D-75 N-70

---End of Reports---

### Note: -

- 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.
- Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- 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.
- 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: Neema Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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	(Shreya Sonal) Dy. Quality Manager	(Dr. S. C. Jain) 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 - [iem2012@rediffmail.com](mailto:iem2012@rediffmail.com)

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# GROUND WATER QUALITY REPORT NEAR VILLAGE AREA



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### Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	2	0	9
Discipline: Chemical	Group: Water						Sub-Group: Ground Water											
Report Issue Date: 20-09-2023	Test Report No.: RN-230308001GW1																	
Sample ID: 230915WA01001	Sample Description: Ground Water (Dug well)																	
Challan No./P.O. No.: 4548023834/237	Challan No./ P.No. Date: 17-09-2022																	
Issued to: <b>Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India</b>																		
Type of Industry: Cement	Customer Representative: Sanjeev Verma																	
Sample Drawn by: IEM Team	Sampling Date: 15-09-2023																	
Protocol: CPCB Guideline & IS Method 3025 Part-01																		
Sampling Location: Bhutkuru																		
Field Meteorological Information			A. Temp. (°C): 27			R.H. (%): 68			W.C.: Partly Sunny			W.D.: North to South						
Sample Receiving date: 15-09-2023					Testing Started: 15-09-2023					Testing Ended: 19-09-2023								

#### ---Test Result---

Sl. No.	Tested Parameter	Unit	Method No.	Limit		Results
				Acceptable	Permissible	
1.	pH value at 25°C	----	IS 3025 (Part-11)	6.5 – 8.5	No Relaxation	6.82
2.	Turbidity	NTU	IS 3025 (Part-10)	1	5	0.70
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	615.0
6.	Calcium (as Ca+2)	mg/l	IS 3025 (Part-40)	75	200	77.46
7.	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part-23)	200	600	94.0
8.	Total Hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part-21)	200	600	264.0
9.	Chloride (as Cl <sup>-</sup> )	mg/l	IS 3025 (Part-32)	250	1000	93.47
10.	Free Residual Chlorine	mg/l	IS 3025 (Part-26)	0.2	1.0	BDL(MDL-0.03)
11.	Sulphate (as SO <sub>4</sub> <sup>-2</sup> )	mg/l	IS 3025 (Part-24)	200	400	96.69
12.	Magnesium (as Mg+2)	mg/l	IS 3025 (Part-46)	30	100	17.01

#### ---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 :2021
Remark	Sample Comply with prescribed specification.

Tested By: Amisha Kumari

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 by \_\_\_\_\_ Authorized Signatory

 (Shreya Sonal) Dy. Quality Manager	 (Dr. S. C. Jain) 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 - [iem2012@rediffmail.com](mailto: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	1	2	1	1
Discipline: Chemical	Group: Residues and Contaminants in Water										Sub-Group: Trace Metals elements							
Report Issue Date: 20-09-2023										Test Report No.: RN-230308001GW1								
Sample ID: 230915RC01001 & 230915MB01001										Sample Description: Ground Water (Dug well)								
Challan No./P.O. No.: 4548023834/237										Challan No./ P.No. Date: 17-09-2022								
Issued to: <b>Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works)</b> <b>Plot No IV/A-7(P), Bokaro Industrial Area Balidih</b> <b>Bokaro Steel City, Bokaro-827014 Jharkhand India</b>																		
Type of Industry: Cement										Customer Representative: Sanjeev Verma								
Sample Drawn by: IEM Team										Sampling Date: 15-09-2023								
Protocol: IS Method & CPCB Guideline																		
Sampling Location: Bhutkuru																		
Field Meteorological Information					A. Temp. (°C): 27				R.H. (%): 68			W.C.: Partly Sunny				W.D.: North to South		
Sample Receiving date: 15-09-2023					Testing Started: 15-09-2023					Testing Ended: 19-09-2023								

### ---Test Result---

Sl. No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Copper	mg/l	APHA 3111 B.2017	0.5-1.5	BDL (MDL - 0.02)
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 - 0.07)
4.	Manganese (Mn)	mg/l	APHA 3111 B.2017	0.1 - 0.3	BDL (MDL - 0.08)
5.	Total Coliform	mg/l	IS 1622: 1981	Shall not be detectable in any 100 ml sample	BDL (MDL-1.8)
6.	E. Coli	mg/l	IS 1622: 1981		BDL (MDL-1.8)

### ---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: Amisha Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

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	<i>(Shreya Sonal)</i>	<i>(Dr. S. C. Jain)</i>
	Dy. Quality Manager	Director

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## Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	2	1	0				
Discipline:	Chemical					Group: Water					Sub-Group: Ground Water											
Report Issue Date:	20-09-2023										Test Report No.: RN-230308001GW2											
Sample ID:	230915WAO1002										Sample Description: Ground Water (Dug well)											
Challan No./P.O. No.:	4548023834/237										Challan No./ P.No. Date: 17-09-2022											
Issued to:																						
Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India																						
Type of Industry: Cement										Customer Representative: Sanjeev Verma												
Sample Drawn by: IEM Team										Sampling Date: 15-09-2023												
Protocol: CPCB Guideline & IS Method 3025 Part-01																						
Sampling Location: Pakhariya Tand																						
Field Meteorological Information					A. Temp. (°C): 27				R.H. (%): 68				W.C.: Partly Sunny				W.D.: North to South					
Sample Receiving date: 15-09-2023					Testing Started: 15-09-2023							Testing Ended: 19-09-2023										

### ----Test Result----

Sl. No.	Tested Parameter	Unit	Method No.	Limit		Results
				Acceptable	Permissible	
1.	pH value at 25°C	----	IS 3025 (Part-11)	6.5 – 8.5	No Relaxation	6.51
2.	Turbidity	NTU	IS 3025 (Part-10)	1	5	0.34
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	349.0
6.	Calcium (as Ca+2)	mg/l	IS 3025 (Part-40)	75	200	37.68
7.	Total Alkalinity (as CaCO3)	mg/l	IS 3025 (Part-23)	200	600	140.0
8.	Total Hardness (as CaCO3)	mg/l	IS 3025 (Part-21)	200	600	164.0
9.	Chloride (as Cl <sup>-</sup> )	mg/l	IS 3025 (Part-32)	250	1000	37.49
10.	Free Residual Chlorine	mg/l	IS 3025 (Part-26)	0.2	1.0	BDL(MDL 0.03)
11.	Sulphate (as SO <sub>4</sub> <sup>-2</sup> )	mg/l	IS 3025 (Part-24)	200	400	64.84
12.	Magnesium (as Mg+2)	mg/l	IS 3025 (Part-46)	30	100	37.86

### ----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: Amisha Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

<b>Specific Contractual Notes -</b> 1. The laboratory accepts responsibility for content of this report. 2. This report shall not be reproduced except in full, without written approval of the MD. 3. This report is intended for only guidance and not for legal purpose or for advertisement. 4. Any complaint about this report should be communicated in writing within 7 days of its issue. 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 <a href="mailto:qm.iemeco@gmail.com">qm.iemeco@gmail.com</a>	Quality Checked by	Authorized Signatory
	(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

Ph - 8407804253, 8407804251, Email - [iem2012@rediffmail.com](mailto:iem2012@rediffmail.com)

ISO 9001:2015  
ISO 45001:2018



# Institute for Environmental Management

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	1	2	1	2
Discipline: Chemical	Group: Residues and Contaminants in Water										Sub-Group: Trace Metals elements							
Report Issue Date: 20-09-2023										Test Report No.: RN-230308001GW2								
Sample ID: 230915RC01002 & 230915MB01002										Sample Description: Ground Water (Dug well)								
Challan No./P.O. No.: 4548023834/237										Challan No./ P.No. Date: 17-09-2022								
Issued to: Dalmia Cement (Bharat) Limited. (Jharkhand Cement Works) Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India																		
Type of Industry: Cement										Customer Representative: Sanjeev Verma								
Sample Drawn by: IEM Team										Sampling Date: 15-09-2023								
Protocol: IS Method & CPCB Guideline																		
Sampling Location: Pakhariya Tand																		
Field Meteorological Information					A. Temp. (°C): 27				R.H. (%): 68			W.C.: Partly Sunny				W.D.: North to South		
Sample Receiving date: 15-09-2023					Testing Started: 15-09-2023					Testing Ended: 19-09-2023								

### ----Test Result----

Sl. No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Copper	mg/l	APHA 3111 B.2017	0.5-1.5	BDL (MDL – 0.02)
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 – 0.07)
4.	Manganese (Mn)	mg/l	APHA 3111 B.2017	0.1 - 0.3	BDL (MDL – 0.08)
5.	Total Coliform	mg/l	IS 1622: 1981	Shall not be detectable in any 100 ml sample	BDL (MDL-1.8)
6.	E. Coli	mg/l	IS 1622: 1981		BDL (MDL-1.8)

### ----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: Amisha Kumari

Sample Drawn By: Rajiv Kumar Singh & Team

<b>Specific Contractual Notes:-</b> 1. The laboratory accepts responsibility for content of this report. 2. This report shall not be reproduced except in full, without written approval of the MD. 3. This report is intended for only guidance and not for legal purpose or for advertisement. 4. Any complaint about this report should be communicated in writing within 7 days of its issue 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 <a href="mailto:qm.iemeco@gmail.com">qm.iemeco@gmail.com</a> 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	Authorized Signatory
	(Shreya Sonali) Dy. Quality Manager	(Dr. S. C. Jain) Director

Corporate office - A-8, Medi 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

ISO 9001:2015  
ISO 45001:2018

## Annexure-2

### DALMIA CEMENT (BHARAT) LIMITED, 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**

<b>SL. No</b>	<b>Year</b>	<b>Number of plants</b>	<b>Area (in Acres)</b>
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 the place of dead tree
11	11 <sup>th</sup> (2021-2022)	500	
12	12 <sup>th</sup> (2022-2023)	350	
13	12 <sup>th</sup> (2023-2024)	400	
	<b>Total</b>	<b>26139</b>	<b>23.25</b>

<b>S.N</b>	<b>Year</b>	<b>Name of Species tree planted</b>
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
13	2023-2024	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**

Categories	UOM	2019-20	2020-21	2021-22
Scope-1 Emissions from Coal & Diesel consumption for the process of Cement Manufacturing.	Kg CO2 /Tone of Cementitious material	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.

**GHG Emission from power consumption**

Categories	UOM	2019-20	2020-21	2021-22
Scope-2 Emissions from Electricity consumption	Kg CO2 /Tone of Cementitious material	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 CO2 /Tone of Cement	53.42	58.41	51.92	41.20	42.78
2	Emissions from Electricity consumed	Kg CO2 /Tone of Cement	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 reduce 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 onsite 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

<b>Corporate social responsibility (CSR) &amp; Corporate Environment responsibility report</b>			
<b>For the period of April 2023 to September 2023</b>			
<b>Sl. No</b>	<b>Name of Activity</b>	<b>Place of Activity/Village</b>	<b>Expense Rs.</b>
1	Drinking Water Facility at DIC Bokaro	Bokaro	247092
2	Dental Camp at Girls High School Tantri	Tantri	8900
3	Flag Distribution under Har Ghar Tiranga Abhiyan	Gorabali, Kanari, Khutri, Bisunpur,	30000
4	Plantation on the Eve of the World Environment Day	Gorabali, Kanari, Khutri, Bisunpur,	44000
5	Support to District Administration , Books Provided For District	Bokaro	200000
6	Construction of Community Centre	Gorabali	413000
7	Livelihood Skill Training	Gorabali, Marafari, Kanari	190000
8	Beautification of Tiranga Park at Bokaro	Bokaro	2607800
9	Toilet Construction at Bishunpur Community Centre	Bisunpur, Gorabali Soiuth	212000
10	Teachers day Celebration at Govind Mahyamik Vidyalaya	Marafari	5000
11	Awariness Session On Livelihood	Marafari	7000
12	Football Match at Gorabali Playground	Gorabali North	19000
13	Pond Construction at Pakhariyatand	Pakhariyatand	1600000
14	World Yoga Day at Bokaro Diksha	Bokaro Diksha	15000
15	Independence day Celebration at Bokaro DikshA	Bokaro Diksha	22000
16	WoW Bus Computer Training	Tupkadih and Jainamore	Ongoing
17	Gorabali Play Ground Development	Gorabali North	55750
18	Awariness on clean air for blue skys DIKSHA Center	Bokaro	5000
19	Awariness on World Ozone Day Balidih Girls School	Balidih	5000
<b>Total</b>			<b>5686542</b>

## **CORPORATE ENVIRONMENT POLICY**

### **DALMIA BHARAT LIMITED**

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

Tel. No.: (04329) 235132 Website: www.dalmiabhl.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, co-processing 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.

**BUSINESS RESPONSIBILITY MATRIX**

The hierarchical system or administrative order of the Company to address the nine principles prescribed by SEBI and other compliances including regulatory approvals viz Environmental Clearance, Consent to Operate etc.





## Annexure-6

### CAPITAL COST INVESTMENT ON ENVIRONMENT PROTECTION AT DCBL BOKARO UP TO SEPTEMBER 2023

<b>M/S DALMIA CEMENT (BHARAT) LIMITED, BOKARO</b>				
Plot No. IV/A-7(P), Bokaro Industrial Area, Balidih, Bokaro Steel City, Jharkhand -827014				
CAPITAL COST INVESTMENT ON ENVIRONMENT PROTECTION AT DCBL BOKARO UP TO SEPTEMBER 2023				
S.N	PARTICULARS	Asset no	Investment in Rs.	Investment in Crores
<b>1</b>	<b>INVESTMENT ON AIR POLLUTION CONTROL MEASURES</b>			<b>29.05</b>
a	Bag House cement mill	5500000007	193983042.2	
b	Bag house fan	5500000014	13972406.4	
c	Bag house for cement mill	5500000037	9901023.02	
d	Bag house fan	5500000046	185484.52	
e	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	
h	Bag filter clair Packing plant area		4800000	
i	Bag filter at Wagon Tippler		28150000	
j	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	
			<b>290493690.8</b>	
<b>2</b>	<b>INVESTMENT ON FUGITIVE DUST EMISSION CONTROL</b>			<b>8.64</b>
a	Construction of Tarpaulin shed near packing plant	5200000052	1741749.73	
f	Road Swapping machine	5900000085	128981	
g	Water spray tanker	5060000016	100000	
h	Delexo Road Swapping Machine	5500000172	2452009.2	
i	Steel Silo for storage of PCC	5500000185	28115894.14	
J	Plant Roads construction	5200000010	53848342.83	
			<b>86386976.9</b>	
<b>3</b>	<b>INVESTMENT IN WATER POLLUTION CONTROL MEASURES</b>			<b>0.78</b>
a	Rain water Harvesting	5200000034	56547.38	
b	Sewar line connected to plant toilet to STP	5200000054	958795.98	
c	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	
f	Toilets & Bathroom for Labour Camp	5200000056	1074911.5	
g	Water treatment plant	5040000013	682090.06	

			<b>7778108.04</b>	
<b>4</b>	<b>ENVIRONMENT POLLUTION MONITORING EQUIPMENT</b>			
1	CAAQM -SO2 & NOx Analyzer	5500000068	1308596	<b>0.61</b>
2	Laboratory balance	5500000074	19244	
3	Opacity meter From Chemtrols industries LTD	5900000033	88889.55	
4	Opacity meter From Chemtrols industries LTD	5900000034	88889.55	
5	Data connectivity to CPCB Server	5800000003	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	
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	
			<b>6120847.34</b>	
	<b>Capital cost Investment from April 23 to September 23</b>			<b>Nil</b>
	<b>Total Capital Cost Investment on Environment measures up to September 2023</b>			<b>39.08</b>

<b>DALMIA CEMENT (BHARAT) LIMITED, BOKARO</b>		
<b>RECURRING COST EXPENDITURE ON VARIOUS ENVIRONMENTAL PROTECTION ACTIVITIES</b>		
<b>April 2023-Sept-2023</b>		
<b>S.No.</b>	<b>Environmental activities</b>	<b>Cost (Rs. In Lacs)</b>
1	<b>Operation and maintenance cost of Pollution Control Equipment</b>	
<b>A</b>	<b>Cement Mill</b>	
	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)	8.10
2	Power consumption in Pollution control equipment (Bag House & Bag Filter) 10344727 KWH X 5.60	579.30
2	Third Party Environmental Monitoring & Analysis	1.15
3	AMC of CEMS Data transmission to JSPCB& CPCB	0.17
4	AMC of CAAQMS Maintenance, Servicing and Calibration,	0.75
5	AMC of CAAQMS Data transmission to JSPCB & CPCB	0.50
6	Calibration of Pollution Monitoring Equipment's (CEMS)	1.50
7	Calibration of Pollution monitoring instrument (RDS &Stack VSSI,Noise level meter)	0.15
8	Air Pollution Monitoring Accessories' Pump maintenance kit & PM-10 & 2.5 Filter paper	2.00
9	Water Pollution Management (AMC of STP, R.O Plant, D.M. Plant, & Softener Plant), Cleaning of Nala,	0.30
10	STP Operation & Maintenance	1.78
11	Road Sweeping Machine Operation & Maintenance	2.65
12	Disposal of Bio medical waste	0.18
13	Fuel consumption in water sprinkling tanker of water on dusty area	0.12
14	Green Belt Development	6.80
<b>TOTAL RECURRING COST EXPENDITURE FROM APRIL 2023 TO SEPTEMBER 2023 (Rs):</b>		<b>605.45</b>

**Environment Internal audit report**

**April 2023-September-2023**

Date: 26.08.2023

<b>Sr. No</b>	<b>Environment internal audit observation points</b>	<b>Auditee Status</b>	<b>Auditor Status</b>
1.	Review status of Statutory compliance - Consent to Operate (CTO) & Environment Clearance (EC) compliance condition	<b>Complied.</b> Timely submitted EC Compliance report to JSPCB /MOEF&CC /CPCB/SEIAA.	Complied
2.	Review status of Statutory compliance - E-Waste Management	<b>Complied.</b> Timely submitted E-Waste return to JSPCB Ranchi and Dhanbad.	Complied
3.	Statutory compliance - Hazardous waste management	<b>Complied.</b> 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.	<b>Complied.</b> Timely submitted Hazardous waste return Form-IV JSPCB Ranchi & Dhanbad.	Complied
5	Checked On Line CEMS & CAAQMS data at JSPCB & CPCB Server	<b>Complied,</b> On line CEMS & CAAQMS Data updated in JSPCB & CPCB server	Complied
6	Checked Calibration certificate record of Pollution monitoring equipment.	<b>Complied.</b> On line CEMS & CAAQMS calibrated with in time.	Complied
7	On Line monitoring data display at factory main gate.	<b>Complied.</b> 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
12	Status of Green belt development	Complied Green belt maintained 33% of the plant	Complied

## Advertisement in newspaper for receiving of EC from SEIAA



**DALMIA CEMENT (BHARAT) LIMITED  
BOKARO INDUSTRIAL AREA  
BOKARO-JHARKHAND**

**PUBLIC NOTICE**

State level Environment Impact Assessment Authority (SEIAA), Jharkhand has accorded Environment Clearance vide their letter no EC/SEIAA/2018-19/2138/2019/474, dated 23.09.2019 for "Upgradation of Technology at existing Standalone Cement Grinding Unit (From 3.0 MTPA to 3.70 MTPA) of M/s Dalmia Cement (Bharat) Limited at Plot No: IV/A-7(P), Bokaro Industrial Area, Bokaro.

Copies of clearance letter have been made available with the State Level Environment Impact Assessment Authority office and may also be seen at website of the Ministry of Environment Forest and Climate Change (MoEF & CC) at <http://envior.nic.in>

Unit Head & Authorized Signatory



**डालमिया सीमेंट (भारत) लिमिटेड**  
बोकारो औद्योगिक क्षेत्र  
बोकारो (झारखण्ड)  
**सार्वजनिक सूचना**

राज्यस्तरीय पर्यावरण प्रभाव आकलन प्राधिकरण (SEIAA), झारखंड के द्वारा पर्यावरण स्वीकृति पत्र संख्या EC/SEIAA/2018-19/2138/2019/474 रांची, दिनांक 23.09.2019 डालमिया सीमेंट (भारत) लिमिटेड बोकारो को प्लॉट नंबर: IV/A-7(P) बोकारो इंडस्ट्रियल एरिया, बोकारो में प्रौद्योगिकी के उन्नयन के लिए मौजूदा स्टेड अलोन सीमेंट ग्राइंडिंग यूनिट (3.0 एमटीपीए से 3.70 एमटीपीए तक) को पर्यावरण स्वीकृति दी गई है।

पर्यावरण स्वीकृति पत्र की प्रतिलिपि राज्यस्तरीय पर्यावरण प्रभाव आकलन प्राधिकरण (SEIAA) के कार्यालय में उपलब्ध है और इसे पर्यावरण वन और जलवायु परिवर्तन मंत्रालय (MoEF&CC) की वेबसाइट <http://envior.nic.in> पर भी देखा जा सकता है।

इकाई प्रमुख एवं अधिकृत हस्ताक्षरकर्ता

## Annexure-9

### EC Copy submitted to local authority & another Govt. Department

1

o/c

**Dalmia**  
Bharat Cement

*newthink! cement! sugar! refractories! power!*

To, Date: 03.10.2019

Shri Ganesh Thakur ji  
Mukhiya  
Village/Basti : Balidih  
Gorabali (South) Gram Panchayat  
Bokaro

**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 Gorabali(S) GP 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 23<sup>rd</sup> 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)



Encl A/a

  
मुखिया  
ग्राम पंचायत गोडावाली व  
बलुपट्ट-बास (बोकारो)  
4.10.2019

**Dalmia Cement (Bharat) Limited**  
Works : Plot No. - IV/A-7(P) Bokaro Industrial Area, Balidih, Bokaro Steel City - 827014, Jharkhand, India  
CIN : U65191TN1996PLC035963  
t: 91 6542 253278 / 253047 | w: www.dalmiacement.com  
Registered Office : Dalmiapuram, Dist: Tiruchirappalli, Tamil Nadu 621651, India  
A Dalmia Bharat Group company  
www.dalmiabharat.com



newthink! cement! sugar! refractories! power!

To,

Date: 03.10.2019

Regional Director  
Jharkhand Industrial Area Development Authority (JIADA)  
Bokaro Industrial Area  
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 23<sup>rd</sup> 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)

Encl A/a

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