Your (Half Yearly Compliance Report) has been Submitted with following details	
Proposal No	SIA/JH/IND1/413722/2023
Compliance ID	680082978
Compliance Number(For Tracking)	EC/COMPLIANCE/680082978/2025
Reporting Year	2025
Reporting Period	01 Dec(01 Apr - 30 Sep)
Submission Date	29-11-2025
RO/SRO Name	Shri Senthil Kumar Sampath
RO/SRO Email	agmu1S6@ifs.nic.in
State	JHARKHAND
RO/SRO Office Address	Integrated Regional Offices, Ranchi
Note:- SMS and E-Mail has been sent to Shri Senthil Kumar Sampath, JHARKHAND with Notification to Project Proponent.	

Dalmia cement

cement! sugar! refractories! power!

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

Date: 29.11.2025

Subject: Half yearly Environment Clearance (EC) Compliance report of Bokaro Cement Manufacturing Works (Unit of Dalmia Cement (Bharat) Limited) Bokaro for the period of April 2025 to September 2025.

Ref: EC Letter no: EC/SEIAA/2022-23/2646/2023/366, Ranchi, Date: 08.02.2023, EC Identification no.EC23B000JH199098

Dear Sir,

Please find enclosed herewith half yearly Environment Clearance compliance report of Bokaro Cement Manufacturing works (Unit of Dalmia Cement (Bharat) Limited), Bokaro, Jharkhand for the period of April '2025 to September 2025 for your kind perusal.
We have also uploaded EC Compliance report in Parivesh 2.0 Portal of MoEF and CC and the soft copy of EC Compliance report is also being sent through email to following authorities:
msseiaa.jhk@gmail.com; ro.ranchi-mef@gov.in; ranchijspcb@gmail.com, ccb.cpcb@nic.in dhanbadjspcb@gmail.com; info@jseiaa.org,chr-seiaajhr@gov.in

Thanking you.

Yours Sincerely,

For Bokaro Cement Manufacturing works)
(Unit of M/s. Dalmia Cement (Bharat) Limited)

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-828001

Enclosed: EC Compliance Report

BOKARO CEMENT MANUFACTURING WORKS

(A Unit of M/s Dalmia Cement (Bharat) Limited

Environment Clearance Compliance Report

For the period of April 2025 to September 2025

EC Letter no: EC/SEIAA/2022-23/2646/2023/366, Ranchi, Date: 08.02.2023, EC Identification no.EC23B000JH199098

BOKARO CEMENT MANUFACTURING WORKS

(Unit of Dalmia Cement (Bharat) Limited)

Plot No. IV/A-7(P)4, Bokaro Industrial Area, Balidih,

Bokaro Steel City, Jharkhand- 827014

Bokaro Cement Manufacturing Works
(A Greenfield Standalone Grinding Unit of Dalmia Cement (Bharat) Limited)

At Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand

STATUS OF COMPLIANCE OF ENVIRONMENTAL CLEARANCE FROM APRIL 2025 TO SEPTEMBER 2025

EC Letter no: EC/SEIAA/2022-23/2646/2023/366, Ranchi, Date: 08.02.2023, EC Identification no.EC23B000JH199098

S. No.	EC Conditions	Compliance
Specific Conditions		
i.	This Environmental Clearance is valid subject to the following condition below — That this project has- a. Obtained all legal rights to operate at concerned place. b. Complied with all existing concerned laws of the land and c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.	**Complied** a. The project is located in Notified Industrial area. The land is allotted by JIADA to DCBL at Plot No. IV/A-7(P)4, Notified Bokaro Industrial Area BalidihPhase-4, Bokaro-827014, Jharkhand and is in possession of DCBL. b. All existing concerned laws are being complied. c. CTE and CTO obtained from JSPCB Ranchi for the construction and operation of the plant.
I. Statutory Compliance		
1.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act. 1986, in case of the diversion of forest land for non- forest purpose involved in the project.	**Not Applicable** as there is No Forest land in plant area. The unit is located in notified Industrial area at JIADA, Bokaro, Jharkhand with due allocation through Govt of Jharkhand. Obtained all necessary statutory clearance to operate the plant.
2.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	**Not Applicable.** This clause is not applicable to our unit, as there is no wild life sanctuary within 10km radius of our unit. NOC of DFO Territorial & DFO Wildlife in this regard has been obtained vide Letter no. 3546 dated 21.12.2021 and 2058 dated 28.11.2021 respectively. The same was submitted during appraisal of plant and also is attached

S. No.	EC Conditions	Compliance
		herewith as **Annexure I&II.**
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 six- monthly compliance report. (in case of the presence of schedule –I species in the study area)	**Not Applicable** The unit is located in notified industrial area at JIADA, Bokaro. There is no record of schedule –I species within 10km radius of our unit. Hence this condition is not applicable.
4	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act" 1974 from the concerned State Pollution Control Board/ Committee.	**Complied with** Our unit has obtained CTE from JSPCB, Ranchi vide letter no JSPCB/ HO/RNC/CTE-15399804/2023/128, Dated 23.02.2023and CTO obtained from JSPCB Ranchi vide letter no. JSPCB/HO/RNC/CTO-17967569/2024 /283 dated 24.02.2024 attached as **Annexure-III&IV**
5	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of for drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.	**Complied.** The permission for water connection has been obtained from JIADA and Drinking Water and Sanitation Sub-Division, Bokaro vide letter no 36 dated 13.04.2022. The same is attached herewith as an **Annexure-V.**
6	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules 2016 as amended from time to time.	**Complied.** Authorization under the Hazardous and other Waste Management Rules 2016 obtained from JSPCB Ranchi copy of the same attached as per **Annexure: VI**
7	No mining/ activity shall be undertaken in the forest land or deemed forest without obtaining requisite prior forestry clearance.	**Not Applicable**
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.	**Noted**
9	Environmental clearance is subject to obtaining prior clearance from forestry and Wildlife angle including clearance from	Not Applicable and EC has already been obtained

S. No.	EC Conditions	Compliance
	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 or located within 10 km. of protected area.)	
10	The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue decay, which till process on their respective merits, no rights will vest in accrue to them unless all clearance are obtained.	**Not Applicable.**
II. Air quality monitoring and preservation		
1	The project proponent shall install 24 x 7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R no 612 (E) dated 25 August 2014 (Cement) and subsequent amendment dated 9th May 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act 1986 or NABL accredited laboratories.	**Complied.** Continuous emission monitoring system at process stacks installed to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R no 612 (E) dated 25 August 2014 (Cement) and subsequent amendment dated 9th May 2016 (Cement) and connected to SPCB and CPCB online servers. CEMS is being regularly calibrated Stack emission monitoring report and CEMS calibration certificate from April 2025 to September 2025 is attached as per **Annexure: VII**.
2	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act. 1986	**Complied With.** Fugitive dust emission regularly monitored. Fugitive emission monitoring report from April 2025 to September 2025 attached as per **Annexure: VIII**
3	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emission) within and outside the plant area at an angle of 120-degree each) covering upwind and downwind directions. (case to case basis small plant: Manual: large plants: Continuous)	On line CAAQMS installed and regularly Ambient air quality monitored. CAAQMS data regularly transmitted to JSPCB and CPCB server. On line CAAQMS Calibration certificate and Manual Ambient air quality monitoring report from NABL/JSPCB from April 2025 to September 2025 attached as per **Annexure: IX**

S. No.	EC Conditions	Compliance
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 monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC. Zonal office of CPCB and Regional Office of SPCB along with six- monthly monitoring report	**Complied with.** Stack emission and AAQM regularly monitored. Monitored reports are being regularly submitted to JSPCB, CPCB & MoEF &CC as a part of EC Compliance report. Report attached as per **Annexure-VII&IX**
5	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	**Complied with.** Bag House at the VRM and 31 Bag filters installed at all the material transfer and handling point to keep the emission within the standard specified by MOEF&CC/CPCB. List of APC the same is attached as **Annexure X**
6	The project shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	**Complied with.** Regular maintenance of bag filters, leakage checking, cleaning of bag filter is being done by dedicated mechanical maintenance team as per schedule.
7	Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB	**Complied with.** Plant is only grinding unit, Clinkerisation is not involved. Applicable Pollution control measures as per CREP guideline of CPCB implemented. **Attached Annexure XI**
8	Sufficient number of mobile or stationary vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	**Complied with.** Stationary vacuum cleaners provided to clean plant roads, shop floors, roofs, regularly. Photographs attached as per **Annexure: XII**
9	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; use closed bulkers for carrying fly ash.	**Complied with.** All raw materials/products are being transferred within plant by covered conveyor belt. Inward & outward transportation of Raw materials & products done in covered tarpaulin trucks/ bulkers/ rail to control material spillage as well as fugitive dust emission.
10	Provide wind shelter fence and chemical spraying on the raw material stock piles	**Complied with** Boundary wall constructed all around the plant, covered shed and walls constructed in packing plant and mill area. All the raw materials and products stored within the covered storage shed and silos. Photographs

S. No.	EC Conditions	Compliance
		attached as per **Annexure XIII**
11	Have separate truck parking area and monitor vehicular emissions at regular interval.	**Complied with.** PUC certified equipment as well as trucks are deployed. Separate truck parking facility provided. Regular checking of vehicles PUC certificates is being done to control of vehicular emission.
12	Efforts shall be made to reduce impact of the transport of the raw materials and end product on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport.	**Being complied.** All measures, detailed in PFR & EMP report, implemented to reduce impact of the transport. Covered conveyor belt are being used for transportation of raw material & product within plant. All raw materials and products transported in covered trucks, bulkers, and railways to reduce the fugitive dust emission. Regular water sprinkling is being done on the roads within plant through water spray tanker to control of fugitive dust emission. All Photographs attached as per **Annexure: XIV**
13	Ventilation system shall be designed for adequate air changes as per ACGIH Document for all tunnels, motor houses, and cement bagging plants.	**Complied with.** Ventilation system arrangement done at motor houses, and cement bagging plants.
III. Water quality monitoring and preservation		
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 € dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these systems 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).	**Not applicable** There is no requirement of water for manufacturing process. Water is being used for cooling of equipment/machinery in closed loop & dust suppression. The water is either consumed or recycled, hence no effluent generation is foreseen. 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) sufficient numbers of piezometers/sampling wells in	**Not Applicable.** No Ground water withdrawal in our plant. There is no effluent generation from the plant. Domestic waste water treated in STP

S. No.	EC Conditions	Compliance
	the plant and adjacent areas through labs recognized under Environment (Protection) Act.1986 and NABL accredited laboratories.	and treated water is being used within plant for greenbelt development and dust suppression. However, ground water quality and ground water depth level of surrounding village regularly monitored. same report attached as per **Annexure-XV**
3	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluents 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.	**Not applicable.** There will not be any effluent generation from the plant.
4	Adhere to 'Zero Liquid Damage'	**Being complied.**
5	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	**Complied with.** 15 KLD STP constructed for the treatment of domestic wastewater. Treated water quality meet the prescribed standards. STP Treated water quality analysis report for the period of April 2025 to September 2025 attached as per **Annexure: XVI**
6	Garland drains and collection pits shall be provided for each stock piles to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run-off.	**Complied with.** Garland drains and collection pits, clay sand, slit barrier provided on drains for arrest the run-off in the event of heavy rains and to check the water pollution due to surface run-off. Garland drains and collection pit photographs attached as per **Annexure: XVII**
7	The project proponent shall practice rainwater harvesting to maximum possible extent.	**Complied with** Rain water harvesting system constructed in our plant as per technical approval RWH from GWD. Ranchi. RWH implementation report attached as per **Annexure: XVIII**
8	Water meter shall be provided at the inlet to all unit processes to maximum possible extent.	**Complied with.** Water meter installed at the inlet of the unit. Photographs attached as per **Annexure: XIX**
9	The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.	**Complied with.** Optimum use of water is being practiced and All necessary efforts is being made to reduce water consumption in our plant. Domestic waste water is being treated in

S. No.	EC Conditions	Compliance
		STP and treated water is being used for greenbelt & dust suppression. STP treated water quality analysis report from April 2025 to September 2025 attached as per **Annexure: XVI**
IV. Noise monitoring and prevention		
1	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six- monthly compliance report.	**Complied with.** Noise level is being regularly monitored in different locations as per the prescribed guidelines and is being regularly submitted to Regional Officer of the Ministry along with Half Yearly Compliance Report.
2	Ambient noise levels shall conform to the standards prescribed under EPA rules viz. 75dB (A) during day time and 70db (A) during night time.	Complied with. Noise level monitoring report from April 2025 to September 2025 attached as per **Annexure- XX**
V. Energy Conservation measures:		
1	Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.	**Complied with.** Solar based LED lights installed at different location of the plant. Photographs attached as per **Annexure: XXI**
2	Provide the project proponent for LED lights in their offices and residential areas.	**Complied with** LED lights installed for lighting purpose
3	Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS Standards.	**Complied** Fly ash and slag waste material from power plant and steel plant are being using for cement manufacturing process as per BIS norms.
VI. Waste Management		
1	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & other waste (Management & Transboundary Movement) Rules 2016.	**Being complied**
2	Kitchen waste shall be composted or composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant).	**Being compliance** Kitchen waste are being utilized by nearby villagers to fed to the animals.
VII. Green Belt		
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	**Complied with** Greenbelt/plantation work done over 33% of the total project area i.e., about 5.2 acres (2.105 ha). The green belt are inter alia

S. No.	EC Conditions	Compliance
	cover the entire periphery of the plant.	cover the entire periphery of the plant. Native species with large canopy will be selected for plantation in accordance with CPCB guidelines. **Green belt development report attached as per Annexure: XXII**
2	The project proponent shall prepare GHG emission inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation.	Complied with. GHG emission reduction plan report attached as per **Annexure: XXIII**
VIII. Public Hearing and Human Health Issues:		
1	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented	**Complied with.** On site emergency Preparedness plan, Hazard identification and Risk Assessment (HIRA) prepared and same is approved by Chief Factory Inspector of Jharkhand. Copy of same attached as per **Annexure: XXIV**
2	The PP shall provide Personal Protection Equipment (PPE) as per the norms of factory act.	**Complied with.** All Personal protective equipment's (PPE) Safety shoes, Nose mask, safety helmet, earplug, provided to all employees and contract workers for their safety. Safety training is being regularly given to the employees for the awareness of safe working culture. PPEs issued for the period of April 2025 to September 2025 attached as per **Annexure-XXV**
3	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	**Complied With.** Local people are employed for the construction purpose. No housing facilities will be required for them. However, all necessary infrastructure / facility is being provided to all workers. Also, the amenities available in the adjacent unit are made accessible.
4	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	**Being Complied** Periodic medical health checkup of employees and workers is being done for every year. Reports maintained as per Factory Act. Few medical health checkup report April 2025 to September 2025 attached as per **Annexure-XXVI**

S. No.	EC Conditions	Compliance
IX. Corporate Environment Responsibility:		
1	The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-14. III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	**Being Complied.** The company invested around 1.5 Crores on the various socio-economic developmental activities on the basis of findings of Participatory rural appraisal which will be conducted periodically by DBF. All socio-economic developmental activities mentioned in submitted PFR & EMP report is being implemented. Apart, from this, company will spend 2% of the profit for implementation of various developmental activities for the nearby area as part of Corporate Social Responsibility Under Section 135 of Companies Act. CER and CSR report for the period of April 2025 to September 2025 attached as per **Annexure-XXVII**
2	The company shall have a well laid down environmental policy duly approved 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 I or shareholders / stakeholders. The copy of the board resolution in this regard shall be submitted to the MoEF & CC as a part of six-monthly report.	**Complied** The Company has a well laid down Corporate Environmental Policy governed by all the units and head office. Accordingly, a full-fledged Environmental Management Cell (EMC) for environmental monitoring and control established. The hierarchical system or administrative order of the Company is attached as an **Annexure XXVIII.**
3	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control senior Executive, who will directly report of the head of the organization.	**Complied.** Environment Management Cell has been established at our plant as well as at Corporate headquarter for the management of environmental activities with qualified person. Environment management cell is headed by Executive Director (Plant Head).
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	**Complied.** Action plan for EMP Implemented. Separate budget allocated for Environment Protection. It is ensured that budget shall not be diverted for any other

S. No.	EC Conditions	Compliance
	competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the SEIAA/Ministry, Regional office along with the six-monthly compliance Report.	purpose. Expenditure on environmental protection are being regularly submitted to Ministry and his Regional Office as a part of Six-Monthly EC compliance report. Expenditure on Environment protection up **to** April 2025 to September 2025 attached as per **Annexure- XXIX**
5	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	**Complied With.** Self-Environment audit report and Third-party Environment audit report attached as per **Annexure: XXX.**
6	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.	**Complied with.** Applicable Pollution control measures as per CREP guideline of CPCB implemented.
XI. Miscellaneous:		
1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspaper 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.	**Complied** A public notice informing about grant of EC has been published in two newspapers named "The Pioneer" and "Aaj" on 02.03.2023 in English as well as in vernacular language i.e. Hindi. Copy of Advertisements are attached herewith as an **Annexure XXXI.** The Newspapers with advertisement along with copy of EC have been submitted to the Regional Office of MoEF & CC, MS-SEIAA and MS- JSPCB. Copy of submission receipts are attached herewith as an **Annexure-XXXII.**
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 turn has to display the same for 30 days from the date of receipt.	**Complied.** We have submitted copy of Environment Clearance to Regional Office of MoEF&CC, MS-SEIAA, MS- JSPCB, local Panchayat and other Govt. bodies, district head quarter. Copy of submission receipts are attached herewith as an **Annexure-XXXII.**
3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Complied. half yearly EC Compliance report uploaded in company official website. screen short attached as per **Annexure-XXXIII**
4	The project proponent shall monitor the criteria pollutants level namely; PM 10, SO2,	**Complied with.** Emission monitoring data displayed at the factory main gate. Display

S. No.	EC Conditions	Compliance
	NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Board photographs attached as per **Annexure-XXXIV**
5	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	**Complied with.** EC compliance report uploaded in Parivesh 2.0 Portal of MoEF and CC website. Acknowledge copy attached as per **Annexure: XXXV**
6	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	**Complied with.** Environment Statement in Form V is regularly submitted to JSPCB, Dhanbad & Ranchi. Last Environment Statement was submitted vide our letter no. DCBL/ENV-ES/24-25/, Dated 20.09.2025. same is also uploaded in company official website **Annexure-XXXVI**
7	The project proponent shall inform the Regional Office as well as 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: 27April '2022 Date of start of Land development work: 29.04.2022 Date of Production: 25.03.2023
7.1	The project authorities must strictly adhere to the stipulation made by the State Pollution Control Board and the State Government.	Agreed.
7.2	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.	Being complied
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	**Complied with.** Half yearly EC Compliance reports are being regularly submitted in hard copies and soft copies to the regulatory authority concerned SEIAA, Regional Office of MoEF & CC at Ranchi, Jharkhand State Pollution Control Board (J.S.P.C.B), Ranchi, and Central Pollution Control Board. (CPCB)

S. No.	EC Conditions	Compliance
	Board (J.S.P.C.B), Ranchi, and Central Pollution Control Board.(CPCB)	
9	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agreed.
10	The SEIAA, Jharkhand or any other competent Authority may alter modify the above conditions or stipulate any further conditions in the	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)	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.	Agreed
13	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed
14	The ministry may reserve the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions.	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.	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 Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, l99l along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court	Being complied. Public Liability Insurance copy attached as per Annexure: **XXXVII**

S. No.	EC Conditions	Compliance
	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 l6 of the National Green Tribunal Act, 2010.	Agreed
18	This environmental clearance is valid for seven years from the date of issue.	Agreed

Annexure-I

No forest land in plant area, Clearance letter from DFO Territorial, Bokaro vide Letter no. 3546 dated 21.12.2021

Government of Jharkhand

Department of Forest, Environment and Climate Change

Permission Letter : LETTER20211220

Acknowledgment No: SWSFST111120213031

Issue Date: 21-12-2021

Name Of Applicant : Dalmia Cement Bharat Limited

Email ID : sinha.rajeevkumar@dalmiacement.com. **Contact no.:** 9771478206

Report of Distance from Forest, Forest Reserve and Sanctuary

SNo	Checkpoint	Divisional Forest Officer
1	Whether Distance of Project location from Reserved Forest/Protected Forest is 250 m?	Yes
2	Whether Project location come under No Mining Zone?	No
3	Does there any National park located within 10 km from project location?	No
4	Does there any Wildlife sanctuary located within 10 km distance from project location?	No
5	Does there any ESZ available within 10 km distance from project location?	No
6	Whether Proposed project comes under prohibited category of ESZ (Yes or No)?	No

Name :

Designation :

Signature :

Divisional Forest Officer
Bokaro Forest Division
Bokaro

Note :-The order dated 12.12.1996 in case no. 202/95 passed by Hon'ble Apex Court will be applicable in respect of GMJJ Land.

*The certificate to be issued by the Divisional Forest Officer of the respective Divisions and upload

Department of Forest, Environment and Climate Change

Report of Distance from Notified Forest, National Park, Sanctuary & Eco-Sensitive Zone

Name Of Applicant Dalmia Cement Bharat Limited

Institution Type Non Government

Email ID sinha.rajeevkumar@dalmiacement.com **Contact no.:** 9771478206

Location of Proposed Land

District Bokaro **Battery Point** Gorabali

Thana No.: 14 **Thana Name:** Jaridih

Khata No.: 134,76,177,46,45,171,47,145,78,65,135,72 **Khesra Name:** 892 (F),781 (P),777 (F),784 (P),779 (P),778 (P),782 (P),783 (P),887 (P),890 (F),888 (P),880 (P),852 (P),891 (F),960(P),850(P),893 (P),851 (P),858 (P),871 (F),957 (P),870 (P),958 (F),884 (F),885 (F),886 (F),776 (P),883 (F),882 (F),875 (F),862 (F),876 (F),881 (F),879 (F),878 (F),874 (F),863 (F),866 (F),873 (F),864 (F),868 (P),861 (F),867 (P),865 (F)

#	Checkpoint	Range Forest Officer	Divisional Forest Officer
1	Whether Distance of Project location from Reserved Forest/Protected Forest is 250 m? *	Yes	Yes
2	Whether Project location come under No Mining Zone? *	No	No
3	Does there any National park located within 10 km from project location? *	No	No
4	Does there any Wildlife sanctuary located within 10 km distance from project location? *	No	No
5	Does there any ESZ available within 10 km distance from project location? *	No	No
6	Whether Proposed project comes under prohibited category of ESZ (Yes or No)? *	No	No

Note :-The order dated 12.12.1996 in case no. 202/95 passed by Hon'ble Apex Court will be applicable in respect of GMJJ Land.

Division DFO Bokaro

Letter No. 3546

Date of issue 21/12/2021

Signature

Name Divisional Forest Officer Bokaro Forest Division Bokaro

Divisional Forest Officer

Annexure-II

Department of Forest, Environment and Climate Change

Report of Distance from Notified Forest, National Park, Sanctuary & Eco-Sensitive Zone

Name Of Applicant: Dalmia Cement Bharat Limited

Institution Type: Non Government

Email ID: sinha.rajeevkumar@dalmiacement.com

Contact no.: 9771478206

Location of Proposed Land

District: Bokaro

Battery Point: center

Thana No.: 14

Thana Name: Jaridih

Khata No.: 134,76,177,46,45,171,47,145,78,65,135,72

Khesra Name: 592 (F),781 (P),777 (F),784 (P),779 (P),778 (P),782 (P),783 (P),787 (P),890 (F),888 (P),880 (P),852 (P),891 (F),960(P),850(P),893 (P),851 (P),858 (P),871 (F),957 (P),870 (P),958 (F),864 (F),885 (P),886 (F),776 (P),883 (F),882 (F),875 (F),862 (F),876 (F),881 (F),879 (F),878 (F),874 (F),863 (F),866 (F),873 (F),864 (F),868 (F),861 (F),867 (F),865 (F)

#	Checkpoint	Range Forest Officer	Divisional Forest Officer
1	Whether Distance of Project location from Reserved Forest/Protected Forest is 250 m? *	No	No
2	Whether Project location come under No Mining Zone? *	No	No
3	Does there any National park located within 10 km from project location? *	No	No
4	Does there any Wildlife sanctuary located within 10 km distance from project location? *	No	No
5	Does there any ESZ available within 10 km distance from project location? *	No	No
6	Whether Proposed project comes under prohibited category of ESZ (Yes or No)? *	Yes	Yes

क्रमांक–1 एवं 2– भूमि की प्रकृति एवं वानकी से दूरी संबंधित वांछित सूचना वन प्रमंडल पदाधिकारी, बोकारो वन प्रमंडल के कार्यालय से प्राप्त करें।

क्रमांक–3 से 6– के संदर्भ में प्रतिवेदित करना है कि प्रस्तावित परियोजना हेतु आवेदित स्थान Battery Point (23.696198N 86.064483E) से निकटतम संरक्षित क्षेत्र (Protected Area) लोधाबाँधी वन्यप्राणी अभयारण्य अवस्थित है, तथा वन, पर्यावरण एवं जलवायु परिवर्तन मंत्रालय भारत सरकार द्वारा अधिसूचित पूर्व लोधाबाँधी वन्यप्राणी अभयारण्य के अधिसूचित ESZ के सीमा से बाहर अवस्थित है।

Note- उपरोक्त सूचना आवेदक द्वारा समर्पित अभिलेख एवं GPS Point भारत सरकार द्वारा प्रकाशित ESZ के अधिसूचना तथा आवेदित स्थान से निकटतम संरक्षित क्षेत्र (Protected Area) के आधार पर दी गयी है।

Division: DFO Wildlife Hazaribagh

Letter No.: 2058

Date of issue: 29.11.2021

Signature:

Name: Divisional Forest Officer, Wildlife Division, Hazaribag

Divisional Forest Officer

वन प्रमंडल पदाधिकारी, बोकारो

Annexure-III

CTE obtained fromJSPCB, Ranchi vide letter no JSPCB/HO/RNC/CTE-15399804/2023/128, Dated 23.02.2023

JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No.: JSPCB/HO/RNC/CTE-15399804/2023/128 Dated : 2023-02-23

Consent to Establish (CTE) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

1. Reference: Application (s) No.- 15399804 / dated : 31/01/2023 of Bokaro Cement Manufacturing Works (A Unit of DCBL), Priya Ranjan for consent under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

2. **Documents Relied Upon:**

(a) The content of Environmental Clearance (EC) granted vide memo no. EC/SEIAA/2022-23/26462022/366, dated 30.01.2023.

(b) The content of Consent to Establish (CTE), vide ref. no. JSPCB/HO/RNC/CTE-12699959/2022/195, dated 28.04.2022 for the production of Cement - 2.0 Million TPA and D.G. Set of 1000 KVA (2 x 500 KVA) as per EC valid for the period of one year.

(c) The content of check-list vide ref. no. 157, dated 09.02.2023.

(d) The content of copy of the land lease document issued by BIADA for 30 yrs. w.e.f. 28.10.2021.

(e) The content of certificate of DFO, vide ref. no. 2058, dated 28.11.2021.

(f) The content of undertaking regarding procurement of raw material from valid sources.

(g) The content of investment figure certified by CA.

3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to establish the project in Mouza- Gorabuli, P S -Bokaro, District-BOKARO as follows:

Project	Site-Area		Investment (Rs)/ Year	Product & Capacity	Period of CTE
	Plot Nos.	Area			
In Expansion	Industrial Area Plot No. IV/A-7(P)4,	15.75 Acre	35.50 Crore	Expansion of capacity:- Cement- 2.0 MTPA to 3.1 MTPA; DG set - 2x500=1000 KVA	As per EC

(A) Specific Conditions:

1. That, the occupier shall make Work area and transport roads and approach road off the main road concrete/ black top.

2. That, the occupier shall install fixed type water sprinklers to cover all dusty places in the premises to impart water spraying intermittently.

3. That, the occupier shall make all roads pucca and shall maintain a good house keeping by regular cleaning and wetting of the roads and dust prone areas.

4. That, the occupier shall store all raw materials and products under shed and shall as far as practicable, do their processing and transfer under foolproof cover(s).

5. That, the occupier shall collect and treat the effluent in foolproof latest system and shall recycle treated effluent to the system for reuse and shall ensure no discharge of effluent out side the premises.

6. That, the occupier shall install air pollution control devices such as Dust Catcher, Cyclone Separator, Bag filters, Venturi Scrubber, ESP etc. in suitable combination to control the emission.

7. That, the occupier shall use fly ash and or fly ash bricks in construction of the project.

8. That, the occupier shall install only green D G Set(s) with acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.

9. That, the occupier shall obtain NOC from Central Ground Water Authority as per the norms.

10. That, the occupier shall dispose the solid waste as per applicable norms.

11. That, the occupier shall dispose the hazardous waste as per applicable norms and shall obtain authorization under HoWM Rules' 2016.

12. That, the occupier shall adhere to ZLD.

13. That, the occupier shall devvelop greenery in an atleast 33 percent of area.

14. That, the occupier shall submit compliance of CTE and EC conditions on six monthly basis to JSPCB and other concerned organizatious.

15. That, the occupier shall apply for CTO and shall submit compliance of CTE and EC conditions alongwith the photographs.

(B) General Conditions :

(1) That, the occupier shall construct pucca (i) minimum ten feet high boundary wall and (ii) approach road and internal roads and shall keep the premises neat and clean and tidy.

(2) That, the occupier shall install comprehensive enclosure (s) to cover the places of unloading of raw materials, the equipments of their processing & transferring, the places of loading of products, by products and wastes for prevention of fugitive emission and shall install such automatic inbuilt system(s) that in house dust/ gases collect(s) and undergo (es) cleaning and clean air goes out.

(3) That, the occupier shall install such automatic inbuilt system(s) that process flue gas(es) / process gas(es) and undergo(es) cleaning and clean air go(es) out through the chimney(s), having height(s) as per Central Pollution Control Board norm.

(4) That, the occupier shall have D G Set(s) of the standard as laid in the Environment (protection) Rules, 1986 and shall install it (them) within acoustic enclosure (s) and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm .

(5) That, the occupier shall impart treatment as per Central Pollution Control Board text to wastewater and shall keep process effluent in close-circuit and effluent from other sources in conformity with the standard (s).

(6) That, the occupier shall install Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge.

(7) That, the occupier shall create new water body (ies) / remove deposit(s) of existing water body(ies) and nearby stream(s) and pond(s) and shall maintain the wholesomeness of water.

(8) That, the occupier shall grow greenery in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

(9) That, this CTE is valid subjected to the validity of mining Lease / Mining Plan / Ecofriendly / Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.

(10) That, this CTE is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time being in force, rests with the industry/ unit/ occupier.

(11) That, this CTE shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.

(12) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules there under.

4. **That, this CTE shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.**

5. **That, this CTE is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTE will be revoked if any of the information/ documents/ certificates/ undertaking given by the occupier is found false/fictitious/forged in future.**

6. **This order shall be valid subject to compliance of all other legal requirements applicable to the unit.**

7. **The State Board reserves the right to revoke, withdraw or make any reasonable variation / change / alteration in condition of this consent.**

This is issued with the approval of the competent authority

Yatindra Kumar Das
Digitally signed by Yatindra Kumar Das
Date: 2023.02.23 10:31:56 +05'30'

(Yatindra Kumar Das)
Member Secretary

Memo No. : JSPCB/HO/RNC/CTE-15399804/2023/128

Dated : 2023-02-23

Copy to : M/s Bokaro Cement Manufacturing Works (A unit of Dalmia Cement (Bharat) Limited, At- Plot No. IV/A-7(P)4, Bokaro Industrial Area, Balidih, Bokaro Steel City, Dist- Bokaro / Director of Industry, Government of Jharkhand, Ranchi/ Deputy Commissioner, Bokaro/ Director of Mines, Government of Jharkhand, Ranchi/ Chief Inspector of Factories, Ranchi/ D.F.O., Bokaro/D.M.O., Bokaro / R.O., Dhanbad for information & ensuring compliance of the above.

Yatindra Kumar Das
Digitally signed by Yatindra Kumar Das
Date: 2023.02.23 10:31:37 +05'30'

(Yatindra Kumar Das)
Member Secretary

Annexure-IV

CTO obtained from JSPCB Ranchi vide letter no. JSPCB/HO/RNC/CTO-17957569/2024/283 Dated 24.02.2024 and valid up to 31.03.2029

JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No. JSPCB/HO/RNC/CTO-17957569/2024/283 Dated : 2024-02-24

Consent to operate (CTO) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

1. Application (s) dated 2023-12-27 of Bokaro Cement Manufacturing Works (A Unit of DCBL), Occupier Name :Priya Ranjan for consent under section 25 (1)(b)/25 (1) (c)/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21(1) of the Air (Prevention & Control of Pollution) Act,1981 .

2. **Documents Relied Upon:**

(a) The content of Environmental Clearance (EC) granted vide memo no. EC/SEIAA/2022-23/26462022/366, dated 30.01.2023.

(b) The content of Consent to Establish (CTE), vide ref. no. JSPCB/HO/RNC/CTE-12699959/2022/195, dated 28.04.2022 for the production of Cement - 2.0 Million TPA and D.G. Set of 1000 KVA (2 x 500 KVA) as per EC valid for the period of one year.

(c) The content of Consent to Establish (CTE), vide ref. no. JSPCB/HO/RNC/CTE-15399804/2023/128, dated 23.02.2023 for the production of Expansion of capacity:- Cement - 2.0 MTPA to 3.1 MTPA; DG set - 2x500=1000 KVA for the period as per EC.

(d) The content of Consent to Operate (CTO), vide ref. no. JSPCB/HO/RNC/CTO-15980338/2023/1752, dated 20.10.2023 for the production of Cement- 3.1 MTPA, DG set - 2x500=1000 KVA, vlaid for the period upto 31.03.2024.

(e) The content of Inspection Report (IR), vide ref. no. 82, dated 05.01.2024.

(f) The content of copy of the land lease document issued by DIADA for 30 yrs. w.e.f. 28.10.2021.

(g) The content of undertaking regarding procurement of raw material from valid sources.

(h) The content of investment figure certified by CA.

3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to operate the project in Mauza -Gorabali , P S -Bokaro , District -BOKARO , as follows:

Project	Site-Area		Investment (Rs)	Product & Capacity	Period of CTO
	Plot Nos.	Area			Date of issue To

Before Expansion	As per EC	As per EC	576.04 Lacs [as per inestment figure certified by CA]	Cement- 3.1 MTPA, DG set - 2x500=1000 KVA (as per CTO)	31/03/2029

(A) Specific Conditions:

1. hat, the occupier shall make Work area and transport roads and approach road off the main road concrete/ black top.

2. That, the occupier shall install fixed type water sprinklers to cover all dusty places in the premises to impart water spraying intermittently.

3. That, the occupier shall make all roads pucca and shall maintain a good house keeping by regular cleaning and wetting of the roads and dust prone areas.

4. That, the occupier shall store all raw materials and products under shed and shall as far as practicable, do their processing and transfer under foolproof cover(s).

5. That, the occupier shall collect and treat the effluent in foolproof latest system and shall recycle treated effluent to the system for reuse and shall ensure no discharge of effluent out side the premises.

6. That, the occupier shall install air pollution control devices such as Dust Catcher, Cyclone Separator, Bag filters, Venturi Scrubber, ESP etc. in suitable combination to control the emission.

7. That, the occupier shall implement all pollution control measures as recommended in EIA/EMP.

8. That, the occupier shall comply the recommendations of CREP.

9. That, the occupier shall use all solid wastes as resource as a raw material or a product.

10. . That, the occupier shall install only green D G Set(s) with acoustic enclosure and shall keep the height(s)
of exhaust pipe(s) as per Central Pollution Control Board norms.

11. That, the occupier shall adhere to Zero Liquid Discharge.

12. That, the occupier shall dispose the solid waste as per applicable norms.

13. That, the occupier shall dispose the hazardous waste as per applicable norms and shall obtain authorization under HoWM Rules' 2016.

14. That, the occupier shall install 24 x 7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R no 612 (E) dated 25 August 2014 (Cement) and subsequent amendment dated 9th May 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act 1986 or NABL accredited laboratories.

15. That, the occupier shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emission) within and outside the plant area at an angle of 120-degree each) covering upwind and downwind directions.

16. That, the occupier shall install STP of adequate capacity and submit its report to the Board.

17. That, the occupier shall construct rain water harvesting system and shall operate and maintain the same.

18. That, the occupier shall construct rain water harvesting system and shall operate and maintain the same.

19. That, the occupier shall provide Personal Protection Equipment (PPE) as per the norms of factory act.

20. That, the occupier shall upgrade the pollution control equipment as and when required.

21. That, the occupier shall submit compliance of EC and CTO conditions on six monthly basis to the Board.

22. That, the occupier shall submit applications for renewal of consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 again 120 days prior to the date of expiry of this consent with requisite fee and documents showing compliance of all of the above conditions.

23. hat, this CTO supersedes the CTO granted earlier vide ref. no. JSPCB/HO/RNC/CTO-15980338/2023/1752, dated 20.10.2023.

(B) General Conditions :

(I) That, the occupier shall maintain the National Ambient Air Quality Standard given below:

S N	Pollutant	Time Weighted Average	Concentration in Ambient Air	
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Govt.)
(1)	(2)	(3)	(4)	(5)
1.	Sulphur Dioxide (SO2), µg/m3	Annual 24 hours	50 80	20 80
2.	Nitrogen Dioxide (NO2), µg/m3	Annual 24 hours	40 80	30 80
3.	Particulate Matter (size less than 10 µm) or PM10, µg/m3	Annual 24 hours	60 100	60 100
4.	Particulate Matter (size less than 2.5 µm) or PM2.5, µg/m3	Annual 24 hours	40 60	40 60
5.	Ozone(O3), µg/m3	8 hours 1 hour	100 180	100 180
6.	Lead (Pb) µg/m3	Annual 24 hours	0.50 1.0	0.50 1.0
7.	Carbon Monoxide (CO) mg/m3	8 hours 1 hour	02 04	02 04
8.	Ammonia (NH3) µg/m3	Annual 24 hours	100 400	100 400
9.	Benzene (C6H6) µg/m3	Annual	05	05
10.	Benzo(a) Pyrene(BaP) Particulate Phase only ng/m3	Annual	01	01
11.	Arsenic (As) ng/m3	Annual	06	06
12.	Nickel (Ni) ng/m3	Annual	20	20

Note : Serial no. 1 to 4 – Mandatory
Serial no. 5 to 12 As applicable for specific type of industry.

(2) That, the occupier shall maintain the emission quality within the standard and the quantity, as follows:

S N	Parameter	Standard
1	Particulate Matter	150 mg/Nm3

(3) That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:

S N	Parameter	Standard
1	Total Suspended Solids	100 mg/L
2	BOD	30 mg/L
3	COD	250 mg/L
4	Oil & Grease	10 mg/L

(4) That, the occupier shall dispose of solid wastes as follows:

S N	Waste Type	Mode of Disposal
1	Hazardous Carbonaceous Wastes	In co-processing in high temperature furnaces or kilns
2	Hazardous Non-Carbonaceous Wastes	In TSDF
3	Non-Carbonaceous Non-Hazardous solid wastes/ Mine Over Burden	As a substitute of Soil or Mineral

(5) That, the occupier shall keep D G Set(s) within acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.

(6) That, the occupier shall install and maintain Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge and submit the photographic view of the structures within a month.

(7) That, the occupier shall grow and maintain greenery of the project in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

(8) That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports, every year latest by 30th September of the next financial year.

(9) That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory in compliance sub-para (2), (3), (4) and (5) of paragraph 3 of this CTO yearly at required periodicity.

(10) That, this CTO is valid subjected to the validity of mining Lease/Mining Plan/Ecofriendly/Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.

(11) That, this CTO is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ occupier.

(12) That, this CTO shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.

(13) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules made there under.

4. That, this CTO shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.

5. That, this CTO is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTO will be revoked if any of the information/documents/certificates/undertaking given by the occupier is found false/fictitious/forged in future.

6. The Order shall be valid subject to compliance of all other legal requirements applicable to the unit.

7. The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alteration in conditions of this consent.

Yatindra Kumar Das Digitally signed by Yatindra Kumar Das Date: 2024.02.24 18:36:42 +05'30'

This is issued with the approval of the Competent authority

(Yatindra Kumar Das)
Member Secretary

Memo No. : JSPCB/HO/RNC/CTO-17957569/2024/283

Dated : 2024-02-24

Copy to: M/s Bokaro Cement Manufacturing Works (A unit of Dalmia Cement (Bharat) Limited, AtPlot No. IV/A-7(P)4, Bokaro Industrial Area, Balidih, Bokaro Steel City, Dist- Bokaro / Director of Industry, Government of Jharkhand, Ranchi/ Deputy Commissioner, Bokaro/ Director of Mines, Government of Jharkhand, Ranchi/ Chief Inspector of Factories, Ranchi/ D.F.O., Bokaro/D.M.O., Bokaro / R.O., Dhanbad for information & ensuring compliance of the above.

Yatindra Kumar Das Digitally signed by Yatindra Kumar Das Date: 2024.02.24 18:36:59 +05'30'

(Yatindra Kumar Das)
Member Secretary

Annexure-V

Water permission letter from JIADA

झारखण्ड औद्योगिक क्षेत्र विकास प्राधिकार
बोकारो प्रक्षेत्र, बियाडा भवन, बालीडीह, बी०एस०सिटी–14.
email : mdbiadabokaro@gmail.com

पत्रांक : दिनांक :

सेवा मे,

अवर प्रमण्डल पदाधिकारी,
पेय जल एवं स्वच्छता अवर प्रमण्डल
चास,
बोकारो स्टील सिटी ।

विषय–इकाई के जलापूर्ति के संबंध मे।

महाशय,

उपर्युक्त विषय आपका दिनांक
आलोक मे इकाई सर्वश्री डालमिया सीमेंट (भारत) संख्या–
क्षेत्र, बी०एस०सिटी–14 के 1.50 (एक लाख पचास हजार) लीटर प्रति दिन जल आपूर्ति
दी ।

विश्वासभाजन,
क्षेत्रीय निदेशक
जियाडा, बोकारो प्रक्षे

ज्ञापांक :
प्रतिलिपि : सर्वश्री डालमिया सीमेंट (भारत) संख्या–
औद्योगिक क्षेत्र, बी०एस०सिटी–14 को सूचनार्थ प्रेषित ।

क्षेत्रीय निदेशक
जियाडा, बोकारो प्र

Office of the Sub-Divisional Officer
Drinking Water and Sanitation Sub-Division, Bokaro

Letter No. 36 Chas, Dated 13/4/22

To,

Regional Director
BIADA, Bokaro

Sub: Regarding Water Connection for M/S Dalmia cement (Bharat) Ltd. under BIADA.
Reference: Your letter no. 35 dated 25.01.22, 185 dated 05.04.22, this office letter no 24 dated 24.02.22 and agreement for water supply between unit and BIADA on dated 17.3.11

Madam,

With reference to the above cited subject, M/S Dalmia cement (Bharat) Ltd is asking for another 1.50 Lakhs litre water per day for their 2nd unit. I would like to inform you that the above firm have water agreement of 5.5 lakhs litre per day with BIADA for their 1st unit, out of which approx 2.0 – 2.5 lakhs litre water per day is being taken by Dalmia cement to meet the requirement of their 1st unit. M/S Dalmia cement (Bharat) Ltd already have approx 3.0 lakhs litre water allocated as surplus (extra). M/S Dalmia cement (Bharat) Ltd can meet the another 1.50 Lakhs litre water per day for their 2nd unit from the existing water agreement. This is for your information and necessary action.

Thanking You

13/4/22
Sub-Divisional Officer
DWS Sub-Division
Bokaro

S.D.O
D.W.S. Sub-division
Bokaro

Memo No. 36 Bokaro/Date 13/4/22

Copy to: M/S Dalmia cement (Bharat) Ltd. for your information and further necessary action.

13/4/22
Sub-Divisional Officer
DWS Sub-Division
Bokaro

S.D.O
D.W.S. Sub-division
Bokaro

Annexure-VI

Authorization of Hazardous waste obtained from JSPCB Ranchi vide letter no. JSPCB/HO/RNC/HWM-16948442/2024/14 dated 4.03.2024

JHARKHAND STATE POLLUTION CONTROL BOARD

T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI -834004
Phone.:2400852, 2400851, Fax:0651- 2400850 www.jspcb.org

FORM 2

[See rule 6(2)]

FORM FOR GRANT OR RENEWAL OF AUTHORIZATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

1. No. of authorization and date of issue: JSPCB/HO/RNC/HWM-16948442/2024/14 04/03/2024

2. Reference of application(No. and date): 16948442 19/10/2023

3. Bokaro Cement Manufacturing Works (A Unit of DCBL) of Priya Ranjan is hereby granted an authorisation based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilisation, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at Plot no-IV/A-7P4, Bokaro Industrial Area , Balidih

Details of Authorisation

Sl.No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity(ton/annum)
1	Cat-I; Used/Spect Oil (5.1)	Kept in MS Drums; sold to authorized recyclers	13 TPA
2	Cat-I; Wastes/residues containing Oil (5.2)	Kept in MS Drums; Sold to authorized recyclers	15 TPA

(1) The authorisation shall be valid for a period of Date of issue to 30.09.2028

(2) The authorisation is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A **General conditions of authorisation:**

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.

6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"

7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.

8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.

11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.

12. An application for the renewal of an authorisation shall be made as laid down under these Rules.

13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B Specific conditions:

1. That, the occupier shall take prior permission of the Board to close down the plant.

2. That, the renewal of authorization will be subject to compliance of the conditions laid down in this authorization.

3. That, the occupier shall comply with the conditions as per the guidelines prescribed by the MoEF for CPCB.

4. That, the occupier shall comply with all the conditions laid down in this authorization.

5. That, the occupier shall submit quarterly report on hazardous wastes generated and consumed in its sources, products generated or resources conserved (specifying the details like type and quantity of resources conserved) to the Board.

6. That, the occupier shall maintain a log book containing information on quantity on generation, date wise utilization of the same and its disposal, etc.

7. That, the occupier shall maintain record of Hazardous Waste utilized, Hazardous Waste generated and disposal as per form-3 and shall submit the annual returns in form-4 as per Rule 20 (1) and (2) of the Hazardous and other waste (Management & Transboundary Movement) Rules, 2016 to the Board.

8. That, the occupier shall comply with all the directions given by standard operating procedure.

9. That, the occupier shall be responsible for safe and environmentally sound management of hazardous and other wastes.

10. That, the hazardous and other wastes generated in the establishment of an occupier shall be sent or sold to an authorised actual user or shall be disposed of in an authorised disposal facility.

11. That, the hazardous and other wastes shall be transported from an occupier's establishment to an authorised actual user or to an authorised disposal facility in accordance with the provisions of these rules.

12. That, the occupier shall take all the steps while managing hazardous and other wastes to-
(a) contain contaminants and prevent accidents and limit their consequences on human beings and the environment; and
(b) provide persons working in the site with

13. That, the occupier shall comply with all the conditions laid down in this authorization mentioned in general and specific conditions.

14. That, the occupier shall install a display Board outside its plant showing details such as
(a) status of CTO;
(b) Status of authorization granted ;
(c) Disposal/reuse of hazardous waste generated in the plant and other relevant information as per prescribed guideline and update the same as required.

Yatindra Kumar Das
Digitally signed by Yatindra Kumar Das
Date: 2024.03.04 10:25:17 +05'30'

Memo No:JSPCB/HO/RNC/HWM-16948442/2024/14
Date: 04/03/2024

Y. K. Das
Member Secretary

Copy To:
Regional Officer, Regional Office, JSPCB, Hazaribagh for information and necessary action.

Yatindra Kumar Das
Digitally signed by Yatindra Kumar Das
Date: 2024.03.04 10:25:30 +05'30'

Y. K. Das
Member Secretary

Annexure: VII

Bokaro Cement Manufacturing Works (Unit of DCBL)

Stack emission monitoring report

On line CEMS report from April 2025 to September 2025

On Line CEMS monitoring report of VRM Bag House Stack			
Month	**Min.**	**Max.**	**Avg.**
April-2025,	7.8	13.8	8.4
May-2025,	4.4	19.7	13.0
June-2025,	3.5	28.1	25.6
July-2025,	1.2	13.0	7.1
August-2025,	2.2	24.0	13.7
September-2025,	2.8	19.3	12.3
Min.	**1.2**	**13.0**	**7.1**
Max.	**7.8**	**28.1**	**25.6**
Avg.	**3.7**	**19.6**	**13.3**

Manual Stack emission monitoring report VRM Bag House Stack			
Month	**Min.**	**Max.**	**Avg.**
April-2025	4.3	12.3	8.12
May-2025	7.5	16.6	10.5
June-2025	6.9	11.8	9.3
July-2025	8.3	12.1	10.1
August-2025	9.2	19.2	13.4
September-2025	8.8	15.3	11.9
Min.	**4.3**	**11.8**	**8.1**
Max.	**9.2**	**19.2**	**13.4**
Avg.	**7.3**	**14.8**	**10.6**

JSPCB Norms	**30 mg/Nm3**

Stack emission monitoring report month of June from JSPCB /NABL approved 2025

INSTITUTE FOR ENVIRONMENTAL MANAGEMENT

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

TC-16139

TEST REPORT

ULR No.: T C 1 6 1 3 5 2 5 0 0 0 0 0 0 2 6 6			
Discipline: Chemical	**Group:** Atmospheric Pollution	**Sub-Group:** Stack Emission	
Report Issue Date: 27-06-2025	**Test Report No.:** RN-241105004S1		
Sample ID: 250625AP23001	**Sample Description:** Stack Emission		
Challan No./P.O. No.: 4548043344/257	**Challan No./ P.No. Date:** 05-11-2024		
Name and Contact Details of Customer: Sanjeev Verma , (9264447745) Email id - verma.sanjeev2@dalmiacement.com Bokaro Cement Manufacturing Works,Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India			
Type of Industry: Cement	**Condition of Sample:** Fit For Test		
Sampling Protocol: IS:11255: 2009.	**Sampling Date:** 22-06-2025		
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series			
Sampling Location: Cement Mill Bag House Stack			
Field Meteorological Information	**A. Temp. (°C):** 29	**R.H. (%):** 62	**W.C.:** Partly Sunny	**W.D.:** SW to NE
Location of performance of the Laboratory Activity: IEM Laboratory, Ranchi			
Sample Receiving Date: 23-06-2025	**Testing Started:** 23-06-2025	**Testing Ended:** 27-06-2025	

Information obtained from Customer

Stack Identification	Cement Mill Bag House Stack	**Sampling Port**	Available
Plat Form	Permanent	**Stack Height from Ground Level (m)**	50
Stack Description	Common for cement mill -1 & 2	**Port Hole Height from Ground Level (m)**	30
Shape of Stack	Circular	**Inner Dimension of Stack (m)**	3.7
Construction Material	MS	**Pollution Control Device (if any)**	Bag House

Flue Gas Temperature (K): 375	**Flue Gas Velocity (m/s):** 18.2	**Flue Gas Volumetric Flow Rate (Nm^3/hr):** 543484.7

--Test Result--

Sl. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm^3	6.4	30.0

Dust	Kg/hr	3.3

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing areas as per IS 196 1966(C).
Abbreviation	MDL: Minimum Detection Limit; BDL: Below Detection Limit
Norms is Specified**	As per the IS Method 11255 Series.
Remark	Sample Comply with prescribed specification.
Opinion & Interpretation	Not Practiced.
Tested by	Akanksha Sourabh
Sample Drawn by	Anikat Munda & Team
Disclaimers	• The results relate only to the item tested, calibrated or sampled. • Additions to, deviations, or exclusions from the method is not practiced if not mentioned. • Results from external providers are not used if not specified.

Specific Contractual Notes :-
1. The laboratory accepts responsibility for content of this report.
2. This report shall not be reproduced except in full, without 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 im.sonar@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.

Reviewed by | Authorized Signatory

(Tauqeer Ahmad) Technical Manager | (Dr. S. C. Jain) Director

----End of Report----

Stack emission monitoring report month of September 2025 from JSPCB /NABL approved 2025

INSTITUTE FOR ENVIRONMENTAL MANAGEMENT

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

TEST REPORT

ULR No.: T C 1 6 1 3 5 2 5 0 0 0 0 0 0 8 2 4			
Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Stack Emission	
Report Issue Date: 09-09-2025		Test Report No.: RN-241105004S1	
Sample ID: 250906AP07001		Sample Description: Stack Emission	
Challan No./P.O. No.: 4548043344/235		Challan No./ P.No. Date: 05-11-2024	
Name and Contact Details of Customer: Sanjeev Verma , (9264447745) Email id.- verma.sanjeev2@dalmiacement.com Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(P), Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India			
Type of Industry: Cement		Condition of Sample: Fit For Test	
Sampling Protocol: IS:11255: 2009		Sampling Date: 06-09-2025	
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series			
Sampling Location: Cement Mill Bag House Stack			
Field Meteorological Information	A. Temp. (°C): 30	R.H. (%): 65	W.C.: Partly Sunny	W.D.: SW to NE
Location of performance of the Laboratory Activity: IEM Laboratory, Ranchi			
Sample Receiving Date: 06-09-2025	Testing Started: 06-09-2025	Testing Ended: 09-09-2025	

Information obtained from Customer

Stack Identification	Cement Mill Bag House Stack	Sampling Port	Available
Plat Form	Permanent	Stack Height from Ground Level (m)	50
Stack Description	Common for cement mill -1 & 2	Port Hole Height from Ground Level (m)	30
Shape of Stack	Circular	Inner Dimension of Stack (m)	2.7
Construction Material	MS	Pollution Control Device (if any)	Bag House

Flue Gas Temperature (K): 271	Flue Gas Velocity (m/s): 16.8	Flue Gas Volumetric Flow Rate (Nm^3/hr): 305735.1

--Test Result--

Sl. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm^3	4.8	30.0

Dust	Kg/hr	2.43

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196(196thC).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Norms** is Specified	As per the IS Method 11255 Series.
Remark	Sample Comply with prescribed specification.
Opinion & Interpretation	Not Practiced
Tested by	Akanksha Sourabh
Sample Drawn by	Anikit Mundu & Team
Disclaimers	• The results relate only to the item tested, calibrated or sampled. • Additions to, deviations, or exclusions from the method is not practiced if not mentioned. • Results from external providers are not used if not specified.

Specific Contractual Notes: -	Reviewed by	Authorized Signatory
1. The laboratory accepts responsibility for content of the report. 2. This report shall not be reproduced except in full, without 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 iem2012@rediff.com	(Tauqeer Ahmad)	(Dr. S. C. Jain)
On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued to the Director of the Organization.	Technical Manager	Director

----End of Report----

CEMS Calibration Certificate for the period of April-2025 to September-2025

Annexure-VIII

Bokaro Cement Manufacturing Works (Unit of DCBL)

Fugitive dust emission monitoring report

April 2025 to September 2025

Sr. No	Month	Near Mill area µg/m3	Near Cement Silo µg/m3	Near Packing plant µg/m3	Near Clinker Silo µg/m3
1	April-2025	681.2	503.5	721.6	687.8
2	May-2025	632.3	558.7	641.2	632.4
3	June-2025	413.8	621.6	547.3	548.1
4	July-2025	531.6	478.2	578.4	368.4
5	August-2025	432.7	521.3	643.3	476.3
6	September-2025	468.6	623.5	696.4	578.3
	Min.	**413.8**	**478.2**	**547.3**	**368.4**
	Max.	**681.2**	**623.5**	**721.6**	**687.8**
	Avg.	**526.70**	**551.1**	**638.0**	**548.6**

Fugitive Emission monitoring report month of June 2025 from JSPCB /NABL approved lab.

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Fugitive dust emission monitoring report month of September from JSPCB /NABL approved lab.

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Annexure-IX

Bokaro Cement Manufacturing Works (Unit of DCBL)

On line CAAQMS Ambient Air Quality Monitoring report from April 2025 to September 2025 towards Gorabali Village

	PM10			PM 2.5		
	µg/m3			µg/m3		
	Min.	Max	Avg.	Min.	Max	Avg.
April-2025,	15.3	87.4	56.2	9.4	40.9	21.1
May-2025,	37.0	96.7	59.6	8.3	34.9	23.4
June-2025,	19.3	95.3	49.1	6.5	36.8	15.8
July-2025,	13.2	65.3	29.7	3.0	20.6	9.0
August-2025,	22.7	92.5	36.7	2.5	32.1	9.1
September-2025,	25.62	58.3	43.32	3.96	22.26	13.8
Min.	**13.2**	**58.3**	**29.7**	**2.5**	**20.6**	**9.0**
Max.	**37.0**	**96.7**	**59.6**	**9.4**	**40.9**	**23.4**
Avg.	**22.9**	**81.3**	**45.5**	**5.7**	**31.2**	**15.6**

	SO2			NOx		
	µg/m3			µg/m3		
	Min.	Max	Av.	Min.	Max	Av.
April-2025,	1.2	6.6	3.9	6.6	24.9	12.7
May-2025,	2.9	6.6	4.7	8.3	21.8	14.9
June-2025,	2.4	8.6	5.5	2.6	7.6	5.4
July-2025,	1.3	7.7	4.5	1.7	5.4	3.6
August-2025,	2.3	9.7	6.0	2.4	15.4	5.3
September-2025,	1.5	4.9	3.2	4.6	13.9	12.1
Min.	**1.2**	**4.9**	**3.2**	**1.7**	**5.4**	**3.6**
Max.	**2.9**	**9.7**	**6.0**	**8.3**	**24.9**	**14.9**
Avg.	**2.0**	**7.3**	**4.6**	**4.5**	**14.9**	**9.1**

CAAQMS Calibration Certificate for the period of April 2025 to September 2025

SWAN ENVIRONMENTAL PVT. LTD.,

CALIBRATION CERTIFICATE

Certificate No. : SWAN/AAQMS/CCR/2025/018 Date of Issue: 27-09-2025
Customer : M/s. Dalmia Cement (Bharat) Ltd. Bokaro Cement Manufacturing Works, Bokaro, Jharkhand

Instrument Details

Instrument : PM 10 Analyser
Make : Anasim Custech, USA
Model : DAM-1020
Serial No. : CN13868
Station Name : ICAMV_CAAQMS
Date of Calibration: 27-09-2025
Due Date : 26-09-2026

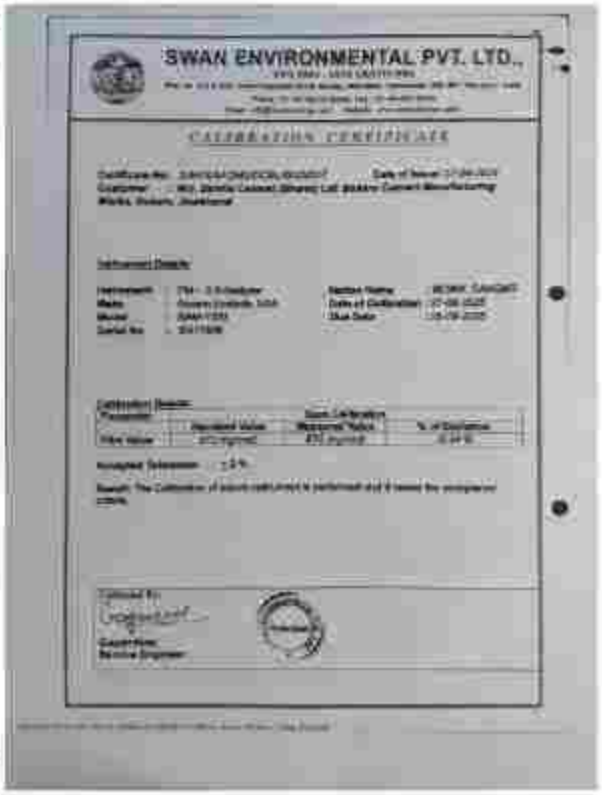
Calibration Details

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Filter Value	8.0mg/m3	8.0mg/m3	0.00 %

Accepted Tolerance: ± 2 %

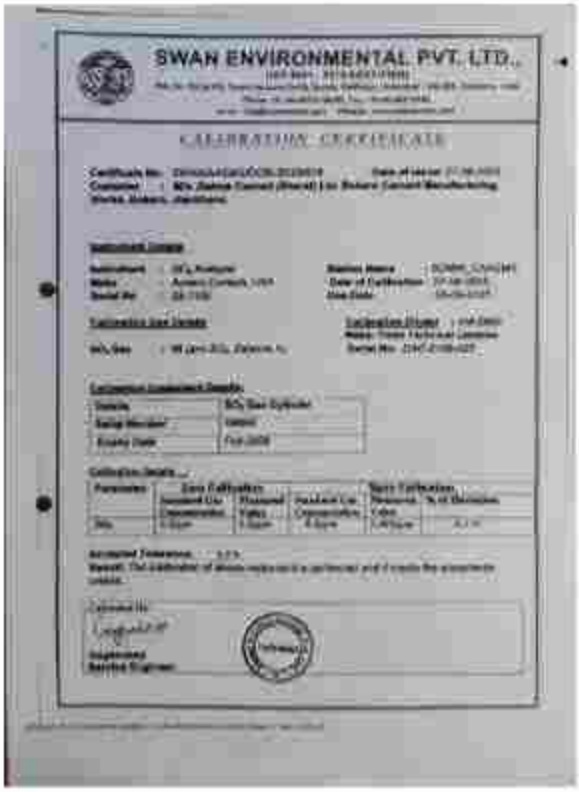
Result: The Calibration of above instrument is performed and it meets the acceptance criteria.

Calibrated By:
Gagandeep
Service Engineer



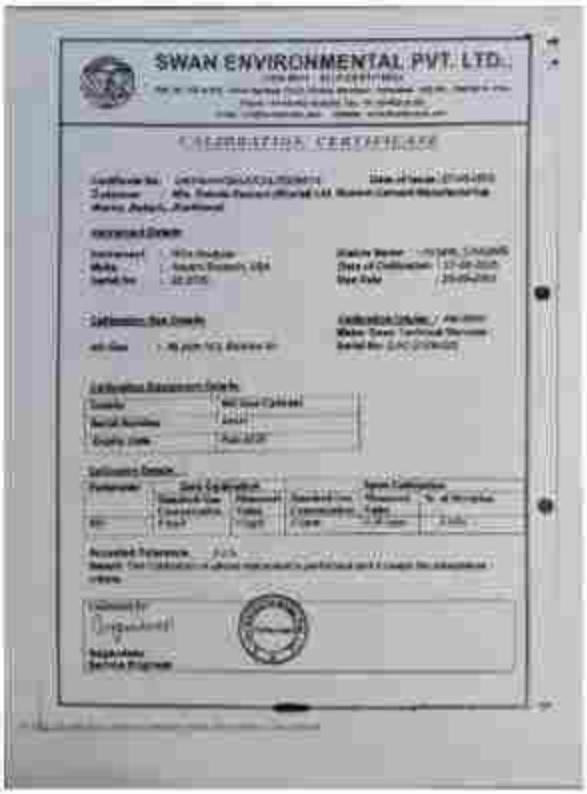
SWAN ENVIRONMENTAL PVT. LTD.,

CALIBRATION CERTIFICATE



SWAN ENVIRONMENTAL PVT. LTD.,

CALIBRATION CERTIFICATE



SWAN ENVIRONMENTAL PVT. LTD.,

CALIBRATION CERTIFICATE

SWAN ENVIRONMENTAL PVT. LTD.,

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CALIBRATION CERTIFICATE

SWAN ENVIRONMENTAL PVT. LTD.,

CALIBRATION CERTIFICATE

SWAN ENVIRONMENTAL PVT. LTD.,

CALIBRATION CERTIFICATE

Bokaro Cement Manufacturing Works (Unit of DCBL)

Ambient Air Quality Monitoring report month of June 2025 from JSPCB/NABL Approved lab

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Ambient Air Quality Monitoring report month of June 2025 from JSPCB/NABL Approved lab

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Ambient Air Quality Monitoring report month of September 2025 from JSPCB/NABL approved lab

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TEST REPORT

Annexure-X

LIST OF POLLUTION CONTROL EQUIPMENTS (BAG FILTERS)

BOKARO CEMENT MANUFACTURING WORKS, (A unit of DALMIA CEMENT BHARAT LIMITED)							
LIST OF POLLUTION CONTROL EQUIPMENTS							
S. No.	Location	Description	Application	Design dust Emission (mg/Nm3)	Volume of bag filter (m3/h)	Fan Volume	Outlet dust Emission (mg/Nm3)
	Bag House						
1.	Cement Mill Venting	Bag House 563BF4	Cement	10	1030000	1150000	≤ 30
	LIST of Nuisance Dust Collectors						
1	TT-1 492 BF1	Belt conveyor from WT to clinker silo new & existing (492 BC1) at TT-1/Clinker	Clinker	10	10000	11500	≤ 30
2	TT-2 492 BF2	Belt conveyor 492BC1 discharging to 492BC2 & BC4 at TT-2/Clinker	Clinker	10	10000	11500	≤ 30
3	TT-3 492BF4	Bag filter 492 BF3 for conveyor 492BC3 discharging to 492 BC4	Clinker	10	10000	11500	≤ 30
4	492BF5	492 BC3 discharge and clinker silo top/ Clinker	Clinker	10	15000	17250	≤ 30
5	TT-4 512BF1	Belt conveyor 512BC1 discharge to 512BC3 at TT-4/ Clinker	Clinker	10	12500	14375	≤ 30
6	TT-5	Belt conveyor 512BC2 discharge to 512BC3 at TT-5/ Clinker	Clinker	10	10000	11500	≤ 30
7	TT-6 512 BF3	Belt conveyor 512BC3 discharge to 512BC4 at TT-6/ Clinker	Clinker	10	7500	8625	≤ 30
8	512 BF4	Belt conveyor 512BC4 discharge to 512BE1 at TT-3 bottom/ Clinker	Clinker	10	5000	5750	≤ 30
9	CMH Top 533 BF1	Cement mill hopper top/ Clinker & Gypsum	Clinker & Gypsum	10	10000	11500	≤ 30
10	533 BF3	CMH extraction	Clinker & Gypsum	10	15000	17250	≤ 30
11	533 BF2	Mill feed conveyor	Clinker & Gypsum	10	10000	11500	≤ 30
12	563 BF1	Cement Mill BE feed/ Reject	Cement	10	12500	14375	≤ 30

BOKARO CEMENT MANUFACTURING WORKS, (A unit of DALMIA CEMENT BHARAT LIMITED)							
LIST OF POLLUTION CONTROL EQUIPMENTS							
S. No.	Location	Description	Application	Design dust Emission (mg/Nm3)	Volume of bag filter (m3/h)	Fan Volume	Outlet dust Emission (mg/Nm3)
		Material					
13	563 BF2	Cement Mill BE Top/ Reject Material	Cement	10	10000	11500	≤ 30
14	563 BF3	Cement Mill reject BC/ Reject Material	Cement	10	10000	11500	≤ 30
15	594 BF1	Baghouse Extraction/ Cement	Cement	10	5000	5750	≤ 30
16	594 BF2	Baghouse Extraction/ Cement	Cement	10	5000	5750	≤ 30
17	BRU K12BF1	K12 BF1 for BRU 1 & 2 (With pneumatic dampers)	Coal	10	30000	34500	≤ 30
18	TT9 K12 BF2	K12 BF2 for TT9 (Coal Handling)	Coal	10	12500	14375	≤ 30
19	FBC Hopper K12 BF3	K12 BF3 for FBC (Coal Handling)	Coal	10	7500	8625	≤ 30
20	492 BF3	492 BF3 (492BC2 to 492BC3) TT14	Clinker	10	10000	11500	≤ 30
21	232BF2	Air slide venting	Fly ash	10	4000	4600	≤ 30
22	614BF1	Cement silo cone	Cement	10	4000	4600	≤ 30
23	613BF1,	Cement silo cone	Cement	10	4000	4600	≤ 30
24	595BF1	Cement silo top	Cement	10	7500	8625	≤ 30
25	594BF3	Cement silo top	Cement	10	7500	8625	≤ 30
26	613BF2	Airslide venting	Cement	10	5000	5750	≤ 30
27	613BF3	Airslide venting	Cement	10	6000	6900	≤ 30
28	646BF1	Packing Plant	Cement	10	15000	17250	≤ 30
29	647BF1	Packing Plant	Cement	10	15000	17250	≤ 30
30	646BF2	Packing Plant	Cement	10	35000	40250	≤ 30

BOKARO CEMENT MANUFACTURING WORKS, (A unit of DALMIA CEMENT BHARAT LIMITED)							
LIST OF POLLUTION CONTROL EQUIPMENTS							
S. No.	Location	Description	Application	Design dust Emission (mg/Nm3)	Volume of bag filter (m3/h)	Fan Volume	Outlet dust Emission (mg/Nm3)
31	647BF2	Packing Plant	Cement	10	35000	40250	≤ 30

Annexure-XI

Compliance of CREP Conditions

BOKARO CEMENT MANUFACTURING WORKS

S.No.	CREP Conditions	Compliance
1	Cement plants/Standalone grinding units, which are not complying* with notified standards, shall do the following to meet the standards: • Augmentation of existing air pollution control devices- by July 2003 • Replacement of existing air pollution control devices- by July 2004	M/s. Bokaro Cement Manufacturing Works (Unit of DCBL) comply with all the Stipulated standards given by MoEF CC/ JSPCB. Company has installed bag filter/Bag house as air pollution control device (APCD) in plant to comply the notified standards. Regular monitoring of ambient air quality is being done.
2	Cement plants/Standalone grinding units located in critically polluted or urban areas (including 5 km distance outside under urban boundary) will meet 100 mg/Nm3 limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm3. As per Gazette Notification MoEFCC G.S.R.497(E) dated 10th May, 2016, emission standards for PM have been prescribed as 30 mg/Nm3.	Neither the plant is located in Critically Polluted area nor in Urban areas. Plant is located in industrial area. All measures undertaken to keep emission level of PM below the permission limit. The major source of air pollution (i.e. Cement mill) provided with Bag House. Bag Filters and de-dusting/nuisance filters installed in Packing Plant and all material transfer points.
3	The new cement kilns to be accorded NOC/ Environmental clearance w.e.f. 01.04.2003 will meet the limit of 50 mg/Nm3.	Unit is Stand-alone Grinding Unit only and comply with new emission norms.
4	CPCB will evolve load-based standards by December 2003.	This is a Stand-alone grinding unit; Load based standards issued by the MoEF CC is for Kiln only for clincker isation. Hence, this condition is not applicable.
5	CPCB and NCBM will evolve SO_2 and NOx emission standards by June 2004	Unit is Stand-alone Grinding Unit only and there will not be SO2 and NOx emission during manufacturing process; this condition is not applicable.
6	The Cement industry will control fugitive emission from all the raw materials and products storage and transfer points by December 2003. However, the feasibility	Unit is Stand-alone Grinding Unit only and there will not be SO2 and NOx emission during manufacturing process; this condition is not applicable.

	for the control of fugitive emission from limestone and coal storage area will be decided by the National Task Force (NTF) The NTF shall submit its recommendations within three months.	To control the fugitive emissions the following measures are adopted • All belt conveyers and material discharge points are covered, water sprinkling is being done by water sprinklers and water spray tankers. roads are cleaned by road sweeping to control of fugitive dust emission. • Storage of raw material/cement in storage shed and Silos. • Concreted internal roads and the sprinkling of water done all along internal roads in the plant in order to control the dust arising due to the movement of vehicular traffic. • Thick green belt is being developed around the plant to arrests the fugitive emissions. .
7	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum coke as fuel in cement kiln by July 2003.	Not Applicable
8	After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operations/sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring system (CMS) by December 2003.	Continuous emission monitoring system (CEMS) installed at Cement Mill Stack and real time emission monitoring date transmitted to SPCB and CPCB website.
9	Tripping in kiln ESP to be minimized by July 2003 as per the recommendations of NTF.	Not Applicable; plant is Stand-alone Grinding Unit. However, high efficiency Bag House provided for Cement Mill
10	Industries will submit the target date to enhance the utilization of waste material by April 2003.	GU is being utilize Fly ash along with Slag which are process waste generated by Thermal Power Plant and Steel industries and help them in getting rid of waste in most sustainable manner by converting into useful product i.e. Cement.

11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	Not Applicable
12	Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003.	Not Applicable

Annexure: XII

All plant internal roads and work place area cleaned by vacuum road sweeping machine

Annexure: XIII

Boundary wall constructed along with thick greenbelt developed act as wind shelter in plant

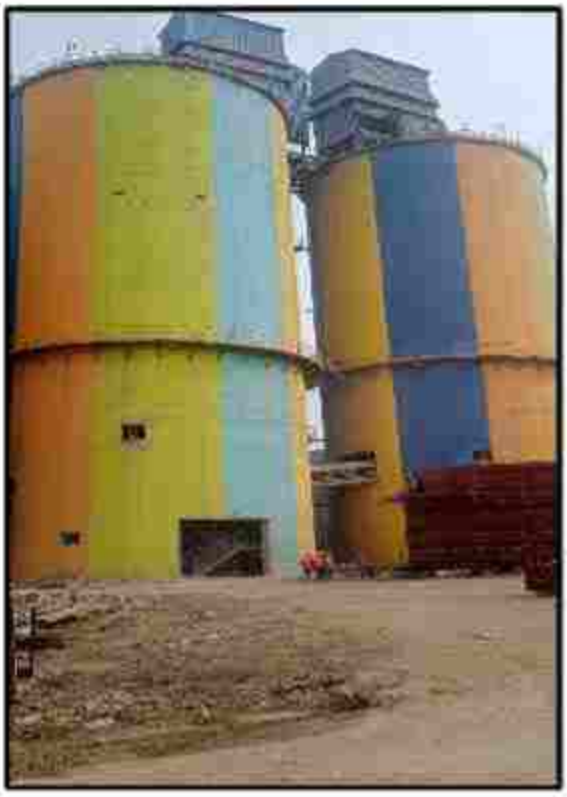
Covered packing plant

All raw materials and product are stored in covered shed

Slag storage in covered yard

Gypsum stored in covered yard

Clinker storage silo



Cement storage Silo

Annexure: XIV

Raw material and products transported in covered vehiclas

Transportation in covered truck

Covered Wagon loading

bulker

Fixed type water sprinkler provided in plant for the control of fugitive dust emission

Water fog system installed in plant main gate

Fixed type water sprinkler instaled plant main gate entrance road

Annexure-XV

Ground water level report of surrounding village area from April 2025 to September 2025

Location	Coordinate of Site	Distance from Plant site (KM)	Depth from ground (feet)					
		Month	April-2025,	May-2025,	June-2025,	July-2025,	August-2025,	September -2025,
Pakhriatand (Near Anganwadi)	23070'5590"N 86006'2678" E	1	8'7"	9'2"	16'1"	17'9"	18'4"	19'8"
Tupkadi (Near Electric Pole)	23071'3362"N 86006'1573" E	1	8'3"	9'8"	13'3"	15'1"	16'0"	17'4"
Godawali (Near Temple)	23068'7751"N 86006'0031" E	1	2'6"	3'4"	5'2"	7'3"	8'1"	9'3"
Bhutkuru (Near primary School)	23070'4642"N 86005'1418" E	1	10'2"	11'6"	15'4"	17'7"	18'5"	19'2"

Ground water quality analysis report of surrounding village area for the month of June 2025 from JSPCB/NABL approved lab

INSTITUTE FOR ENVIRONMENTAL MANAGEMENT

TEST REPORT

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Ground water quality analysis report of surrounding village area for the month of June 2025 from JSPCB/NABL approved lab

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Ground water quality analysis report of surrounding village area month of September 2025 from JSPCB/NABL approved lab

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Ground water quality analysis report of surrounding village area month of September 2025 from JSPCB/NABL approved lab

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Annexure-XVI

BOKARO CEMENT MANUFACTURING WORKS

(Unit OF DALMIA CEMENT (BHARAT) LIMITED)

STP Outlet water quality analysis report from April 2025 to September 2025

STP OUTLET WATER QUALITY ANALYSIS REPORT FROM APRIL 2025 TO SEPTEMBER 2025 (OUTLET)						
Sr. No	Parameter	PH	Suspended solids mg/lit	BOD mg/lit	COD mg/lit	Oil & Grease mg/lit.
	Norms	5.5-9.0	100	30	250	10
1	April-2025,	7.8	21	14	56.0	BDL
2	May-2025,	7.9	25	16	68.0	BDL
3	June-2025,	7.7	31	18	76.0	BDL

4	July-2025,	7.6	34	18	84.0	BDL
5	August-2025,	7.9	39	17	92.0	BDL
6	September-2025,	8.1	32	17	52.0	BDL
	Min.	**7.6**	**21**	**14**	**52.0**	**0**
	Max.	**8.1**	**39**	**18**	**92.0**	**0**
	Avg.	**7.8**	**30**	**16**	**71.5**	**0.0**

BOKARO CEMENT MANUFACTURING WORKS
(Unit OF DALMIA CEMENT (BHARAT) LIMITED)

STP Treated water quality analysis report from April 2025 to July 2025

Institute for Environmental Management

Test Report

Institute for Environmental Management

Test Report

INSTITUTE FOR ENVIRONMENTAL MANAGEMENT

TEST REPORT

INSTITUTE FOR ENVIRONMENTAL MANAGEMENT

TEST REPORT

STP Treated water quality analysis report from August 2025 to September 2025

INSTITUTE FOR ENVIRONMENTAL MANAGEMENT

TEST REPORT

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TEST REPORT

Annexure-XVII

Garland drains and collection pit constructed

Annexure-XVIII

BOKARO CEMENT MANUFACTURING WORKS
(Unit OF DALMIA CEMENT (BHARAT) LIMITED)

RWH Technical approval obtained from State Ground Water Board

Office of the Director, Ground Water Directorate,
Water Resources Department, Govt. of Jharkhand,
"Abhiyantran Bhawan", Kutchery Chowk, Ranchi 834001

Phone/Fax0651-2217141
E Mail-dirgwatran-wrd-jhr@nic.in

Letter No.: GWD / 260 / 2023 /..180../ Ranchi, dated- 18-05-2023

From,

Director,
Ground Water Directorate,
Water Resources Department,
Govt. of Jharkhand, Ranchi.

To,

Authorized Signatory,
Bokaro Cement Manufacturing Works,
Unit of Dalmia Cement, Bharat Limited,
Plot No. IV(A-7)(P)4,
Industrial Area (BIADA), Bokaro,
Dist. Bokaro-827014, Jharkhand.

Sub:- **Technical Approval of "Rain Water Harvesting" Design and Plan for Ground Water Recharging for the project of Bokaro Cement Manufacturing Works, Unit of Dalmia Cement, Bharat Limited.**

Ref:- Your letter No.-NIL, dated-28.03.2023, letter No.-NIL, dated-20.04.2023 and letter No.- NIL, dated-16.05.2023

Sir,

With reference to above cited subject your Design & Plan of "Rain Water Harvesting" along with Hydrological report of the area submitted by you to this office envisages to Harvest 38661M^3 of Rainfall run-off per annum resulting in Ground Water Recharge of the order of 23197M^3 per annum.

The plan comprises of two nos. storage tanks of total capacity 1300M^3 ie (500M^3 and 800M^3) respectively. 5 (five) nos recharge pit of size dia, depth 2M and 3M respectively. As per our perception in addition to storage tank it is advised to construct 1 (One) no. recharge pit of size 15'x15'x12' with 1 (one) no. boring of 8" dia up to 60m depth to be connected with a desilting chamber of size 1.5mx1.5mx1.5m to facilitate Rain Water Harvesting in a better way.

The plan submitted by you for Rain Water Harvesting is Technically Approved subject to the following conditions:-

1. The Rainfall run-off in the premises should get **primary treatment** to make the run-off free from suspended impurities and passing through settling chamber. Necessary chemical treatment should also be undertaken, if required.

2. Sewerage treatment plant (STP) must be established with separate drainage system so that recycled water may be used for cleaning and plantation purposes.

P.T.O.-2

3. Your entire "Rain Water Harvesting" project for Ground Water Recharging must be completed within 90 days of the approval of the plan.

4. The proposed Rain Water Harvesting Recharge Pits must be filled with filter materials of standard specifications and top coarse sand filter must be changed in every alternate year before onset of monsoon.

5. The quality of Ground Water in and around the plant area must be monitored periodically (every 6 months) and the data be necessarily made available to this office and to Jharkhand State Pollution Control Board, Dhurwa, Ranchi.

6. The completion Report of the entire project must be communicated within the stipulated period of 90 days to this office as well as to Jharkhand State Pollution Control Board, immediately after completion of the project.

7. The Guidelines of C.G.W.A. will prevail time to time.

8. "This premises has elaborate Rain Water Harvesting Facility", must also be displayed prominently at the entrance and other places of your plant, in order to sensitize more people about Rain Water Harvesting.

Enclosures :- (1) Technically Approved Rain Water Harvesting Plan.

Yours Sincerely,

Director,
Ground Water Directorate,
Jharkhand, Ranchi.

BOKARO CEMENT MANUFACTURING WORKS
(Unit OF DALMIA CEMENT (BHARAT) LIMITED)

RAIN WATER HARVESTING SYSTEM

Designing Details

Roof top Rain Water Harvesting System implemented in Bokaro Cement Manufacturing Works (Unit of DCBL). Rain Water Harvesting System implemented near Raw Material Handling Stacker reclaimer, Cement Mill, Project Office, Gate Complex and Packing Plant Building in our plant. Rain water collected from roof top through gutter and carrying by pipe lines in recharge tranches. 1 (One) Recharge pit constructed of Size 15'x 15 x 12' with one no boring of 8" dia up to 60 m depth constructed near packing plant .5 Nos Recharge pit constructed of size dia depth 2 M and 3 M with recharge trenches in plant area . In plant area depth of ground water level is varying between 3 to 5 meter and no hard rock strata are available above ground water level. 2 Nos of water collection tank also constructed for collection of rain water and same rain water will be used in green belt development and dust suppression. Rain water easily percolated and recharges in ground water level. Rain water harvesting system structure constructed as per Technical approval from Ground Water Directorate, Water Resource Department Govt of Jharkhand vide letter no GWD/260/2023/180/Ranchi Dated 18.05.2023. All Rain Water Harvesting Structure Photographs attached for your information:

Display board at the factory main gate "**This Premises has Elaborate Rain Water Harvesting Facility**"

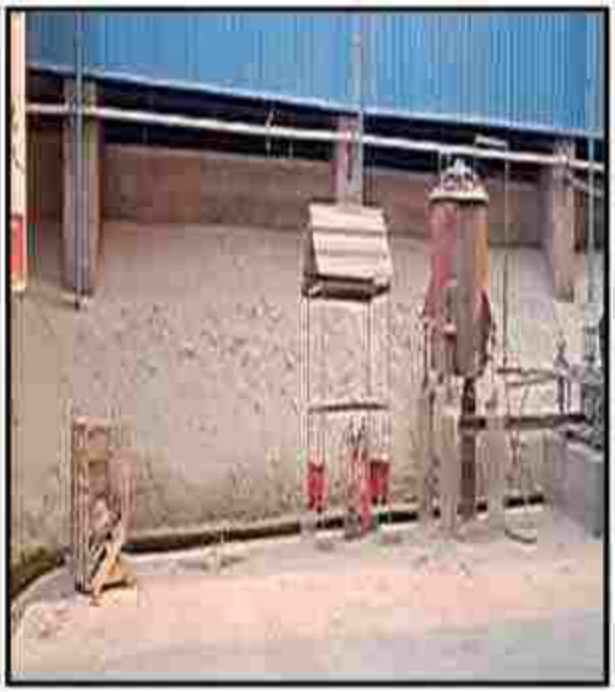
(1) Rain water harvesting recharge pit near Packing plant

Rooftop Rain water collection pipe line, concreated drain connected to recharge pit near Packing plant building

(2) Rain water harvesting recharge pit near Electrical load center

Rooftop Rain water collection pipe line, concreated drain connected to recharge pit near Electrical load center

(3) Rain Water Recharge Pit with connecting drain near stacker reclaimer



(4) Rain water recharge pit with connecting drain near mill area

(5) Rain water harvesting pit with Connecting drainage near stacker reclaimer

(6) Rain water recharge pit near packing plant covered with chamber and its connecting drainage

Rain Water collection Pond constructed Capacity: 925 KL

Rain water / Water collection tank constructed of capacity :400 KL

Annexure-XIX

BOKARO CEMENT MANUFACTURING WORKS

(Unit OF DALMIA CEMENT (BHARAT) LIMITED)

Water Flow meter installed at the main gate of the factory

Annexure-XX

BOKARO CEMENT MANUFACTURING WORKS (UNIT OF DCBL)

Noise Level report from April 2025 to September 2025

Near Project office							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
April-2025,	51.6	59.8	55.7		46.4	48.1	47.3
May-2025,	52.7	58.9	55.8		47.1	50.9	49.0
June-2025,	58.4	66.7	62.6		48.2	51.8	50
July-2025,	53.8	58.6	56.2		51.3	54.2	52.8
August-2025,	54.3	63.8	59.1		52.2	67.3	59.8
September-2025,	57.8	65.9	61.9		46.9	47.7	47.3
Min.	**51.6**	**58.6**	**55.7**		**46.4**	**47.7**	**47.3**
Max.	**58.4**	**66.7**	**62.6**		**52.2**	**67.3**	**59.8**
Avg.	**54.8**	**62.3**	**58.5**		**48.7**	**53.3**	**51.0**

Thakur Tand Village (Near Aganwadi)							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
April-2025,	43.8	45.6	44.7		42.7	43.6	43.2
May-2025,	43.5	45.4	44.5		39.6	40.4	40.0
June-2025,	41.6	42.7	42.2		40.6	42.8	41.7
July-2025,	43.2	44.1	43.7		43.8	44.9	44.4
August-2025,	44.3	43.5	43.9		42.8	43.9	43.4
September-2025,	43.4	44.8	44.1		43.7	44.1	43.9
Min.	**41.6**	**42.7**	**42.15**		**39.6**	**40.4**	**40.0**
Max.	**44.3**	**45.6**	**44.7**		**43.8**	**44.9**	**44.4**
Avg.	**43.3**	**44.4**	**43.8**		**42.2**	**43.3**	**42.7**

BOKARO CEMENT MANUFACTURING WORKS (UNIT OF DCBL)

Noise Level report from April 2025 to September 2025

Near Gorabali village (Near Temple)							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
April-2025,	43.2	44.1	43.7		38.9	42.3	40.6
May-2025,	40.7	42.9	41.8		38.4	41.6	40
June-2025,	43.8	44.2	44.0		38.7	41.7	40.2
July-2025,	42.7	45.8	44.3		39.6	41.1	40.4
August-2025,	41.3	42.3	41.8		40.1	41.6	40.85
September-2025,	42.8	44.2	43.5		37.4	38.2	37.8
Min.	**40.7**	**42.3**	**41.8**		**37.4**	**38.2**	**37.8**
Max.	**43.8**	**45.8**	**44.25**		**40.1**	**42.3**	**40.85**
Avg.	**42.4**	**43.9**	**43.2**		**38.9**	**41.1**	**40.0**

Near Khuturi Village (Near School)							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
April-2025,	39.9	41.4	40.7		37.6	38.8	38.2
May-2025,	37.8	39.9	38.9		35.2	40.6	37.9
June-2025,	37.9	40.8	39.4		37.9	38.1	38.0
July-2025,	40.2	42.8	41.5		39.6	42.2	40.9
August-2025,	40.5	40.9	40.7		35.8	36.7	36.3
September-2025,	37.6	38.5	38.1		37.7	38.8	38.3
Min.	**37.6**	**38.5**	**38.05**		**35.2**	**36.7**	**36.25**
Max.	**40.5**	**42.8**	**41.5**		**39.6**	**42.2**	**40.9**
Avg.	**39.0**	**40.7**	**39.9**		**37.3**	**39.2**	**38.3**

BOKARO CEMENT MANUFACTURING WORKS (UNIT OF DCBL)

Noise Level checking report from NABL/JSPCB approved lab month of June 2025

INSTITUTE FOR ENVIRONMENTAL MANAGEMENT

TEST REPORT

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TEST REPORT

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Noise Level checking report from NABL/JSPCB approved lab month of September 2025

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TEST REPORT

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TEST REPORT

Annexure-XXI

Bokaro Cement Manufacturing Works (Unit of DCBL)

Solar light installed at different location of the plant

NEAR TOILT

NEAR S. T. P.

NEAR AAQMS

NEAR PROJECT OFFICE

Annexure-XXII

Bokaro Cement Manufacturing works

Unit of Dalmia Cement (Bharat) Limited

Green belt plan

BOKARO CEMENT MANUFACTURING WORKS
(UNIT OF DCBL)

GREEN BELT DEVELOPMENT REPORT

Greenbelt/plantation will be done over 33% of the total project area i.e., about 5.2 acres (2.105 ha). The green belt will inter alia cover the entire periphery of the plant. Native fruits bearing species with large canopy will be selected for plantation.

Green Belt development report

Sl. N	Years	Area (Acres)	No. of Trees
01.	1st Year (2022-23)	0.5	550
02.	2nd Year (2023-24)	1.8	1865
03.	3rd Year (2024-25)	2.5	2380
04	4th Year (2025-26) (April-September)	0.4	435
TOTAL		**5.2**	**5230**

S.N	Year	Name of Species tree planted
1	1st Year (2022-23)	Gulmohar, Amaltash, Neem,Mihigini, shisham,Ashoka, Teak, Mango, Amala, Shiv Babool, Chatni, Jamun, Jarul
2	2nd Year (2023-24)	Gulmohar,Amaltash,Neem,Mihigini,shisham,Ashoka,Teak,Mango, Amala
3	3rd Year (2024-25)	Chatni,Gulmohar,Neem,Mihigini,Guava,Mango,Amala,Neem,Jamun Nerium
4	4th Year (2025-26) (April-September)	Chatni,,Neem,Mihigini,,Mango,Amala,,Jamun Nerium

Green Belt development report

Green Belt development report

Annexure-XXIII

BOKARO CEMENT MANUFACTURING WORKS

(UNIT OF DALMIA CEMENT (BHARAT) LIMITED)

Carbon Emission and Carbon Neutrality Action Plan

The MoEFCC Gazette Notification dated 08th October 2025 has set carbon-emission reduction targets for 186 cement plants, including Dalmia Cement (Bharat) Limited, Bokaro. The baseline GHG intensity for Dalmia Cement (Bharat) Limited is already covered in CCTS. Going forward Unit-2 Bokaro Cement Manufacturing Works (Unit of DCBL) will also be covered into CCTS and accordingly target will be provided by MoEFCC & BEE for GHG reduction in cement plant. As the plant recently commissioned and baseline assessment of CCTS happened in FY-23-24 the unit -2 BCMW was not added in current cycle.

Sources of GHG Emissions

Scope 1 (Direct Emissions):

- Coal consumption in FBC
- Company-owned vehicles and hired equipment

Scope 2 (Indirect Emissions):

Purchased grid electricity

Mitigation Plan for GHG Reduction

1. Process Optimization and Energy Efficiency

Key measures include reducing coal usage in the FBC, lowering clinker consumption, increasing rail transport, minimizing vehicle movement, and optimizing operating hours of major equipment.

Examples of completed improvements:

- Coal consumption will be reduced
- Increased clinker silo storage to reduce road transport
- Optimized slag circuit, packing plant compressors, pneumatic systems, and blower usage
- Reduced mill start-stops through better silo-level management

2. Future Process Optimization Initiatives

Planned technical measures includes:

- Baghouse DP reduction in CVRM units
- Wagon loading system optimization
- Feed chute modifications to avoid stoppages
- Energy-efficient impeller replacements
- Installation of VFDs, pneumatic valves, and compressed-air optimization
- Replacement of old fans, lighting optimization, and reduction of pressure drops

3. Energy-Efficiency Improvements

We are implementing targeted energy-efficiency programs, including benchmarking studies for high-consuming equipment, fan optimization, and compressor efficiency improvements. These actions directly reduce GHG emissions by lowering overall energy demand.

ISO 50001:2018 Implementation

DCBL Bokaro will be implemented ISO 50001 to systematically manage and improve energy performance across the plant.

4. Increasing Renewable Energy Sourcing

The plant is working to significantly increase the share of renewable electricity through rooftop solar, off-site RE procurement, and long-term renewable PPAs. The long-term goal is to transition toward 100% renewable electricity, eliminating grid-related emissions.

Additional initiatives include:

- Installation of solar and LED lighting in the plant and colony
- Regular tree plantation and green-belt development

5. Regular GHG Assessment and Inventory Strengthening

We conduct annual, third-party–assured GHG inventories to identify reduction opportunities from major emission sources and continuously track performance.

6. Objectives of GHG Reduction Program

- Drive innovation through cross-functional involvement
- Improve cost efficiency through energy and resource savings
- Set ambitious reduction targets and track progress
- Conduct internal and external energy audits
- Enhance awareness among employees and stakeholders
- Regularly evaluate, prioritize, and implement GHG-reduction opportunities

Annexure: XXIV

Approved On Site Emergency Plan from Chief Inspector of Factories, Jharkhand

Letter No. 7/EP 1025 /2022 कारखाना(मुख्यालय)– 672

OFFICE OF THE CHIEF INSPECTOR OF FACTORIES, JHARKHAND, RANCHI.

LABOUR BUILDING, DORANDA, RANCHI-834002

(Email Id- cifoffice123@gmail.com)

From,

Chief Inspector of Factories, Jharkhand,
Ranchi.

To,

The Occupier,
M/s Dalmia Cement (Bharat) Limited,
Unit: Bokaro Cement Manufacturing Works,
Plot No. IV/A-7(P) 4, Bokaro Industrial Area
Balidih, Bokaro Steel City, Bokaro- 827014.

Ranchi Dated: 08-08-2022

Subject: Recommendation of On site Emergency Plan of M/s Dalmia Cement (Bharat) Limited, Unit: Bokaro Cement Manufacturing Works, Plot No. IV/A 7(P) 4, Bokaro Industrial Area, Balidih, Bokaro Steel City, Bokaro-827014.

Reference: Your letter dated-02.08.2022.

Sir,

This has reference to your letter date-02.08.2022 along with On-site Emergency Plan which consists of total forty four (44) pages. The submitted emergency response plan has been verified and examined. The above On-site emergency plan is recommended subject to the following conditions: -

1. Regular Mock- drill shall be carried out in the factory at least once in every year and the report shall be made available to the area Inspector of Factories and Chief Inspector of Factories.
2. The safety audit shall be conducted by experienced competent person/Agency/ Institutions. The safety audit report, health & safety policy, Hazard analysis report & fire load calculation report shall be submitted.
3. The Emergency Plan will be up-dated and revised as per modification in the plant.
4. Adequate arrangement of medical/relief facilities (first aid equipments etc.) shall be provided and maintained in the emergency control room.
5. Telephone number of key persons to be noted and displayed in the central control room.
6. The Independent power back-up facility for Emergency Control Room shall be provided.

Encl: A copy of the recommended plan is enclosed herewith.

Yours faithfully,

Chief Inspector of Factories, Jharkhand,
Ranchi

Annexure: XXV

Dalmia Cement (Bharat) Limited, Bokaro

PPEs Issues for the period of April 2025- September-2025

Description of PPEs	PPEs Issued
Heat Resistant suit	6
safety Helmet	600
Reflective jacket	2665
Load carrying Helmet	50
Earplug	500
Safety shoes	263
Dust Mask	10000
Hand Gloves	18361
Clear Glass	1300

Annexure: XXVI

MEDICAL HEALTH CHECKUP RECORD

BOKARO CEMENT MANUFACTURING WORKS (UNIT OF DCBL)						
MEDICAL HEALTH CHECKUP REPORT FY 2025-2026 (Line-2)						
Sl. NO.	Name (Shri)	Designation	Deptt.	Testing Date	Due Date	Blood Group
1	Dharmendra Gorain S/O Phulchand Gorain	Security Guard	SIS Line 2	4/21/2025	4/21/2026	B+ve
2	Manoj Kumar Thakur S/O Kala Chand Napit	Security Guard	SIS Line 2	4/21/2025	4/21/2026	A+ve
3	Deepak Kumar Mahto S/O Shankar Mahato	Security Guard	SIS Line 2	4/22/2025	4/22/2026	A+ve
4	Goutam Kumar Singh S/O Laldev Singh	Attender	COMMERCIAL LP-2	4/22/2025	4/22/2026	B+ve
5	Uttam Kumar Singh S/O Yudhister Singh	Attender	COMMERCIAL LP-2	4/26/2025	4/26/2026	B+ve
6	Pradeep Kumar Mahto S/O Rakhit Lal Mahto	Attender	COMMERCIAL LP-2	4/22/2025	4/22/2026	AB+ve
7	Rajesh Singh s/O Sarju Prasad Singh	Labour	Mech., Line-2	4/23/2025	4/23/2026	B+ve
8	Mohan Lal Ravidas S/O Sri Chandradev Ravidas	Labour	Mech., Line-2	4/24/2025	4/24/2026	AB+ve
9	Rajendra Kumar Ravidas S/O Lotan Ravidas	Labour	Mech., Line-2	4/24/2025	4/24/2026	B+ve
10	Rajesh Singh s/O Sarju Prasad Singh	Labour	Mech., Line-2	4/23/2025	4/23/2026	B+ve
11	Mohan Lal Ravidas S/O Sri Chandradev Ravidas	Labour	Mech., Line-2	4/24/2025	4/24/2026	AB+ve
12	Rajendra Kumar Ravidas S/O Lotan Ravidas	Labour	Mech., Line-2	4/24/2025	4/24/2026	B+ve

Annexure: XXVII

BOKARO CEMENT MANUFACTURING WORKS
DALMIA CEMENT (BHARAT) LIMITED

Corporate Environment Responsibility & CSR report for the period of April 2025 to September 2025

Sl. No	Name of Activity	Place of Activity/ Village	Expense (in Rs.)
1	Tailoring Training	Parsadih and Kanari	50000.0
2	Beautician Training	Bishunpur, Gorabali South	40000.0
3	Distribution of Paddy Seeds	Gorabali South	55000.0
4	Distribution of Chairs for Old age homes	Gorabali South	51000.0
5	General Medicine and Gynecology Camp	Gorabali South and Marafari	24500.0
6	Digital Literacy through WoW Bus	Tantri, Jainamore	325000.0
7	EDP Training	Gorabali South	300000.0
8	Vaccination of Livestock's (Goat)	Gorabali North, South, Khuntri, Kanari, Marafari	12000.0
9	Plantation and Distribution of Disposable Carry Bags	Gorabali North, South, Khuntri, Kanari, Marafari	57000.0
10	Well Renovation	Kanari	387000.0
11	Independence Day	Bokaro Diksha	25000.0
12	Yoga Day	Bokaro Diksha	37000.0
13	Skill training to local youths at Bokaro Diskha	Bokaro	1200000.0
14	Dental Camp	Bokaro Diksha	15000
15	Sewa Diswas	Gorabali North, Marafari	75000.0
	Total Expense (in Rs.)		**2653500.0**

CER& CSR details for the period of April 2025 to September 2025

Tailoring Training

Beautician Training

Distribution of Paddy Seeds

Distribution of Chairs for Old age homes

General Medicine and Gynecology Camp

Digital Literacy through WoW Bus

EDP Training

Vaccination of Livestock's (Goat)

Dental Camp

Plantation and distribution of disposable carry bags

Celebration of Environment Day at Bokaro Diksha

Celebration of Yoga day

Well renovation for the conservation of water

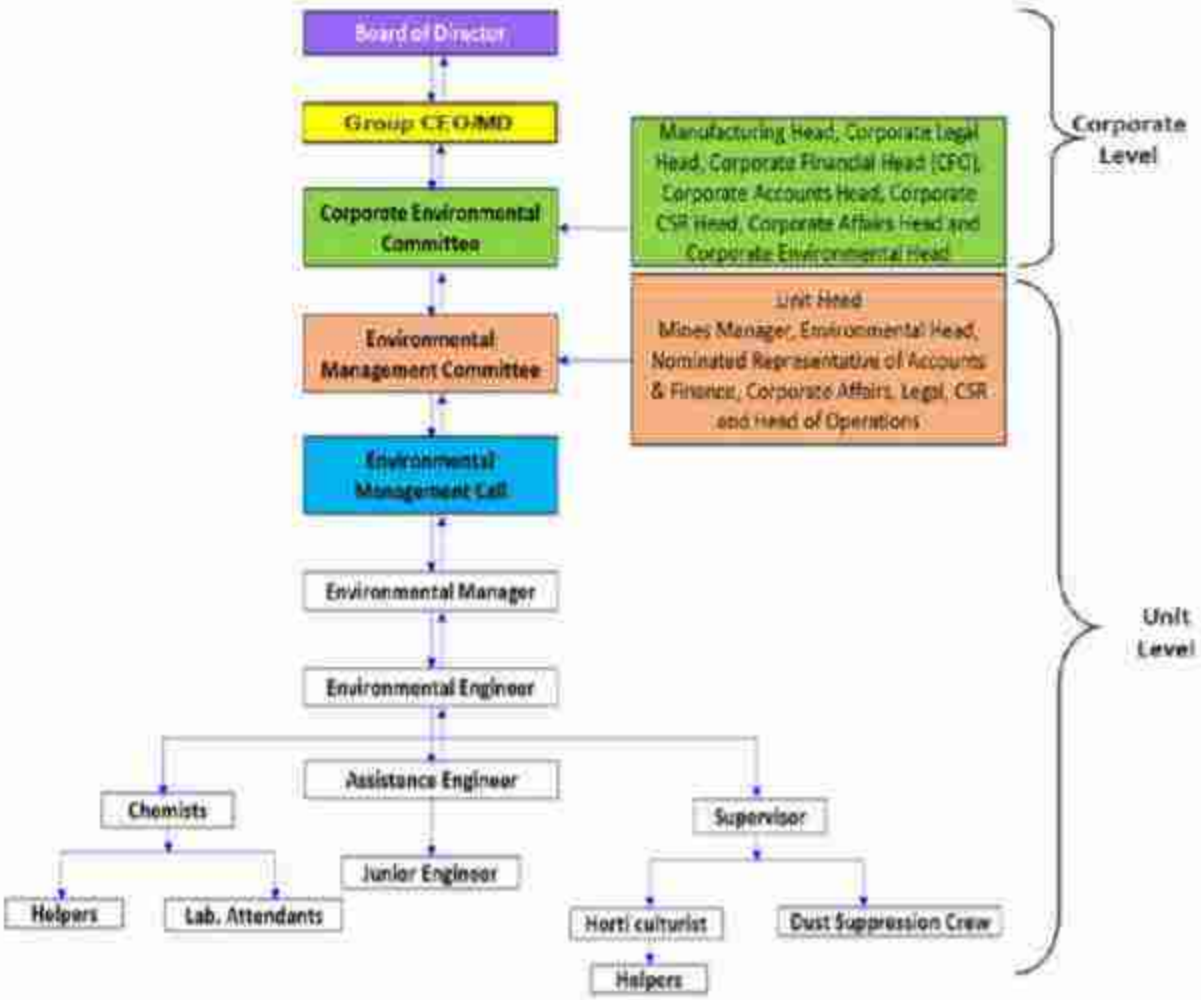
Skill Training to local youths and Independence Day Celebration at Bokaro Diksha

Celebration of Sewa Diswas

Annexure: XXVIII

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: XXIX

BOKARO CEMENT MANUFACTURING WORKS

DALMIA CEMENT (BHARAT) LIMITE

Investment on Environment management up to September 2025

Sn	Item	Cost (Rs. in Crores)
1	**Cost of Air Pollution Control Systems**	
A	APCEs like Bag house with stack & auxiliary Bag filters cost	25.0
B	Cost of CAAQMS & Opacity Meter and Digital Display Board	1.0
C	Road Sweeping Machine	0.30
D	Water Tanker spraying	0.01
E	Concreting of internal road and drainage	8.0
	Sub Total	**34.31**
2	**Cost of Water conservation & Pollution Control**	
A	STP of 15 KLD	0.25
B	Rain water harvesting system with drainage pipes, Flow meter for raw water, Sprinklers & drip irrigation systems for greenbelt/plantation etc.	0.35
	Sub Total	**0.6**
3	**Cost of Solid Waste Management System-Storage with concrete flooring for Solid & Hazardous waste**	0.5
4	**Green belt development**	0.05
5	**Noise Reduction Systems-enclosures for machineries with suitable absorption material, vibration isolators for all fans, compressors etc.**	0.05
	Grand Total	**35.51**

Bokaro Cement Manufacturing Works (Unit of DCBL)

Recurring cost investment on Environment protection
April 2025 to September 2025

Bokaro Cement Manufacturing Works (Unit of DCBL)		
Recurring cost expenditure on various Environmental protection activities from April 2025 to September 2025		
April 2025-September-2025		
S.No.	**Environmental activities**	**Cost (Rs. In Lacs)**
1	**Operation and maintenance cost of Pollution Control Equipment**	
A	**Cement Mill**	
1	Cost on Schedule maintenance Bags replacement with new bags, Bags cleaning, De dusting line checking, cleaning and repairing work. Bag filters fan maintenance etc)	1.67
2	Power consumption in Pollution control equipment (Bag House & Bag Filter) 6305508 KWH X 5.86	369.5
2	Third Party Environmental Monitoring & Analysis	0.5
3	AMC of CEMS Data transmission to JSPCB& CPCB	0.15
4	AMC of CAAQMS Maintenance, Servicing and Calibration,	0.75
6	Calibration of Pollution Monitoring Equipment's (CEMS)	1.5
10	STP Operation & Maintenance	1.26
11	Road Sweeping Machine Operation & Maintenance	1.86
13	Fuel consumption and manpower cost of water sprinkling tanker	1.23
14	Green Belt Development	3.8
TOTAL RECURRING COST EXPENDITURE FROM APRIL 2025 TO SEPTEMBER 2025 (Rs):		**382.21**

Annexure: XXX

Bokaro Cement Manufacturing Works (Unit of DCBL)

Half Yearly Environment Internal audit report for the period of April 2025-September-2025

Date: 29.08.2025 (2.30 PM -5.30 PM)

Following below members present in Environment Audit:

1. Sunil Kumar Bhusari
2. Debi Prasad Das
3. Arvind Kumar. (Head Mechanical)
4. LR Patel: (Head E&I)
5. Drigpal Singh: (Asst. Manager Quality)
6. Sagar Sharma: Head (Safety)
7. Sohan Lal (Head Civil)
8. Shubham (Unit Head Office)
9. Sanjeev Verma (Head Environment)

Following below point discussed and reviewed of Environment performance of Dalmia Cement (Bharat) Limited. Bokaro

Sr. No	Environment internal audit observation points	Compliance Status of observation points	Auditor Observation
1.	Review status of Statutory compliance - Consent to Operate (CTO) & Environment Clearance (EC) compliance condition	Complied. Timely submitted EC Compliance report to / MOEF&CC, JSPCB /CPCB/SEIAA.	Complied
2.	Checked Calibration certificate record of Pollution monitoring equipment	Complied, On line CEMS & CAAQMS calibration done in time and CEMS and CAAQMS data continuous transmitted to JSPCB & CPCB server and emission maintained within the norms.	Complied
3.	Statutory compliance - Hazardous waste management	Complied. Timely submitted Hazardous waste return Form-IV JSPCB Ranchi & Regional Office Dhanbad.	Complied

4.	Review status of Statutory compliance Condition of OHC, CTO and Authorization of Bio medical waste compliance condition under Bio- Medical Waste Management.	Complied. Timely submitted Hazardous waste return Form-IV JSPCB Ranchi & Dhanbad.	Complied
5	Checked Calibration certificate record of Pollution monitoring equipment.	Complied. On line CEMS & CAAQMS instrument calibrated with in time.	Complied
6	On Line monitoring data display at factory main gate.	Complied. Online Environment monitoring data displayed at main gate.	Complied.
7	Checked Third party Environment monitoring report.	Complied, third party Environment monitoring report done on quarterly basis and all Environment monitoring data available in Environment Department.	Complied.
8	Checked Drinking water quality	Complied, drinking water quality regularly checked on monthly basis all parameter with in the norms.	Complied.
9	Checked status validity of CTO and HWA.	Complied. within time limit	Complied.
10	Checked fugitive dust emission records	Fugitive dust emission monitoring done by NABL/JSPCB approved lab record available at Environment Department and fugitive emission control measures taken.	Complied
11	Status of Green belt development	Complied Green belt maintained 33% of the plant. Also instructed to horticulture department for regular sprinkling of water on trees during dry season.	Complied
12	Rain water harvesting system	Complied Rain water harvesting system constructed and maintained. Also instructed to Civil department for cleaning of all drainage of RWH System	Complied
13	Status of Bag filter /Bag house	Complied All plant Bag filter and bag house is running	Complied

		condition and also instructed to Maintenance team for preventive maintenance with in time period	
14	Status of Bag filter /Bag house	Complied All plant Bag filter and bag house is running condition and also instructed to Maintenance team for preventive maintenance with in time period	Complied
15	Submission of Environment statement to JSPCB	Complied Environment Statement submitted with in time for the year 2024-2025	Complied
16	Statue of water spray tanker for control of fugitive dust emission	Complied Water spray tanker regular water spray on the outside roads and dust prone area for the control of fugitive dust emission and record maintained	Complied
17	Status of road sweeping machine	Complied Regular cleaning of the roads and concreated area by road swapping machine and record maintained. also discussed preventive maintenance of road sweeping machine to control of breakdown of road sweeping machine.	Complied
18	Status of Solar light	Complied Solar light installed at different location in the plant . instruct Electrical Department for preventive maintenance of Solar light.	Complied
19	Status of Water sprinkler	Water sprinklers and water fog system working condition in plant gate main road	Complied
20	Status of Raw material covering	Raw material are covered with tarpaulin sheet for control of fugitive dust emission.	Complied
21	Maintenance of plant main inertance road	Regular plant outside road maintenance done as when required	Being done
22	PPEs provide to all workers and employee's	It is observed that all workers employees are wearing PPEs in plant area. PPEs are regularly provided to all employee's .	Complied

23	Awareness done on Safety and Environment protection.	Daily discussion done on GRT (Grass Root Team) meeting to awareness for safety and Environment for all employees.	Complied
24	Few places belt conveyers open	Covering of conveyers belt work is under progress and will completed one week.	Complied
25	Water leakage near FBC area	Damage pipe line change with new pipe line. Presently no water leakage	Complied.
26	Tree plantation required in plant vacant place area	Instructed to Horticulture team for native tree plantation in Monsoon season	Complied
27	Ground water level and ground water quality report	Ground water level checked and Ground water quality analysis regularly done and reports are available in Environment Department of surrounding village area.	Complied
28	Medical health checkup record	Medical health checkup regularly done and Medical Health checkup report available at Plant OHC.	Complied
29	Disposal of Bio Medical Waste	Bio Medical Waste dispose off through authorized vendor from JSPCB /CPCB M/s Bio Genetic PVT Limited Dhanbad	Complied
30	Disposal of Used Oil /Waste oil	Used oil /Waste oil dispose of through authorized vendor from SPCB/CPCB M/s M/s Plus Lubricants Gul Authorization No.MPCB/RO(HQ)HSMD/Autho/19/H&OW-26	Complied
31	Checking of Vehicle PUC Certificate	Regular PUC certificate checked by Security team of PUC of all vehicle interring in plant area	Complied
32	Disposal of Kitchen Waste	Bachler hostel kitchen waste collected and dispose of by nearby villagers to fed there animals .	Complied
33	Status of Water meter	All water meter working condition	Complied

ENVIRONMENTAL COMPLIANCE AUDIT REPORT

FOR

BOKARO CEMENT MANUFACTURING WORKS (A UNIT OF DALMIA CEMENT (BHARAT) LIMITED)

AT

BOKARO INDUSTRIAL AREA, BALIDIH, BOKARO, JHARKHAND

Prepared By:

INSTITUTE FOR ENVIRONMENTAL MANAGEMENT
A-13, Saket Vihar, Harmu Housing Colony
Ranchi, Jharkhand, India
NABET certificate no.: QCI/NABET/ENV/ACO/24/3193
Valid up to: February 7, 2027

Declaration by experts contributing to the Environmental Compliance Audit report for Bokaro Cement Manufacturing Works (A Unit of Dalmia Cement (Bharat) Limited) located at Bokaro Industrial Area, Balidih, Bokaro, Jharkhand Jharkhand.

We, hereby, certify that we were the part of the **Environment Compliance Audit** team in the following capacity that developed the above **Report**, submitted to client.

Endorsed by:

Name: Dr. S. C. Jain

(Director)

Signature:

Project Coordinator:

Name: Ms. Shreya Sonal

(Assistant General Manager)

Signature:

Period of Involvement: August 2025 to till date

Contribution of Experts Team:

S. No.	Name of the expert/s	Involvement (Task & Period)		Signature
		Task	Period	
1.	Dr. S.C. Jain	Finalization of the report.	August 2025 to till date	
2.	Ms. Shreya Sonal	Development of Audit Findings and Compliance Report. Preparation of Compliance Summary for Audit Requirements	August 2025 to till date	
3.	Mr. Abhigyan Rohan	Evidence gathering through documents and photographs at site	August 2025 to till date	
4.	Mr. Rajiv Kumar Singh	Evidence gathering through documents and photographs at site	August 2025 to till date	

5.	Ms. Akanksha Sourabh	Coordination and Assistance in Report Preparation.	August 2025 to till date	
6.	Ms. Maher Fatmi	Coordination and Assistance in Report Preparation.	August 2025 to till date	Maher

Declaration by the Head of the accredited consultant organization/ authorized person

I, Mrs Seema Jain, hereby, confirm that the above-mentioned experts were involved in the, Environmental compliance Audit report preparation for ***Bokaro Cement Manufacturing Works (A Unit of Dalmia Cement (Bharat) Limited) located at Bokaro Industrial Area, Balidih, Bokaro, Jharkhand.*** I also confirm that the consultant organization shall be fully accountable for any mis-leading information mentioned in this statement.

The report has been prepared on the basis of the maps, documents, details provided by the Dalmia Cement Bharat Limited, Bokaro.

Signature:

Name: Mrs Seema Jain

Designation: Managing Director

Institute For Environmental Management * Ranchi *

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CHAPTER 1 – INTRODUCTION

1.1 BACKGROUND

This Environmental Audit Report has been prepared to assess the environmental performance of Bokaro Cement Manufacturing works (A Unit of Dalmia Cement (Bharat) Limited), situated in Bokaro Industrial Area, Balidih, Bokaro, Jharkhand. The audit aims to evaluate the project's compliance with applicable environmental regulations, standards, and best practices, as well as identify areas for improvement in environmental management.

The cement project has the potential to impact the environment in various ways. This audit was conducted to ensure that the project is being implemented in an environmentally responsible manner and to identify opportunities for minimizing its environmental footprint.

The audit was conducted on **6th August 25** by IEM Team and involved a thorough review of documents, observations, and interviews with key personnel. This report presents the findings, observations, and recommendations arising from the audit, with the objective of promoting environmental sustainability and minimizing the project's adverse environmental impacts.

1.2 SCOPE OF WORK

The scope of environmental auditing, as per Dalmia's mandate, includes:

- To review the conditions stipulated in the Environmental Clearance (EC) granted to the cement plant and its associated units, specifically focusing on measures for controlling air pollution, fugitive emissions, noise levels, and wastewater/solid waste management.
- To assess compliance with the EC conditions, Consent to Establish/Operate (CTE/CTO) conditions, and other statutory approvals relevant to cement manufacturing processes such as raw material handling, cement grinding,.
- To conduct detailed site inspections and verify on-ground environmental performance, including stack emissions from grinding units; fugitive dust concentrations at transfer points. This also includes reviewing on-site documentation, monitoring reports, and the adequacy of sampling and analytical procedures.

- To engage in discussions with concerned plant personnel regarding statutory compliance, operational practices, environmental infrastructure bag filters, bag houses, dust extraction systems), and effectiveness of systems installed to meet EC and regulatory requirements.
- To evaluate the overall environmental performance of the cement plant in relation to EC stipulations, Consent conditions, Hazardous and Other Waste Rules, Solid Waste Management Rules, and guidelines.
- To assess compliance and adequacy of environmental management practices, including dust management in material handling areas, clinker and fly ash storage, greenbelt development, storm water management, and occupational health and safety provisions.

To provide recommendations for improving environmental performance, including upgrades in pollution control systems, dust suppression measures, energy efficiency improvements, and strengthening of environmental monitoring and management systems.

To prepare a detailed Environmental Audit Report outlining compliance against each EC and Consent condition, along with corrective actions, recommendations, and improvements required for strengthening environmental management and monitoring at the cement plant.

1.3 OBJECTIVES

The key objectives of the audit were:

1. To assess compliance:

Evaluate adherence to Environmental Clearance (EC) conditions, Consent to Operate/Establish (CTO/CTE), and other statutory requirements applicable to cement manufacturing operations.

2. To evaluate environmental performance:

Assess the effectiveness of the plant's environmental management systems—covering air emissions, fugitive dust control, solid and hazardous waste handling, noise control, and greenbelt development—and identify areas needing improvement.

3.To ensure environmental protection:

Verify that adequate mitigation measures are implemented to minimize environmental impacts such as particulate emissions, dust dispersion, noise, and impacts on local water resources, biodiversity, and the surrounding community.

4. To promote sustainable development:

Encourage sustainable cement manufacturing practices by assessing energy efficiency, alternative fuel and raw material (utilization, resource conservation, and overall carbon footprint reduction strategies.

5. To identify areas for improvement:

Provide actionable recommendations to improve plant operations, environmental monitoring systems, pollution control equipment efficiency and ensure best environmental practices across all units.

6. To support informed decision-making:

Offer a comprehensive evaluation of the plant's environmental performance to help management make data-driven decisions, improve sustainability outcomes, and ensure continuous compliance and environmental stewardship.

1.4 CONDUCT OF ENVIRONMENTAL AUDIT WORK & REPORTING

The environmental audit involved a document review, site inspection, and stakeholder consultation. A draft report was prepared and submitted to Dalmia for comments, followed by incorporation of responses and preparation of this final audit report.

1.5 STRUCTURE OF THE REPORT

The final environmental audit report is structured into the following five chapters:

Chapter 1- Introduction and Background information on Bokaro Cement Manufacturing Works.

(Unit of Dalmia Cement (Bharat) Limited).

Chapter 2- Audit Methodology: A detailed description of the audit process and scope of the audit.

Chapter 3- Environmental Compliance Audit: An overview of the findings of the audit, including descriptions of compliance and findings from the site inspection in compliance to the EC conditions.

Chapter 4- Audit Findings: The draft report of audit finding was submitted to Dalmia for needful and comments. The comments of the PP on IEM observation were recorded, which were discussed and finalized.

Chapter 5- Post Audit comments and clarifications.

CHAPTER 2 – AUDIT METHODOLOGY

2.1 METHODOLOGY

The methodology for the environmental audit involves a comprehensive approach to assess compliance and environmental performance. It begins with a thorough document review, examining relevant documents such as Environmental Clearance approvals, other statutory clearances, and environmental monitoring reports. A site visit is then conducted to observe environmental management practices, inspect facilities, and gather data on environmental parameters. Interviews and discussions with key personnel, including plant management and environmental staff, provide valuable insights into environmental management practices and procedures. Data collection and analysis are also crucial, involving the examination of environmental data such as air and water quality monitoring data and waste management records. The audit culminates in a comprehensive report detailing findings, recommendations, and conclusions, highlighting areas of compliance and non-compliance, and providing opportunities for environmental performance enhancement.

2.2 OPENING MEETING

The audit process commenced with an opening meeting on 6th August 2025 with the Bokaro Cement Manufacturing Works, Dalmia Team which includes other concerned officials to introduce the audit scope and their responsibility in facilitating the process. The purpose, depth and the scope of the audit were outlined and the methods were explained. Further, requirement of documents to review such as various management plans, project report, and periodical reports submitted to various regulatory agencies to address specific compliance requirement particularly those relevant to address the scope of the study were discussed and deliberated.

2.2.1 CONSULTATION

Interaction meetings were conducted with the concerned officials and staff dealing with the project to understand the regulatory and statutory process followed for the plant.

2.2.2 DESK REVIEW

The available documents were exhaustively desk reviewed for generation of information and the gaps in compliance to environmental clearance conditions; relevant information generated was

used for detailed discussion with the concerned officials.

2.3 DATA COLLECTION AND VERIFICATION

The audit team reviewed the following statutory and project-related documents, as listed in **Table 2.1**, to assess environmental compliance:

This review enabled the team to evaluate the project's adherence to relevant environmental regulations and standards.

Table 2.1- Document reviewed by IEM

Sl. No.	Documents	Letter no. & Dated
1	Environment Clearance (EC) 2.0 MTPA to 3.1MTPA	EC/SEIAA/2022-23/2646/2646-27, Ranchi Dated 08.02.2023
2	Environment Clearance (EC) 2.0 MTPA	EC/SEIAA/2021-22/2534/2022/27, Ranchi Dated 21.01.2022

Sl. No.	Documents	Letter no. & Dated	Validity
1	Consent for Establishment for 2.0 MTPA	JSPCB/HO/RNC/CTE-12699959/2022/ 195, Dated 28-04-2022	27.04.2023
2	Consent for Establishment for 2.0 MTPA to 3.10 MTPA	JSPCB/HO/RNC/CTE-15399804/2023/ 128, Dated 23-02-2023	As per EC
3	Consent to operate 3.10 MTPA (PSC/ PCC) under Air &Water Act	JSPCB/HO/RNC/CTO-15980338/2023/1752, Dated 20.10.2023	31.03.2024
4	Consent to operate 3.10 MTPA (PSC/ PCC) under Air &Water Act	JSPCB/HO/RNC/CTO-17957569/2024/253/ 24.02.2024	31.03.2029
5	Authorization of Hazardous Waste	JSPCB/HO/RNC/HWM-16948442/2024/14, Dated 04/03/2024	30.09.2028

2.4 SITE INSPECTIONS

The areas that were inspected during the comprehensive site visit to Dalmia site on 6th October 2025 are mentioned below. The inspection aimed to evaluate environmental management practices, identify potential risks, and ensure compliance with regulatory requirements.

- Raw material handling & storage
- Cement grinding unit (VRM)
- Fly ash / Slag handling & storage
- Coal
- Cement storage silos
- Packing plant & dispatch area (Truck/Bag/Bulk Loading)
- Central Control Room (CCR)
- Water management systems (process water, dust suppression, domestic water)
- Sewage Treatment Plant (STP)
- Garland drains & storm water management system
- Solid waste management (dust, process rejects, sludge)
- Hazardous waste management (used oil, grease, contaminated materials)
- Greenbelt development & plantation
- Ambient air quality & noise monitoring stations
- Occupational Health Centre (OHC)
- Employee protection & safety systems (PPE, safety signage, emergency response)
- Energy management systems (VFDs, energy meters)
- Renewable energy integration (Solar rooftop, LED lighting)
- Corporate Social Responsibility (CSR) activities
- Environmental laboratory / monitoring corner

2.5 CONSULTATIONS WITH PROJECT OFFICIALS

The audit team conducted comprehensive consultations with project officials, including:

- **Plant Manager:** Discussing overall plant operations and process efficiency

- **Environmental Officer:** Reviewing statutory compliance, monitoring data, and environmental management systems
- **Safety Officer:** Understanding safety practices, PPE implementation, and emergency preparedness
- **CSR Coordinator:** Evaluating corporate social responsibility activities
- **Operational Staff:** Gathering insights on daily operations and practical implementation of environmental measures

The purpose of these consultations was to evaluate the implementation of environmental management initiatives, identify operational challenges, and understand future planning related to:

- **Air Pollution Control Systems:** Performance of bag filters and bag house, and stack emission compliance
- **Greenbelt Development:** Progress, maintenance, and future plantation targets
- **Energy Efficiency:** Plans for energy conservation
- **Raw Materials :** Current usage and future enhancement strategies
- **Water Management Systems:** Reuse, recycling, and reduction initiatives in process and domestic water consumption
- **Environmental Laboratory Strengthening:** Enhancing in-house environmental monitoring capabilities
- **Zero Liquid Discharge:** Plant strictly follows Zero Liquid Discharge (ZLD).

2.6 MONITORING & VERIFICATION

Cross-verification of compliance status was done using:

- **NABL-Accredited Laboratory Data:** Ensuring accuracy and reliability of monitoring data
- **Internal Records:** Reviewing air, water, and noise quality monitoring records
- **CSR Activity Reports and Fund Utilization Statements:** Evaluating CSR initiatives and fund utilization

2.7 REVIEW OF STATUTORY COMPLIANCE

The audit team evaluated compliance with relevant statutes and regulations, including:

- **Environmental Acts:**

  - Air (Prevention & Control of Pollution) Act, 1981

  - Water (Prevention & Control of Pollution) Act, 1974

  - Environment (Protection) Act, 1986

  - Forest (Conservation) Act, 1980

- **Environmental Standards:**

  - Air Quality Standards (GSR-742(E), NAAQS)

  - Noise Quality Standards (GSR-742(E))

  - Water Quality Standards (GSR-801(E), IS10500:2012, IS2296:1982)

The team cross-checked statutory consents and approvals with field-level implementation and operational records to ensure compliance.[1]

2.8 WORKING GROUP MEETING & REPORTING

After the completion of interview, document verification and site visit, the observation and suggestions by the audit team were compiled into a consent checklist and audit notes were prepared. This report has been prepared highlighting areas where action or improvement is required keeping in view the scope of the study.

CHAPTER 3 – COMPLIANCE STATUS

The Environmental Audit was carried out in accordance with the conditions stipulated in the Environmental Clearance (EC), Consent to Establish (CTE), Consent to Operate (CTO), Forest Clearance (FC), Environmental Management Plan (EMP), and other applicable statutory approvals. The audit team developed and implemented systematic procedures to obtain sufficient, relevant, and reliable evidence for assessing the degree of compliance. The appropriateness of each activity was evaluated based on the quality of evidence—its relevance, validity, and reliability—which served as the basis for professional judgment in determining the nature, timing, and extent of the audit procedures.

The audit for Bokaro Cement Manufacturing Works (Unit of Dalmia Cement (Bharat) Limited), was conducted through a comprehensive review of documents, site inspections, stakeholder interactions, and verification of records to establish evidence of compliance

3.1 DEFINITIONS OF TERMINOLOGY USED FOR ASSESSMENT OF COMPLIANCE STATUS

For assessment of compliance status against each stipulated environmental clearance and statutory condition, the terminology described in **Table 3.1** has been adopted.

Table 3.1: Expression of compliance with conditions of approval

Status	Description
Complied	Where the environmental condition is implemented in accordance with the stipulated conditions.
Being Complied	The condition is dynamic, where continuous compliance is ensured with passage of time.
Will be Complied / Agreed	Requirement of compliance is at a later date and will be complied at appropriate time.
Partially Complied	Compliance of condition is not fully met and is inadequate.
Not Complied	Non-conformance / lack of implementation of needed action.
Not Applicable / Review Required	Condition is not applicable for the project. Requires review and initiative by project proponent (PP) to bring it to the notice of MoEF&CC for needful action.

3.2 COMPLIANCE STATUS OF Bokaro Cement Manufacturing Works (Unit of Dalmia Cement (Bharat) Limited). Based on the audit, the compliance status of major EC conditions is presented in Table 3.2.

Table 3.2 - Point wise compliance status of Environmental Clearance conditions and Audit Observations /Recommendations by ICM

EC Conditions - EC Letter No.-EC/ SEIAA / 2022-23 /2646/ 2023/346, Ranchi Dated/ 08.02.2023.			
Point No.	**Specific Condition of EC**	**Compliance Status**	**Observation**
Specific Condition			
(ii)	This Environmental Clearance is valid subject to the following condition below: That this project has- a. Obtained all legal rights to operate at concerned place. b. Complied with all existing concerned laws of the land and c. Complied with the directions of SEIAA on the issue of Environmental Clearance till date.	**Complied**	a. The project is located in Notified Industrial area. The Land is allotted by JIADA vide DCNL at Plot No. PC/A-7(PH) Notified Bokaro Industrial Area Mahilo Phase-4, Notified Bokaro Industrial Area Mahilo Phase-4, Bokaro-827013, Jharkhand and is in possession of JACDL. b. All existing concerned laws are being complied. c. CTE and CTO obtained from JSPCB Ranchi for the manufacture and operation of the plant
4. Statutory Compliance			
1	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.	**Not Applicable**	As there is No Forest land in plant area. The unit is located in notified Industrial area in JIADA, Bokaro, Jharkhand with due allocation through Govt. of Jharkhand. Obtained all necessary statutory clearance to operate the plant

2	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	**Not Applicable**	This clause is not applicable to our unit, as there is no wildlife sanctuary within 10 km radius of our unit. NOC of DFO Territorial & DFO Wildlife in this regard has been obtained, vide Letter No. 3546 dated 21.12.2021 and 2958 dated 28.11.2021 respectively. The same was submitted during appraisal of plant and also is attached herewith as Annexure I & II.
3	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area).	**Not Applicable**	The unit is located in notified industrial area of JIADA, Bokaro. There is no record of Schedule-I species within 10 km radius of our unit. Hence, this condition is not applicable.
4	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	**Complied**	Our unit has obtained CTE from JSPCB, Ranchi vide letter no. JSPCB/HO/RNC/CTE-1939804/2023/128, dated 23.02.2023, and CTO obtained from JSPCB Ranchi vide letter no. JSPCB/HO/RNC/CTO-1709769/2024/283 dated 24.02.2024, attached as **Annexure-III & IV**.
5	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.	**Complied**	The permission for water connection has been obtained from JIADA and Drinking Water and Sanitation Sub-Division, Bokaro vide letter no. 36 dated 11.04.2022. The same is attached herewith as **Annexure-V**.
6	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time	**Complied**	Authorization under the Hazardous and Other Waste Management Rules 2016 obtained from JSPCB Ranchi. Copy attached as **Annexure-VI**.

	to time.		
7	No mining activity shall be undertaken in the forest land or deemed forest without obtaining prior forestry clearance.	**Not Applicable**	Not Applicable
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.	**Will be Complied / Agreed**	Noted
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 On case any fauna occurs in found in the project area or if the area involves forest land or Wildlife habitat i.e. core zone of elephant/tiger reserve etc. and located within 10 km of protected area.	**Not Applicable**	Not Applicable and EC has already been obtained.
10	The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue delay, which will proceed on their respective merits, no rights will vest in or accrue to them unless all clearance are obtained.	**Not Applicable**	Not Applicable
II. Air quality monitoring and preservation			
1	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. no 612 (E) dated 25 August 2014 (Centre) and subsequent amendment dated 9th May 2016 (Centre) and	**Complied**	Continuous emission monitoring system at process stacks installed 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 (Centre) and amendment dated 9th May 2016 (Centre) and connected to SPCB and CPCB online server. Stack emission monitoring report from October 2024 to March

	connected to SPCB and CPCB online server and calibrate these system from time from time as according to equipment supplier specifications through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.		2025 is attached as Annexure VII. CEMS is being regularly calibrated.
2	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986).	**Complied**	Fugitive emission regularly monitored. Fugitive emission monitoring report from October 2024 to March 2025 attached as **Annexure VIII.**
3	The project proponent shall install system to carryout ambient Air Quality monitoring for communication parameters relevant to the main pollutants released (e.g. PM-10 and PM-2.5 in relevance to PM emission, and SO2 and NOx in relevance to SO2 and NOx emissions) within and outside the plant area at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (Case to case basis small plants: Manual; Large plants: Continuous)	**Complied**	On line CAAQMS installed and regularly monitored. Ambient air quality monitored. CAAQMS data regularly transmitted to SPCB and CPCB server. Online CAAQMS and Manual Ambient air quality monitoring report from October 2024 to March 2025 attached as **Annexure IX.**
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 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.	**Complied**	Stack emission and AAQM regularly monitored. Monthly reports are being regularly submitted to SPCB, CPCB & MoEF&CC as a part of EC Compliance report. Report attached as per **Annexure-VII & IX.**
5	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable	**Complied**	Bag filters in the VRM and 11 Bag Filters installed at all the material transfer and handling points to keep the emissions within the standard specified by MOEF&CC/CPCB.

	sources, so as to comply prescribed stack emission and fugitive emission standards.		List of APC equipment is attached as **Annexure X.**
6	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	**Complied**	Regular maintenance of bag filters, leakage checking, and cleaning of bag filters is being done by a dedicated mechanical maintenance team as per schedule.
7	Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.	**Complied**	Plant is only grinding unit. Clinkerisation is not involved. Appropriate Pollution control measures as per CREP guideline of CPCB implemented. Attached **Annexure XI.**
8	Sufficient number of mobile or stationary vacuum cleaners shall be provided to clean plant roads, shop floors, roofs regularly.	**Complied**	Stationary vacuum cleaners provided to clean plant roads, shop floors, roofs regularly.
9	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. Use closed bulkers for carrying fly ash.	**Complied**	All raw materials/products are being transferred within plant by covered conveyor belt. Inward & outward transportation of raw materials & products is done in covered tarpaulin trucks/ bulkers/ rail to control material spillage as well as fugitive emission.
10	Provide wind shelter fence and chemical spraying on the raw material stock piles.	**Complied**	All the raw material, fuel and products are stored within the covered storage yard and silos
11	Have separate truck parking area and monitor vehicular emissions at regular interval.	**Complied**	PUC-certified equipment as well as trucks are deployed. Separate truck parking facility provided. Regular checking of vehicle PUC certificates is being done to control 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.	**Being Complied**	All measures detailed in PFR & EMP report are implemented to reduce impact of transport. Covered conveyor belts are being used for transportation of raw material & product within plant. All raw materials and products are transported in covered trucks, bulkers, and railways to reduce fugitive dust emission. Regular water sprinkling is being done on the roads within the plant through water spray tanker to control fugitive dust emission.

13	Ventilation system shall be designed for adequate air changes as per ACGIH Document for all tunnels, motor houses, and cement bagging plants.	**Complied**	Ventilation system arrangement completed at motor houses and cement bagging plants.
III. Water quality monitoring and preservation:			
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)	**Not Applicable**	There is no requirement for water for manufacturing process. Water is used only for cooling of equipment/machinery in closed loop and dust suppression. The water is either consumed or recycled; hence no effluent generation is foreseen. 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.	**Not Applicable**	No ground water withdrawal in our plant. There is no effluent generation from the plant. Domestic wastewater is treated in STP and treated water is being used within plant for greenbelt development and dust suppression. However, groundwater quality and groundwater depth level of surrounding village are regularly monitored. Same report attached as **Annexure-XII.**
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.	**Not Applicable**	There will not be any effluent generation from the plant.

4	Adhere to 'Zero Liquid Discharge'.	**Being Complied**	Being complied.
5	Sewage Treatment Plant shall be provided for treatment of domestic waste water to meet the prescribed standards.	**Complied**	15 KLD STP constructed for the treatment of domestic wastewater. Treated water quality meets the prescribed standards. STP treated water quality analysis report for the period of October 2024 to March 2025 attached as **Annexure-XIII.**
6	Garland drains and collection pits shall be provided for each stock pile to avoid the run off in the event of heavy rains and to check the water pollution due to surface run off.	**Complied**	Garland drains and collection pits provided for each stock pile to avoid run off during heavy rains and to check surface run-off-related water pollution.
7	The project proponent shall positive rainwater harvesting to maximum possible extent.	**Complied**	Rainwater harvesting system constructed in the plant as per technical approval for RWH from GWD, Ranchi. RWH implementation report attached as **Annexure-XIV.**
8	Water meters shall be provided at the inlet to all unit processes in the cement plant.	**Complied**	Water meter installed at the inlet of the unit. Photographs attached as **Annexure-XV.**
9	The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.	**Complied**	Optimum use of water is being practiced, and all necessary efforts are being made to reduce water consumption in the plant. Domestic wastewater is treated in the STP, and treated water is used for greenbelt development and dust suppression. STP treated water analysis report attached as **Annexure-XV.**
IV. Noise monitoring and prevention			
1	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Office of the Ministry as a part of six- monthly compliance report.	**Complied**	Noise level is being regularly monitored at different locations as per prescribed guidelines and is regularly submitted to the Regional Officer of the Ministry along with the Half-Yearly Compliance Report.

2	The ambient noise levels should conform to the standards prescribed under EPA Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time	**Complied**	**Noise level monitoring report from October 2024 to March 2025 attached as per Annexure-XVI.**
V. Energy Conservation measures			
1	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and monitor the same regularly.	**Complied**	Solar-based LED lights installed at different locations in the plant. Photographs attached as per **Annexure-XVII.**
2	Provide the project proponent for LED lights in their offices and residential areas.	**Complied**	LED lights installed for lighting purpose.
3	Maximum utilization of fly ash, slag and residual in cement blend as per BIS Standards. Waste management.	**Complied**	Portland Slag Cement (PSC) using waste products such as slag (about 35%) as per BIS norms.
VI. Waste management			
1	The waste oil, grease and other hazardous waste shall be disposed off as per the Hazardous & Other waste (Management & Trans boundary Movement) Rules, 2016.	**Being Complied**	Being complied.
2	Rejects waste shall be compacted or conserved to bunker for further use. (to be decided on case to case basis depending on type and size of plant).	**Being Complied**	Rejects waste utilized by nearby villagers to fill in the ground.
VII. Green Belt			
1	Green belt shall be developed in an area equal to 33% of the plant area with native species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the	**Complied**	Greenbelt plantation work is under progress and will be done over 33% of the total project area i.e., about 5.2 acres (2.105 ha). The greenbelt will inter alia cover the entire periphery of the

	plant		plant. Native species with large canopy will be selected for plantation in accordance with CPCB guidelines. **Greenbelt development report attached as per Annexure-XVIII.**
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	**Complied**	GHG emission inventory report attached as per **Annexure-XIX**
VIII. Public hearing and Human health issues			
1	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	**Complied**	On-site Emergency Preparedness Plan, Hazard Identification and Risk Assessment (HIRA) prepared and approved by Chief Factory Inspector of Jharkhand.
2	The PP shall provide Personal Protection Equipment (PPE) as per the norms of factory Act.	**Complied**	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 given to the employees for the awareness of safe working culture.
3	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	**Complied**	Local people are employed for the construction purpose. No housing facilities will be required for them. However, all necessary infrastructure / facility is being provided to all workers. Also, the amenities available in the adjacent unit are made accessible.
4	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act	**Being Complied**	Periodic medical health checkup of employees and workers is being done for every six months. Reports maintained as per Factory Act.

IX. Corporate Environment Responsibility			
1	The project proponent shall comply with the provisions contained in the Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	**Being Complied**	The company invested around 1.5 Crores on the various socio-economic developmental activities on the basis of findings of Participatory rural appraisal which will be conducted periodically by DBF. All socio-economic developmental activities mentioned in submitted EIA & EMP report is being implemented. Apart, from this, company will spend 2% of the profit for implementation of various developmental activities for the nearby area as part of Corporate Social Responsibility Under Section 135 of Companies Act. **CER and CSR report for the period of October 2024 to March 2025 attached as per Annexure- XX.**
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/violations of the environmental/forest wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	**Complied**	The Company has a well-laid-down Corporate Environmental Policy governed by all its units and head office. Accordingly, a duly-fledged Environmental Management Cell (EMC) for environmental monitoring and control has been established. The hierarchical/administrative order of the company is attached as **Annexure XXI.**
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	**Complied**	Environmental Management Cell has been established at site 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**

	the organization.		**Head).**
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 committed for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.	**Complied**	Action plan for EMP implementation during construction phase 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 will be regularly submitted to Ministry and its Regional Office as a part of six-Monthly EC compliance report. Expenditure on Environmental protection up to **October 2024 to March 2025 attached as per Annexure- XXII.**
5	Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	**Complied**	Environmental audit report attached as per **Annexure- XXIII.**
6	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented. Miscellaneous	**Complied**	Applicable Pollution control measures as per CREP guidelines of CPCB implemented.
X. Miscellaneous			
1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	**Complied**	A public notice intimating about grant of EC has been published in two newspapers namely "The Pioneer" and "Aaj" on 07.05.2025 in English as well as in vernacular language i.e. Hindi. Copy of advertisements are attached herewith as an **Annexure XXIV.** The Newspapers with advertisement along with copy of EC have been submitted to the Regional Office of MoEF & CC, MS-SEIAA and MS-JSPCB. Copy of submission receipts are attached herewith as an **Annexure- XXV.**

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 turn has to display the same for 30 days from the date of receipt.	**Complied**	We have submitted copy of Environment Clearance to Regional Office of MoEF&CC, MS-SEIAA, MS-JSPCB, local Panchayat and other Govt. bodies, district head quarter. Copy of submission receipts are attached herewith as ex **Annexure-XXV.**
3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	**Complied**	Complied. Half yearly EC Compliance report uploaded in company official website. screen short attached as per **Annexure- XXVI**
4	The project proponent shall monitor the criteria pollutants level namely; PM_{10}, SO_2, NO_x (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	**Complied**	Emission monitoring data displayed at the factory main gate. Display Board photographs attached as per **Annexure-XXVII**
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.	**Being Complied**	**Being Complied.**
6	The project proponents shall submit the environmental statement for each financial year in FormV to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	**Complied**	Environment Statement as Form V is regularly submitted to JSPCB, Dhanbad & Ranchi. Last Environment Statement was submitted vide our letter no. DCBL/ENV-ES-23-24, Dated 24.09.2024

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.	**Complied**	Date of final approval: 27 April 2022 Date of start of Land development work: 29.04.2022 Date of Production: 25.03.2023
7 (i)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	**Will be Complied / Agreed**	Noted for compliance.
7(ii)	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitments made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	**Being Complied**	Being complied
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)	**Complied**	Half yearly EC Compliance reports are being regularly submitted in hard copies and soft copies to the regulatory authority concerned SEIAA, Regional Office of MoEF & CC at Ranchi, Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi, and Central Pollution Control Board. (CPCB).
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.	**Will be Complied / Agreed.**	Noted & agreed.

10	The SEIAA, Jharkhand or any other competent Authority may alter/modify the above conditions or stipulated any further condition in the interest of Environment Protection.	**Will be Complied / Agreed**	Noted & agreed.
11	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	**Will be Complied / Agreed**	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.	**Will be Complied / Agreed**	Noted & agreed.
13	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions not satisfactory.	**Will be Complied / Agreed**	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.	**Will be Complied / Agreed**	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.	**Will be Complied / Agreed**	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 Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	**Will be Complied / Agreed**	Noted & agreed.
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.	**Will be Complied / Agreed**	Noted & agreed
18	This environmental clearance is valid for seven years from the date of issue.	**Will be Complied / Agreed**	Noted & Agreed.

CHAPTER 4 – AUDIT FINDINGS

The team collected Environmental Clearance (EC) conditions stipulated by MoEF&CC, GoI, issued vide **EC/SEIAA/2022-23/2646/2023/366, Ranchi, Date: 08.02.2023, EC Identification no.EC23B000JH199098** for Bokaro Cement Manufacturing Works (Unit of Dalmia Cement (Bharat) Limited). The detailed observations are presented in this chapter. It provides the compliance status of EC conditions and specific as well as general recommendations for improvement.

4.1 COMPLIANCE STATUS OF AUDIT

The stipulated environmental compliance conditions were audited separately for the specific and general conditions. The compliance status is summarized below:

4.1.1 COMPONENT WISE COMPLIANCE STATUS OF SPECIFIC CONDITIONS

Out of the total 72 (43 are compiled EC conditions) specific conditions, the compliance status was categorized as *Complied, Being Complied, Will be Complied/Agreed, Partially Complied, Not Complied, and Not Applicable/Review Required.*

Table 4.1: Compliance status of component wise specific conditions

Components	Complied	Being Complied	Partially Complied	Not Complied	Will be Complied / Agreed	Review Required / Not Applicable	Total
Specific Condition	1	0	0	0	0	0	1
Statutory Condition	3	0	0	0	1	6	10
Air Quality Monitoring & Preservation	12	1	0	0	0	0	13
Water Quality Monitoring & Preservation	5	1	0	0	0	3	9
Noise Monitoring And Prevention	2	0	0	0	0	0	2
Energy Conservation Measures	3	0	0	0	0	0	3
Waste Management	0	2	0	0	0	0	2
Green Belt	2	0	0	0	0	0	2
Public Hearing & Human Health Issues	3	1	0	0	0	0	4

Corporate Environment Responsibility	5	1	0	0	0	0	6
Miscellaneous	7	2	0	0	11	0	20
Total	43	8	0	0	12	9	72

Figure 4.1: Detailed compliance status of component wise specific conditions

4.2 SPECIFIC OBSERVATIONS AND RECOMMENDATIONS

1. RAW MATERIAL HANDLING & STORAGE

Observation: Clinker, gypsum, fly ash, and slag are stored in covered sheds; material transfer points are provided with operational bag filters.

Recommendation: Strengthen housekeeping around packing plant area and ensure timely replacement of filter bags to maintain optimal dust control.

2. CEMENT GRINDING UNIT (VRM)

Observation: The VRM is equipped with high-efficiency bag filters; stack emissions monitored and found within permissible limits.

Recommendation: Increase frequency of localized cleaning around the VRM system to minimize fugitive dust emissions.

3. FLY ASH / SLAG HANDLING & STORAGE

Observation: Fly ash and slag are stored in silos and covered shed; pneumatic conveying effectively minimizes dust dispersal.

Recommendation: Ensure immediate clean-up of any spillage to maintain good housekeeping and prevent fugitive emissions.

4. COAL HANDLING & STORAGE

Observation: The coal yard is adequately covered and maintained.

Recommendation: Ensure complete coverage and conduct regular water sprinkling during dry months to suppress dust.

5. CEMENT STORAGE SILOS

Observation: Silos are equipped with functional pressure relief valves and efficient bag filters; no visible dust observed during aeration.

Recommendation: Continue periodic preventive maintenance of bag filters to sustain operational efficiency.

6. PACKING PLANT & DISPATCH AREA

Observation: Packing machines are integrated with dust extraction systems; minor fugitive emissions observed near truck loading chutes.

Recommendation: Maintain preventive servicing of bag filters and utilize vacuum sweeping machines for regular cleaning to control fugitive dust.

7. CENTRAL CONTROL ROOM (CCR)

Observation: Online monitoring systems are operational with real-time display of emissions and process parameters.

Recommendation: Enable automated data backup and prepare monthly compliance trend reports for better documentation.

8. WATER MANAGEMENT SYSTEMS

Observation: Process water is largely reused; no discharge observed. Water meters are installed.

Recommendation: Maintain comprehensive water meter logs to track and optimize water consumption.

9. SEWAGE TREATMENT PLANT (STP)

Observation: STP capacity is adequate; treated water reused for horticulture and dust suppression.

Recommendation: Improve sludge drying practices and maintain proper records of sludge disposal.

10. GARLAND DRAINS & STORM WATER MANAGEMENT

Observation: Drains are generally clean; minor silt accumulation observed near the raw material yard.

Recommendation: Increase desilting frequency, especially before monsoon, and install mesh screens to prevent debris entry.

11. SOLID WASTE MANAGEMENT

Observation: Dust collected from bag filters is reused completely; housekeeping waste stored separately.

Recommendation: Implement uniform color-coded waste bins throughout the plant for better segregation.

12. HAZARDOUS WASTE MANAGEMENT

Observation: Used oil is stored in designated containers within an impervious, covered area; some labels are faded.

Recommendation: Replace faded labels and ensure spill-response kits are available at all hazardous waste storage points.

13. GREENBELT DEVELOPMENT

Observation: Greenbelt density is satisfactory along the boundary, and plant area.

Recommendation: Introduce additional dust-tolerant native species to enhance pollution-mitigation capability.

14. AMBIENT AIR QUALITY & NOISE MONITORING

Observation: Monitoring is carried out as per schedule; all parameters remain within prescribed limits.

Recommendation: Provide acoustic enclosures or insulation for high-noise equipment where required and conduct periodic awareness sessions for workers.

15. OCCUPATIONAL HEALTH CENTRE (OHC)

Observation: OHC is well-equipped; health records are maintained. Periodic medical check-ups conducted; ergonomic assessment not included.

Recommendation: Integrate ergonomic risk assessments and conduct training for workers involved in repetitive or high-risk activities.

16. EMPLOYEE PROTECTION & SAFETY MEASURES

Observation: PPE usage across the plant is satisfactory; no major non-compliance observed.

Recommendation: Strengthen supervisory checks and conduct refresher sessions on mandatory PPE usage.

17. ENERGY MANAGEMENT SYSTEMS

Observation: VFDs are installed on major motors; energy meters functioning. Energy audit conducted, but implementation of recommendations is partial.

Recommendation: Prioritize execution of low-cost energy-saving measures identified in the energy audit.

18. RENEWABLE ENERGY INTEGRATION

Observation: Solar rooftop systems are operational and contribute to auxiliary power requirements.

Recommendation: Install additional solar lighting within the plant premises and promote employee awareness on renewable energy.

19. CORPORATE SOCIAL RESPONSIBILITY (CSR)

Observation: CSR activities are aligned with local needs, documentation is available.

Recommendation: Develop measurable impact indicators and maintain year-wise CSR outcome and performance records.

4.3 GENERAL OBSERVATIONS AND RECOMMENDATIONS

5 1. GENERAL SITE MANAGEMENT

Observation:

The grinding unit is largely complied with Environmental Clearance (EC) and Consent to Operate (CTO) conditions. Fugitive dust control measures—such as water sprinkling, belt conveyors with enclosures, and bag filters—are operational. However, high-dust zones including raw material unloading, VRM feed points, packing plant, and material transfer areas show intermittent dust accumulation due to heavy material handling. Overall housekeeping is satisfactory.

Recommendations:

- Enhance the frequency of mechanical sweeping on internal roads and major traffic routes.

- Strengthen dust extraction systems and install/upgrade rubber skirting at high-emission points such as the packing plant and fly ash unloading zone.
- Improve and systematize housekeeping schedules around VRM platforms, silo aeration points, and transfer areas.

2. ENVIRONMENTAL DOCUMENTATION & COMPLIANCE

Observation:

The unit maintains essential statutory documents including monitoring reports, calibration certificates, manifests, stack emission data, and CEMS/OCEMS records. While documentation is complete, some logbooks and monitoring sheets are still maintained manually, causing inconsistent data referencing. Calibration of ambient monitoring equipment is carried out as per schedule.

Recommendations:

- Introduce a digital compliance dashboard for real-time monitoring, reporting, and documentation.
- Maintain fully synchronized, standardized digital logs across all environmental parameters.
- Conduct internal environmental documentation audits every six months to ensure data accuracy and regulatory compliance.

3. GREENBELT & ECOLOGICAL MANAGEMENT

Observation:

A developed greenbelt exists along the plant boundary and internal roads, offering effective dust filtration. However, density variations and reduced survival rates are observed in peripheral stretches and near the packing and dispatch area.

Recommendations:

- Increase plantation density using native, broad-leaf, and shade-tolerant species suitable for dusty industrial environments.
- Expand greenbelt around raw material storage and high-dust areas to mitigate fugitive emissions.

4. WATER & STORMWATER MANAGEMENT

Observation:

The grinding unit operates with low water demand. Water reuse is practiced effectively for dust suppression and domestic needs. Stormwater drains are functional but exhibit silt accumulation near material handling and unloading areas.

Recommendations:

- Carry out desilting of stormwater drains and sumps before monsoon and conduct periodic inspections in silt-prone zones.
- Develop additional rainwater recharge structures to enhance groundwater infiltration.
- Install drain screens or sediment traps to minimize silt carryover into downstream drains.

5. SAFETY & HEALTH MANAGEMENT

Observation:

The Occupational Health Centre (OHC) is functional, and periodic health examinations are conducted. PPE usage among regular plant employees is satisfactory.

Recommendations:

- Strengthen PPE enforcement for contract workers and transient workforce through enhanced supervision and regular tool-box training.
- Install or upgrade acoustic enclosures and noise barriers, particularly around the VRM and other high-noise mechanical equipment.

CHAPTER – 5

POST AUDIT CLARIFICATIONS AND FINAL CONCLUSIONS

After incorporating the clarifications and supporting documents provided by the Project Proponent (BCMW) during and after the audit process, the Environmental Audit Report has been finalized and is hereby submitted for onward submission to the competent authority for consideration and clearance of Environmental Clearance (EC) conditions.

The post-audit review involved detailed evaluation of the compliance records, environmental monitoring data, on-site inspections, and clarifications received from project officials. It was observed that the BCMW has implemented a systematic and responsible approach toward environmental management and regulatory compliance at the Dalmia Cement Bharat Limited, Bokaro (Unit 2). The majority of the EC conditions have been satisfactorily complied with, and actions for the remaining long-term commitments are in progress as per stipulated timelines.

5.1 SUMMARY OF AUDIT FINDINGS AND CLARIFICATIONS

The audit established that:

- **A majority of the environmental clearance and statutory commitments have been fully complied with**, reflected by the 43 out of 72 components categorized under "Complied". High levels of compliance were observed particularly in areas related to air quality preservation, water management, energy conservation, greenbelt development, public health requirements, and miscellaneous general obligations.

- **Several commitments (8 components) are under progressive implementation**, falling under the "Being Complied" category. These primarily relate to ongoing air and water monitoring improvements, waste management measures, and Corporate Environment Responsibility (CER) activities, which require continuous follow-up and periodic verification.

- A **set of long-term or phased actions (12 components) have been classified as "Will be Complied / Agreed"**, representing activities that are planned, committed, and currently under implementation. These include certain statutory and miscellaneous obligations that will be fulfilled within the stipulated compliance timeline.

- No **cases of partial compliance or non-compliance were recorded in the audit**, indicating that the unit maintains strong adherence to environmental management requirements and no deviation was observed that poses regulatory or environmental risk.

- A **total of 9 components require review or are not applicable**, due to process-specific, operational, or regulatory reasons. These have been appropriately documented under the "Review Required / Not Applicable" category to ensure clarity in future assessments.

5.2 ENVIRONMENTAL PERFORMANCE OVERVIEW

The cement grinding unit continues to operate in full compliance with the conditions stipulated under Environmental Clearance (EC Letter No. EC/SEIAA/2022-23/2646/2023/366, dated 08.02.2023), maintaining a strong commitment to statutory, environmental, and safety standards. The plant operates with Zero Liquid Discharge (ZLD), supported by a 15 KLD Sewage Treatment Plant (STP), with treated water fully reused for greenbelt development, dust suppression, and utilities. No industrial effluent is generated, as the plant follows a closed-loop water-cooling system. Periodic desilting of garland drains, maintenance of stormwater channels, and installation of rainwater harvesting structures ensure effective runoff management and enhanced groundwater recharge.

Ambient Air Quality Monitoring (both manual and CAAQMS-based) indicates that PM_{10}, $PM_{2.5}$, SO_2, and NO_x concentrations remain within CPCB-prescribed norms at all monitored locations. Continuous Emission Monitoring Systems (CEMS) at process stacks are operational, calibrated, and linked to SPCB/CPCB servers as per the Environment (Protection) Rules, 1986. Fugitive emissions are effectively controlled through a comprehensive network of bag filters, bag houses, ESP-equivalent dust control infrastructure for grinding operations, covered conveyors, closed bulkers for fly ash, wind barriers, mechanical cleaning systems, and routine water sprinkling. Quarterly fugitive emission monitoring confirms compliance.

Noise monitoring conducted at all designated locations demonstrates that daytime and nighttime noise levels comply with EPA 1986 standards (75 dB(A) day & 70 dB(A) night). Noise mitigation is achieved through the use of acoustic enclosures, preventive maintenance of rotating equipment, and structured traffic management within the premises.

The plant has strengthened solid and hazardous waste management through authorization under HOWM Rules, 2016, ensuring scientific disposal of waste oil, grease, and other hazardous

materials. Kitchen waste is reused by nearby villagers for animal feeding, reducing organic waste accumulation. Portland Slag Cement (PSC) production promotes circularity by utilizing 65% slag as per BIS norms.

Significant progress has been made in greenbelt development, with plantation activities underway to cover 33% of the total project area (5.2 acres). Native, broad-canopied species have been selected in accordance with CPCB guidelines, contributing to dust attenuation, noise buffering, and carbon sequestration. More than 23,000 saplings (as reported) have been planted across plant boundaries, internal roads, and high-activity operational zones.

Under Corporate Environment Responsibility (CER) and CSR initiatives, the company has invested substantially in local socio-economic development, aligned with Ministry's OM (F. No. 22-65/2017-IA.III). A dedicated Environmental Management Cell, supported by qualified professionals, ensures continuous monitoring, reporting, and compliance. Annual self-environmental audits and periodic third-party environmental audits are conducted as per EC conditions.

Overall, the plant demonstrates a robust environmental management framework, proactive monitoring, and enhanced operational controls, ensuring adherence to all applicable statutory, regulatory, and EC-mandated environmental safeguards.

5.3 CSR, CER, AND COMMUNITY ENGAGEMENT

The cement plant has implemented multiple Corporate Social Responsibility (CSR) and Corporate Environment Responsibility (CER) initiatives, including:

- Skill development and livelihood training programs for local youth,
- Installation of solar-powered streetlights in peripheral villages,
- Periodic medical camps delivering healthcare support to over 6,000 beneficiaries,
- Infrastructure development for government schools and drinking-water facilities.

The plant has operationalized a community grievance redressal system, including a designated CSR officer. Future CSR planning focuses on long-term, theme-based interventions such as education, water access, women empowerment, and renewable energy support for villages.

5.4 CORRECTIVE AND PREVENTIVE ACTION (CAPA) RECOMMENDATIONS

The following corrective and preventive actions are recommended to further enhance environmental performance:

• Accelerate the upgradation of air pollution control systems, especially for Cement mill, and packing plant, to ensure consistent compliance during peak-load operations.

• Enhance greenbelt and plantation density along the plant boundary, material handling zones, and transportation corridors using native tree species.

• Strengthen water conservation initiatives by increasing rainwater harvesting capacity and improving storm water management across the plant premises.

• Conduct periodic third-party audits of ambient air, stack emissions, and groundwater to ensure data reliability and strengthen compliance assurance.

• Continue regular health surveillance programs, workplace safety training, and PPE compliance monitoring to maintain high occupational health and safety standards.

5.5 FINAL CONCLUSION

Based on the overall assessment, site verification, and clarifications provided by plant authorities:

• The cement plant demonstrates substantial compliance with Environmental Clearance conditions and statutory environmental obligations.

• Pollution control systems, environmental safeguards, and monitoring mechanisms are adequately installed and effectively functioning.

• Ongoing efforts in greenbelt development, CSR implementation, energy conservation, and emission reduction reflect a proactive commitment to sustainable industrial operations.

• No major non-compliances or environmental violations were identified that warrant regulatory action.

With continued diligence, timely implementation of pending improvement measures, and strict adherence to the Environmental Management Plan (EMP), the cement plant is well-positioned to maintain compliance with MoEF&CC norms and national environmental standards.

Final Recommendation:

This report, after due incorporation of all clarifications and field verifications, is hereby **submitted for consideration and clearance of Environmental Clearance conditions** for the Bokaro Cement Manufacturing Works (A unit of Dalmia Cement Bharat Limited, located at Bokaro Industrial Area, Balidih, Bokaro, Jharkhand.

Annexure-I

No forest land in plant area, Clearance letter from DFO Territorial, Bokaro vide Letter no. 3546 dated 21.12.2021

Government of Jharkhand

Department of Forest, Environment and Climate Change

Permission Letter : LETTER20211220

Acknowledgment No: SWSFST111120211105

Issue Date: 21-12-2021

Name Of Applicant : Dalmia Cement Bharat Limited

Email ID : sinha.rajeevkumar@dalmiacement.com. **Contact no.:** 9771478206

Report of Distance from Forest, Forest Reserve and Sanctuary

SNo	Checkpoint	Divisional Forest Officer
1	Whether Distance of Project location from Reserved Forest/Protected Forest is 250 m?	Yes
2	Whether Project location come under No Mining Zone?	No
3	Does there any National park located within 10 km from project location?	No
4	Does there any Wildlife sanctuary located within 10 km distance from project location?	No
5	Does there any ESZ available within 10 km distance from project location?	No
6	Whether Proposed project comes under prohibited category of ESZ (Yes or No)?	No

Name :

Designation :

Signature :

Note :-The order dated 12.12.1996 in case no. 202/95 passed by Hon'ble Apex Court will be applicable in respect of GMJJ Land.

*The certificate to be issued by the Divisional Forest Officer of the respective Divisions and upload

Department of Forest, Environment and Climate Change

Report of Distance from Notified Forest, National Park, Sanctuary & Eco-Sensitive Zone

Name Of Applicant Institution: Dalmia Cement Bharat Limited

Type: Non Government

Email ID: sinha.rajeevkumar@dalmiacement.com

Contact no.: 9771478206

Location of Proposed Land

District: Bokaro

Battery Point: Gorabali

Thana No.: 14

Thana Name: Jaridih

Khata No.: 134,76,177,46,45,171,47,145,78,65,135,72

Khasra Name: 892 (F),781 (P),777 (F),784 (P),779 (P),778 (P),782 (P),783 (P),887 (F),890 (F),888 (P),880 (P),852 (P),891 (F),960(P),850(P),893 (P),851 (P),858 (P),871 (F),957 (P),870 (P),958 (F),884 (F),885 (F),886 (F),776 (P),883 (F),882 (F),875 (F),862 (F),876 (F),881 (F),879 (F),878 (F),874 (F),863 (F),866 (F),873 (F),864 (F),868 (P),861 (F),867 (P),865 (F)

#	Checkpoint	Range Forest Officer	Divisional Forest Officer
1	Whether Distance of Project location from Reserved Forest/Protected Forest is 250 m? *	Yes	Yes
2	Whether Project location come under No Mining Zone? *	No	No
3	Does there any National park located within 10 km from project location? *	No	No
4	Does there any Wildlife sanctuary located within 10 km distance from project location? *	No	No
5	Does there any ESZ available within 10 km distance from project location? *	No	No
6	Whether Proposed project comes under prohibited category of ESZ (Yes or No)? *	No	No

Note :-The order dated 12.12.1996 in case no. 202/95 passed by Hon'ble Apex Court will be applicable in respect of OMJJ Land.

Division: DFO Bokaro

Letter No. 3546

Date of issue: 21/12/2021

Signature

Name: Divisional Forest Officer, Bokaro Forest Division, Bokaro

Divisional Forest Officer

Annexure-II

Department of Forest, Environment and Climate Change

Report of Distance from Notified Forest, National Park, Sanctuary & Eco-Sensitive Zone

Name Of Applicant Institution: Dalmia Cement Bharat Limited

Type: Non Government

Email ID: sinha.rajeevkumar@dalmiacement.com

Contact No.: 9771475208

Location of Proposed Land

District: Bokaro

Battery Point: none

Thana No.: 14

Thana Name: Jaridih

Khata No.: 134,56,177,46,45,171,47,149,78,65,155,72

Khata Name: 892 (F),781 (P),777 (F),784 (P),779 (P),778 (P),782 (P),783 (P),887 (P),809 (F),808 (P),800 (P),832 (P),891 (P),960(P),820(P),893 (P),831 (P),838 (P),871 (P),957 (P),870 (P),958 (P),894 (P),880 (P),886 (P),774 (P),883 (P),882 (P),875 (P),842 (P),876 (P),881 (P),879 (P),878 (P),874 (P),865 (P),806 (P),873 (P),864 (P),868 (P),861 (P),867 (P),863 (F)

#	Checkpoint	Range Forest Officer	Divisional Forest Officer
1	Whether Distance of Project location from Reserved Forest/Protected Forest is 250 m? *	No	No
2	Whether Project location come under No Mining Zone? *	No	No
3	Does there any National park located within 10 km from project location? *	No	No
4	Does there any Wildlife sanctuary located within 10 km distance from project location? *	No	No
5	Does there any ESZ available within 10 km distance from project location? *	No	No
6	Whether Proposed project comes under prohibited category of ESZ (Yes or Not)? *	Yes	Yes

बिन्दु-1 एवं 2- भूमि की प्रकृति एवं कागजात के दृष्टि संबंधित अंचल अधिकारी अथवा उप प्रमंडल पदाधिकारी, बोकारो का प्रमाणपत्र के आधार पर प्राप्त है।

बिन्दु-3 से 6- के संबंध में प्रतिवेदित करना है कि प्रस्तावित परियोजना हेतु अंकित स्थान Battery Point (23.8961980N 86.0644832E) से निकटतम संरक्षित क्षेत्र (Protected Area) लोधमाही वन्यजीवी अभयारण्य अवस्थित है, तथा वन, पर्यावरण एवं जलवायु परिवर्तन मंत्रालय भारत सरकार द्वारा अधिसूचित पूर्व लोधमाही वन्यजीवी अभयारण्य के अधिसूचित ESZ के भीतर ही स्थित अवस्थित है।

Note: पदाधिकारी भूमापक अंचलवार द्वारा संबंधित अंकित एवं GPS Point भारत सरकार द्वारा प्रकाशित ESZ के अधिसूचना तथा अंकित स्थान के निकटतम संरक्षित क्षेत्र (Protected Area) के आधार पर दी गयी है।

Division: DFO Wildlife Hazaribagh

Letter No.: 2058

Date of Issue: 29/11/21

Signature:

Name: Divisional Forest Officer Wildlife Division, Hazaribag

Divisional Forest Officer

Annexure-III

CTE obtained fromJSPCB, Ranchi vide letter no JSPCB/HO/RNC/CTE-15399804/2023/128, Dated 23.02.2023

JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No.: JSPCB/HO/RNC/CTE-15399804/2023/128 Dated : 2023-02-23

Consent to Establish (CTE) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

1. Reference: Application (s) No.- 15399804 / dated : 31/01/2023 of Bokaro Cement Manufacturing Works (A Unit of DCBL), Priya Ranjan for consent under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

2. **Documents Relied Upon:**

(a) The content of Environmental Clearance (EC) granted vide memo no. EC/SEIAA/2022-23/2646/2022/566, dated 30.01.2023.

(b) The content of Consent to Establish (CTE), vide ref. no. JSPCB/HO/RNC/CTE-15699959/2022/195, dated 28.04.2022 for the production of Cement - 2.0 Million TPA and D.G. Set of 1000 KVA (2 x 500 KVA) as per EC valid for the period of one year.

(c) The content of check-list vide ref. no. 107, dated 09.02.2023.

(d) The content of copy of the land lease document issued by BIADA for 30 yrs. w.e.f. 28.10.2021.

(e) The content of certificate of DFO, vide ref. no. 2058, dated 28.11.2021.

(f) The content of undertaking regarding procurement of raw material from valid sources.

(g) The content of investment figure certified by CA.

3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to establish the project in Mouza- Gorabati, P.S -Bokaro, District-BOKARO as follows:

Project	Site-Area		Investment (Rs)/ Year	Product & Capacity	Period of CTE
	Plot Nos.	Area			
In Expansion	Industrial Area Plot No. IV/A-7(P)4,	15.75 Acre	35.50 Crore	Expansion of capacity:- Cement- 2.0 MTPA to 3.1 MTPA; DG set - 2x500=1000 KVA	As per EC

(A) Specific Conditions:

1. That, the occupier shall make Work area and transport roads and approach road off the main road concrete/ black top.

2. That, the occupier shall install fixed type water sprinklers to cover all dusty places in the premises to impart water spraying intermittently.

3. That, the occupier shall make all roads pucca and shall maintain a good house keeping by regular cleaning and wetting of the roads and dust prone areas.

4. That, the occupier shall store all raw materials and products under shed and shall as far as practicable, do their processing and transfer under foolproof cover(s).

5. That, the occupier shall collect and treat the effluent in foolproof latest system and shall recycle treated effluent to the system for reuse and shall ensure no discharge of effluent out side the premises.

6. That, the occupier shall install air pollution control devices such as Dust Catcher, Cyclone Separator, Bag filters, Venturi Scrubber, ESP etc. in suitable combination to control the emission.

7. That, the occupier shall use fly ash and or fly ash bricks in construction of the project.

8. That, the occupier shall install only green D G Set(s) with acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.

9. That, the occupier shall obtain NOC from Central Ground Water Authority as per the norms.

10. That, the occupier shall dispose the solid waste as per applicable norms.

11. That, the occupier shall dispose the hazardous waste as per applicable norms and shall obtain authorization under HoWM Rules' 2016.

12. That, the occupier shall adhere to ZLD.

13. That, the occupier shall develop greenery in an atleast 33 percent of area.

14. That, the occupier shall submit compliance of CTE and EC conditions on six monthly basis to JSPCB and other concerned organizations.

15. That, the occupier shall apply for CTO and shall submit compliance of CTE and EC conditions alongwith the photographs.

(B) General Conditions :

(1) That, the occupier shall construct pucca (i) minimum ten feet high boundary wall and (ii) approach road and internal roads and shall keep the premises neat and clean and tidy.

(2) That, the occupier shall install comprehensive enclosure (s) to cover the places of unloading of raw materials, the equipments of their processing & transferring, the places of loading of products, by products and wastes for prevention of fugitive emission and shall install such automatic inbuilt system(s) that in house dust/ gases collect(s) and undergo (es) cleaning and clean air goes out.

(3) That, the occupier shall install such automatic inbuilt system(s) that process flue gas(es) / process gas(es) and undergo(es) cleaning and clean air go(es) out through the chimney(s), having height(s) as per Central Pollution Control Board norm.

(4) That, the occupier shall have D G Set(s) of the standard as laid in the Environment (protection) Rules, 1986 and shall install it (them) within acoustic enclosure (s) and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm .

(5) That, the occupier shall impart treatment as per Central Pollution Control Board test to wastewater and shall keep process effluent in close-circuit and effluent from other sources in conformity with the standard (s).

(6) That, the occupier shall install Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge.

(7) That, the occupier shall create new water body (ies) / remove deposit(s) of existing water body(ies) and nearby stream(s) and pond(s) and shall maintain the wholesomeness of water.

(8) That, the occupier shall grow greenery in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

(9) That, this CTE is valid subjected to the validity of mining Lease / Mining Plan / Ecofriendly / Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.

(10) That, this CTE is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time being in force, rests with the industry/ unit/ occupier.

(11) That, this CTE shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.

(12) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules there under.

4. **That, this CTE shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.**

5. **That, this CTE is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTE will be revoked if any of the information/ documents/ certificates/ undertaking given by the occupier is found false/fictitious/forged in future.**

6. This order shall be valid subject to compliance of all other legal requirements applicable to the unit.

7. The State Board reserves the right to revoke, withdraw or make any reasonable variation / change / alteration in condition of this consent.

This is issued with the approval of the competent authority

Yatindra Kumar Das Digitally signed by Yatindra Kumar Das Date: 2023.02.23 10:10:56 +05'30'

(Yatindra Kumar Das)
Member Secretary

Memo No. : JSPCB/HO/RNC/CTE-15399804/2023/128

Dated : 2023-02-23

Copy to : M/s Bokaro Cement Manufacturing Works (A unit of Dalmia Cement (Bharat) Limited, At- Plot No. IV/A-7(P)4, Bokaro Industrial Area, Balidih, Bokaro Steel City, Dist- Bokaro / Director of Industry, Government of Jharkhand, Ranchi/ Deputy Commissioner, Bokaro/ Director of Mines, Government of Jharkhand, Ranchi/ Chief Inspector of Factories, Ranchi/ D.F.O., Bokaro/D.M.O., Bokaro / R.O., Dhanbad for information & ensuring compliance of the above.

Yatindra Kumar Das Digitally signed by Yatindra Kumar Das Date: 2023.02.23 10:10:37 +05'30'

(Yatindra Kumar Das)
Member Secretary

Annexure-IV

CTO obtained from JSPCB Ranchi vide letter no. JSPCB/HO/RNC/CTO-17957569/2024/283 Dated 24.02.2024 and valid up to 31.03.2029

JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No. JSPCB/HO/RNC/CTO-17957569/2024/283 Dated : 2024-02-24

Consent to operate (CTO) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

1. Application (s) dated 2023-12-27 of Bokaro Cement Manufacturing Works (A Unit of DCBL), Occupier Name :Priya Ranjan for consent under section 25 (1)(b)/25 (1) (c)/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21(1) of the Air (Prevention & Control of Pollution) Act,1981 .

2. **Documents Relied Upon:**

(a) The content of Environmental Clearance (EC) granted vide memo no. EC/SEIAA/2022-23/2646/2022/366, dated 30.01.2023.

(b) The content of Consent to Establish (CTE), vide ref. no. JSPCB/HO/RNC/CTE-12699959/2022/195, dated 28.04.2022 for the production of Cement - 2.0 Million TPA and D.G. Set of 1000 KVA (2 x 500 KVA) as per EC valid for the period of one year.

(c) The content of Consent to Establish (CTE), vide ref. no. JSPCB/HO/RNC/CTE-13599804/2023/128, dated 23.02.2023 for the production of Expansion of capacity:- Cement - 2.0 MTPA to 3.1 MTPA; DG set - 2x500=1000 KVA for the period as per EC.

(d) The content of Consent to Operate (CTO), vide ref. no. JSPCB/HO/RNC/CTO-15986138/2023/1752, dated 20.10.2023 for the production of Cement- 3.1 MTPA, DG set - 2x500=1000 KVA, valid for the period upto 31.03.2024.

(e) The content of Inspection Report (IR), vide ref. no. 82, dated 05.01.2024.

(f) The content of copy of the land lease document issued by BIADA for 30 yrs. w.e.f. 28.10.2021.

(g) The content of undertaking regarding procurement of raw material from valid sources.

(h) The content of investment figure certified by CA.

3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to operate the project in Mouza -Gorabati , P.S -Bokaro , District -BOKARO , as follows:

Project	Site-Area		Investment (Rs)	Product & Capacity	Period of CTO
	Plot Nos.	Area			Date of issue To

Before Expansion	As per EC	As per EC	576.04 Lacs (as per investment figure certified by CA)	Cement- 3.1 MTPA, DG set - 2x500=1000 KVA (as per CTO)	31/03/2029

(A) Specific Conditions:

1. hat, the occupier shall make Work area and transport roads and approach road off the main road concrete/ black top.

2. That, the occupier shall install fixed type water sprinklers to cover all dusty places in the premises to impart water spraying intermittently.

3. That, the occupier shall make all roads pucca and shall maintain a good house keeping by regular cleaning and wetting of the roads and dust prone areas.

4. That, the occupier shall store all raw materials and products under shed and shall as far as practicable, do their processing and transfer under foolproof cover(s).

5. That, the occupier shall collect and treat the effluent in foolproof latest system and shall recycle treated effluent to the system for reuse and shall ensure no discharge of effluent out side the premises.

6. That, the occupier shall install air pollution control devices such as Dust Catcher, Cyclone Separator, Bag filters, Venturi Scrubber, ESP etc. in suitable combination to control the emission.

7. That, the occupier shall implement all pollution control measures as recommended in EIA/EMP.

8. That, the occupier shall comply the recommendations of CREP.

9. That, the occupier shall use all solid wastes as resource as a raw material or a product.

10. . That, the occupier shall install only green D G Set(s) with acoustic enclosure and shall keep the height(s)
of exhaust pipe(s) as per Central Pollution Control Board norms.

11. That, the occupier shall adhere to Zero Liquid Discharge.

12. That, the occupier shall dispose the solid waste as per applicable norms.

13. That, the occupier shall dispose the hazardous waste as per applicable norms and shall obtain authorization under HoWM Rules' 2016.

14. That, the occupier shall install 24 x 7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R no 612 (E) dated 25 August 2014 (Cement) and subsequent amendment dated 9th May 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act 1986 or NABL accredited laboratories.

15. That, the occupier shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emission) within and outside the plant area at an angle of 120-degree each) covering upwind and downwind directions.

16. That, the occupier shall install STP of adequate capacity and submit its report to the Board.

17. That, the occupier shall construct rain water harvesting system and shall operate and maintain the same.

18. That, the occupier shall construct rain water harvesting system and shall operate and maintain the same.

19. That, the occupier shall provide Personal Protection Equipment (PPE) as per the norms of factory act.

20. That, the occupier shall upgrade the pollution control equipment as and when required.

21. That, the occupier shall submit compliance of EC and CTO conditions on six monthly basis to the Board.

22. That, the occupier shall submit applications for renewal of consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 again 120 days prior to the date of expiry of this consent with requisite fee and documents showing compliance of all of the above conditions.

23. hat, this CTO supersedes the CTO granted earlier vide ref. no. JSPCB/HO/RNC/CTO-15980338/2023/1752, dated 20.10.2023.

(B) General Conditions :

(1) That, the occupier shall maintain the **National Ambient Air Quality Standard** given below:

S N	Pollutant	Time Weighted Average	Concentration in Ambient Air	
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Govt.)
(1)	(2)	(3)	(4)	(5)
1.	Sulphur Dioxide (SO2), µg/m3	Annual 24 hours	50 80	20 80
2.	Nitrogen Dioxide (NO2), µg/m3	Annual 24 hours	40 80	30 80
3.	Particulate Matter (size less than 10 µm) or PM10, µg/m3	Annual 24 hours	60 100	60 100
4.	Particulate Matter (size less than 2.5 µm) or PM2.5, µg/m3	Annual 24 hours	40 60	40 60
5.	Ozone(O3), µg/m3	8 hours 1 hour	100 180	100 180
6.	Lead (Pb) µg/m3	Annual 24 hours	0.50 1.0	0.50 1.0
7.	Carbon Monoxide (CO) mg/m3	8 hours 1 hour	02 04	02 04
8.	Ammonia (NH3) µg/m3	Annual 24 hours	100 400	100 400
9.	Benzene (C6H6) µg/m3	Annual	05	05
10.	Benzo(a) Pyrene(BaP) Particulate Phase only ng/m3	Annual	01	01
11.	Arsenic (As) ng/m3	Annual	06	06
12.	Nickel (Ni) ng/m3	Annual	20	20

Note : Serial no. 1 to 4 – Mandatory
Serial no. 5 to 12 As applicable for specific type of industry.

(2) That, the occupier shall maintain the emission quality within the standard and the quantity, as follows:

S N	Parameter	Standard
1	Particulate Matter	150 mg/Nm3

(3) That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:

S N	Parameter	Standard
1	Total Suspended Solids	100 mg/L
2	BOD	30 mg/L
3	COD	250 mg/L
4	Oil & Grease	10 mg/L

(4) That, the occupier shall dispose of solid wastes as follows:

S N	Waste Type	Mode of Disposal
1	Hazardous Carbonaceous Wastes	In co-processing in high temperature furnaces or kilns
2	Hazardous Non-Carbonaceous Wastes	In TSDF
3	Non-Carbonaceous Non-Hazardous solid wastes/ Mine Over Burden	As a substitute of Soil or Mineral

(5) That, the occupier shall keep D G Set(s) within acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.

(6) That, the occupier shall install and maintain Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge and submit the photographic view of the structures within a month.

(7) That, the occupier shall grow and maintain greenery of the project in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

(8) That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports, every year latest by 30th September of the next financial year.

(9) That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory in compliance sub-para (2), (3), (4) and (5) of paragraph 3 of this CTO yearly at required periodicity.

(10) That, this CTO is valid subjected to the validity of mining Lease/Mining Plan/Ecofriendly/Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.

(11) That, this CTO is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ occupier.

(12) That, this CTO shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.

(13) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules made there under.

4. That, this CTO shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.

5. That, this CTO is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTO will be revoked if any of the information/documents/certificates/undertaking given by the occupier is found false/fictitious/forged in future.

6. The Order shall be valid subject to compliance of all other legal requirements applicable to the unit.

7. The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alteration in conditions of this consent.

Yatindra Kumar Das Digitally signed by Yatindra Kumar Das Date: 2024.02.24 18:36:43 +0530

This is issued with the approval of the Competent authority

(Yatindra Kumar Das)
Member Secretary

Memo No. : JSPCB/HO/R2NC/CTO-17957569/2024/283

Dated : 2024-02-24

Copy to: M/s Bokaro Cement Manufacturing Works (A unit of Dalmia Cement (Bharat) Limited, At/Plot No. IV/A-7(P)4, Bokaro Industrial Area, Balidih, Bokaro Steel City, Dist- Bokaro / Director of Industry, Government of Jharkhand, Ranchi/ Deputy Commissioner, Bokaro/ Director of Mines, Government of Jharkhand, Ranchi/ Chief Inspector of Factories, Ranchi/ D.F.O., Bokaro/D.M.O., Bokaro / R.O., Dhanbad for information & ensuring compliance of the above.

Yatindra Kumar Das Digitally signed by Yatindra Kumar Das Date: 2024.02.24 18:36:59 +0530

(Yatindra Kumar Das)
Member Secretary

Annexure-V

Water permission letter from JIADA

झारखण्ड औद्योगिक क्षेत्र विकास प्राधिकार
बोकारो प्रक्षेत्र, दियाला भवन, बालीडीह, बीएसएसिटी–14.
email : rodiadabokaro@gmail.com

पत्रांक : दिनांक :

सेवा में,

अवर प्रमण्डल पदाधिकारी,
पेय जल एवं स्वच्छता अवर प्रमण्डल
चास,
बोकारो स्टील सिटी ।

विषय:–इकाई को जलापूर्ति के संबंध में।

महाशय,

उपर्युक्त विषय आपका दिनांक

आलोक में इकाई सर्वश्री डालमिया सीमेंट (भारत) संख्या–
क्षेत्र, बीएसएसिटी–14 को 1.50 (एक लाख पचास हजार) लीटर प्रति दिन जल आपूर्ति
दी ।

विश्वासभाजन,
क्षेत्रीय निदेशक
जियाडा, बोकारो प्रक्षे

ज्ञापांक :
प्रतिलिपि : सर्वश्री डालमिया सीमेंट (भारत) संख्या–
औद्योगिक क्षेत्र, बीएसएसिटी–14 को सूचनार्थ प्रेषित ।

क्षेत्रीय निदेशक
जियाडा, बोकारो प्र

Office of the Sub-Divisional Officer

Drinking Water and Sanitation Sub-Division, Bokaro

Letter No. 36 Chas, Dated 13/4/22

To,

Regional Director
BIADA, Bokaro

Sub: Regarding Water Connection for M/S Dalmia cement (Bharat) Ltd. under BIADA.
Reference: Your letter no. 35 dated 25.01.22, 185 dated 05.04.22, this office letter no 24 dated 24.02.22 and agreement for water supply between unit and BIADA on dated 17.3.11

Madam,

With reference to the above cited subject, M/S Dalmia cement (Bharat) Ltd is asking for another 1.50 Lakhs litre water per day for their 2nd unit. I would like to inform you that the above firm have water agreement of 5.5 lakhs litre per day with BIADA for their 1st unit, out of which approx 2.0 – 2.5 lakhs litre water per day is being taken by Dalmia cement to meet the requirement of their 1st unit. M/S Dalmia cement (Bharat) Ltd already have approx 3.0 lakhs litre water allocated as surplus (extra). M/S Dalmia cement (Bharat) Ltd can meet the another 1.50 Lakhs litre water per day for their 2nd unit from the existing water agreement. This is for your information and necessary action.

Thanking You

13/4/22
Sub-Divisional Officer
DWS Sub-Division,
Bokaro

Memo No. 36 Bokaro/Date 13/4/22

Copy to: M/S Dalmia cement (Bharat) Ltd. for your information and further necessary action.

13/4/22
Sub-Divisional Officer
DWS Sub-Division,
Bokaro

Annexure-VI

Authorization of Hazardous waste obtained from JSPCB Ranchi vide letter no. JSPCB/HO/RNC/HWM-16948442/2024/14 dated 4.03.2024

JHARKHAND STATE POLLUTION CONTROL BOARD

T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI -834004
Phone:2400852, 2400851, Fax:0651- 2400850 www.jspcb.org

FORM 2

[See rule 6(2)]

FORM FOR GRANT OR RENEWAL OF AUTHORIZATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

1. No. of authorization and date of issue: JSPCB/HO/RNC/HWM-16948442/2024/14 04/03/2024

2. Reference of application(No. and date): 16948442 19/10/2023

3. Bokaro Cement Manufacturing Works (A Unit of DCBL) of Priya Ranjan is hereby granted an authorisation based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilisation, treatment, disposal or any other use of hazardous or other waste or both on the premises situated at Plot no-IV/A-7P4, Bokaro Industrial Area , Balidih

Details of Authorisation

Sl.No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity(ton/annum)
1	Cat-I; Used/Spect Oil (5.1)	Kept in MS Drums; sold to authorized recyclers	13 TPA
2	Cat-I; Wastes/residues containing Oil (5.2)	Kept in MS Drums; Sold to authorized recyclers	15 TPA

(1) The authorisation shall be valid for a period of Date of issue to 30.09.2028

(2) The authorisation is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A **General conditions of authorisation:**

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.

6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"

7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.

8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.

11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.

12. An application for the renewal of an authorisation shall be made as laid down under these Rules.

13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B Specific conditions:

1. That, the occupier shall take prior permission of the Board to close down the plant.

2. That, the renewal of authorization will be subject to compliance of the conditions laid down in this authorization.

3. That, the occupier shall comply with the conditions as per the guidelines prescribed by the MoEF for CPCB.

4. That, the occupier shall comply with all the conditions laid down in this authorization.

5. That, the occupier shall submit quarterly report on hazardous wastes generated and consumed in its sources, products generated or resources conserved (specifying the details like type and quantity of resources conserved) to the Board.

6. That, the occupier shall maintain a log book containing information on quantity on generation, date wise utilization of the same and its disposal, etc.

7. That, the occupier shall maintain record of Hazardous Waste utilized, Hazardous Waste generated and disposal as per form-3 and shall submit the annual returns in form-4 as per Rule 20 (1) and (2) of the Hazardous and other waste (Management & Transboundary Movement) Rules, 2016 to the Board.

8. That, the occupier shall comply with all the directions given by standard operating procedure.

9. That, the occupier shall be responsible for safe and environmentally sound management of hazardous and other wastes.

10. That, the hazardous and other wastes generated in the establishment of an occupier shall be sent or sold to an authorised actual user or shall be disposed of in an authorised disposal facility.

11. That, the hazardous and other wastes shall be transported from an occupier's establishment to an authorised actual user or to an authorised disposal facility in accordance with the provisions of these rules.

12. That, the occupier shall take all the steps while managing hazardous and other wastes to-
(a) contain contaminants and prevent accidents and limit their consequences on human beings and the environment; and
(b) provide persons working in the site with

13. That, the occupier shall comply with all the conditions laid down in this authorization mentioned in general and specific conditions.

14. That, the occupier shall install a display Board outside its plant showing details such as
(a) status of CTO;
(b) Status of authorization granted ;
(c) Disposal/reuse of hazardous waste generated in the plant and other relevant information as per prescribed guideline and update the same as required.

Yatindra Kumar Das
Digitally signed by Yatindra Kumar Das
Date: 2024.03.04 10:25:17 +05'30'

Memo No:JSPCB/HO/RNC/HWM-16948442/2024/14
Date: 04/03/2024

Y. K. Das
Member Secretary

Copy To:

Regional Officer, Regional Office, JSPCB, Hazaribagh for information and necessary action.

Yatindra Kumar Das
Digitally signed by Yatindra Kumar Das
Date: 2024.03.04 10:25:39 +05'30'

Y. K. Das
Member Secretary

Annexure: VII

Bokaro Cement Manufacturing Works (Unit of DCBL)

Stack emission monitoring report

On Line CEMS report from October 2024 to March 2025

On Line CEMS monitoring report of VRM Bag House Stack			
Month	**Min.**	**Max.**	**Avg.**
Oct-2024.	2.5	10.3	6.4
Nov-2024.	3.1	4.9	4.0
Dec-2024.	4.2	7.0	5.6
Jan-2025.	5.9	9.7	7.3
Feb-2025.	4.5	5.9	5.2
Mar-2025.	4.1	15.7	10.4
Min.	**2.5**	**4.9**	**4.0**
Max.	**5.9**	**15.7**	**10.4**
Avg.	**4.1**	**8.9**	**6.5**

Manual Stack emission monitoring report from October 2024 to March 2025

Manual Stack emission monitoring report VRM Bag House Stack			
Month	**Min.**	**Max.**	**Avg.**
Oct-2024.	4.6	7.6	6.1
Nov-2024.	5.7	13.5	9.6
Dec-2024.	5.3	10.9	8.1
Jan-2025.	6.8	11.5	9.2
Feb-2025.	4.7	8.3	7.8
Mar-2025.	8.3	9.6	9.0
Min.	**4.6**	**7.6**	**6.1**
Max.	**8.3**	**13.5**	**9.6**
Avg.	**6.3**	**10.2**	**8.3**

JSPCB Norms	**30 mg/Nm3**

Institute for Environmental Management

Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	5	2	3	

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Stack Emission
Report Issue Date: 10-03-2025	Test Report No.: RN-24110500551	
Sample ID: 250307AP09001	Sample Description: Stack Emission	
Challan No./P.O. No.: 4548043346/237	Challan No./ P.No. Date: 05-11-2024	

Issued to:
Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited
Plot No IV/A-7(P/4), 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: 06-03-2025	
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series			
Field Meteorological Information	A. Temp. (°C): 24	R.H. (%): 47	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025	

General Physical Information

Stack Identification	Cement Mill Bag House Stack	Sampling Port	Available
Plat Form	Permanent	Stack Height from Ground Level (m)	50
Stack Description	Common for cement mill- 1 & 2	Port Hole Height from Ground Level (m)	40
Shape of Stack	Circular	Inner Dimension of Stack (m)	3.7
Construction Material	MS	Pollution Control Device (if any)	Bag House

Flue Gas Temperature (K): 379	Flue Gas Velocity (m/s): 20.5	Flue Gas Volumetric Flow Rate (Nm^3/hr):605749.1

Test Result

Sl. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm^3	8.6	30.0

Dust	Kg/hr	5.21

—End of Report—

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2 °C and Relative Humidity 60±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Siddharth kumar & Team

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

Reviewed by	Authorized Signatory
(Tauqeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director

Corporate office - A. B. 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

Annexure-VIII

Bokaro Cement Manufacturing Works (Unit of DCBL)

Fugitive dust emission monitoring report

October 2024 to March 2025

Sr. No	Date of monitoring	Near Mill area µg/m3	Near Packing plant µg/m3	Near Clinker Silo µg/m3
1	October-2024.	678.2	825.6	714.8
2	November-2024.	527.3	782.3	837.4
3	December-2024.	683.8	845.5	783.12
4	January-2025.	874.6	743.4	874.9
5	February-2025.	918.7	985.7	923.3
6	March-2025.	815.2	1013.4	687.5
	Min.	**527.3**	**743.4**	**687.5**
	Max.	**918.7**	**1013.4**	**923.3**
	Avg.	**749.63**	**866.0**	**803.5**

Fugitive Emission monitoring report

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Work Environment & Indoor Air
Report Issue Date: 10-03-2025		Test Report No.: RN-241105005E01
Sample ID: 250307AP10001		Sample Description: Fugitive Emission
Challan No./P.O. No.: 4548043346/237		Challan No./ P.No. Date: 05-11-2024
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(P/4), 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: 06-03-2025
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: Packing Plant		
Field Meteorological Information	A. Temp. (°C):24 / R.H. (%):47	W.C.: Sunny / W.D.: NW to SE
Sample Receiving date:07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025

—Test Results—

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	$\mu g/m^3$	2000	725.5

—End of Report—

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

Tested By:Akanksha Sourabh

Sample Drawn By: Siddharth Kumar & Team

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

Reviewed by	Authorized Signatory
T. Ahmad	
(Tanjeer Ahmad)	(Dr. B. C. Jain)
Technical 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 Sahtai Bhawan, Harmu Housing Colony,
Ranchi-834002, Jharkhand, India
Ph - 8407804255, 8407804251, Email - iem2012@rediffmail.com

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub Group: Work Environment & Indoor Air
Report Issue Date: 10-03-2025	Test Report No.: RN-241105005FE02	
Sample ID:250307AP10002	Sample Description: Fugitive Emission	
Challan No./P.O. No.: 4548043346/237	Challan No./ P.No. Date: 05-11-2024	
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(P/4), 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:06-03-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: Raw Material Yard		

Field Meteorological Information	A. Temp. (°C):24	R.H. (%):47	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date:07-03-2025	Testing Started:07-03-2025		Testing Ended:10-03-2025	

—Test Results—

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Particulate Matter (SPM)	IS 5182 Part - 04	$\mu g/m^3$	2000	799.9

—End of Report—

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

Tested By:Akanksha Sourabh

Sample Drawn By: Siddharth Kumar & Team

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

Reviewed by	Authorized Signatory
(Tauqeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director

Corporate office - A.R. Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001
Laboratory Site - H.No. - A-13, Jaket Vihar, Near Sohrai Bhawan, Harmu Housing Colony,
Ranchi-834002, Jharkhand, India
Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Work Environment & Indoor Air
Report Issue Date: 10-03-2025	Test Report No.: RN-241105005FE03	
Sample ID:250307AP10003	Sample Description: Fugitive Emission	
Challan No./P.O. No.: 4548043346/237	Challan No./ P.No. Date: 05-11-2024	
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(P/4), 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:06-03-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: Mill Area		
Field Meteorological Information	A. Temp. (°C):24	R.H. (%):47	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date:07-03-2025	Testing Started:07-03-2025	Testing Ended:10-03-2025

—Test Results—

Sl. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	$\mu g/m^3$	2000	639.4

—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 Factories Act, 1948 (8 hrs. Basis)
Remark	Sample Comply With the PrescribedSpefication.

Tested By:Akanksha Sourabh

Sample Drawn By: Siddharth Kumar & 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.

Reviewed by	Authorized Signatory
(Taugeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director

Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001
Laboratory Site - H.No. - A-13, Sakti Vihar, Near Sainik Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India
Ph - 8407804203, 8407804251, Email - ism2012@rediffmail.com

Annexure-IX

Bokaro Cement Manufacturing Works (Unit of DCBL)

On line Ambient Air Quality Monitoring report from October 2024 to March 2025 towards Gorabali Village

On Line CAAQMS Monitoring report				
	SO2	NOx	PM-10	PM-2.5
	µg/m3	µg/m3	µg/m3	µg/m3
Month				
October-2024.	3.6	26.9	39.8	17.4
November-2024.	4.8	20.8	45.9	21.3
December-2024.	2.9	21.7	48.1	22.7
January-2025.	3.8	15.1	42.4	19.9
February-2025.	4.6	16.7	51.3	23.6
March-2025.	3.7	13.9	54.8	27.7
Min	**2.9**	**13.9**	**39.8**	**17.4**
Max	**4.8**	**26.9**	**54.8**	**27.7**
Avg	**3.9**	**19.5**	**47.1**	**22.3**

Bokaro Cement Manufacturing Works (Unit of DCBL)

Ambient Air Quality Monitoring report from October 2024 to March 2025

Institute for Environmental Management

Test Report

ULR No.: T C 3 5 2 9 2 2 5 0 0 0 0 0 0 5 0 6			
Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air	
Report Issue Date: 10-03-2025		Test Report No.: RN-241105005A1	
Sample ID: 250307AP07001		Sample Description: Ambient Air	
Challan No./P.O. No.: 4548045346/237		Challan No./ P.No. Date: 05-11-2024	
Issued to: Bokaro Cement Manufacturing Works,Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(Pt)4, 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:06-03-2025 to 07-03-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series			
Sampling Location: Gorabali Village (Near Temple)			
Field Meteorological Information	A. Temp. (°C):22	R.H. (%):47	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025	

---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM_{10})	IS 5182 Part 23:2006	$\mu g/m^3$	100	61.2
2.	Particulate Matter ($PM_{2.5}$)	IS 5182 Part 24:2019	$\mu g/m^3$	60	36.7
3.	Sulphur Dioxide (SO_2)	IS 5182 Part-02	$\mu g/m^3$	80	15.3
4.	Nitrogen Dioxide (NO_2)	IS 5182 Part-06	$\mu g/m^3$	80	28.4
5.	Ammonia (NH_3)	IS 5182 Part 25	$\mu g/m^3$	400	18.0
6.	Ozone (O_3)	IS 5182 Part 09	$\mu g/m^3$	100	21.2
7.	Arsenic (as As)	USEPA IO 3.2	ng/m^3	—	BDL (MDL-2)
8.	Lead (as Pb)	IS 5182 Part 22	$\mu g/m^3$	1.0	0.05
9.	Nickel (as Ni)	IS 5182 Part 26	ng/m^3	—	BDL (MDL-4)

---End of Report---

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 45±5 % in all testing area as per IS 196-1966(E).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule – 1986.
Remark	Sample Comply with prescribed specification.

Tested By:Akanksha Sourabh

Sample Drawn By:Siddharth Kumar & Team

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

Reviewed by: Authorised Signatory

T. Ahmad — (Tauqeer Ahmad), Technical Manager

(Dr. S. C. Jain), Director

Corporate office - A-8, Modi Heights, Opp. All India Radio Station, Ranu 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

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air
Report Issue Date: 10-03-2025	Test Report No.: RN-241105005A1	
Sample ID: 250307AP07001	Sample Description: Ambient Air	
Challan No./P.O. No.: 4546043346/237	Challan No./ P.No. Date: 05-11-2024	
Issued to: Bokaro Cement Manufacturing Works,Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(P)4, 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:06-03-2025 to 07-03-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: Goraboli Village (Near Temple)		
Field Meteorological Information	A. Temp. (°C):22 | R.H. (%):47 | W.C.: Sunny	W.D.: NW to SE
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025

—Test Results—

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
10.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m^3	---	BDL (MDL-0.18)
11.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m^3	---	BDL(MDL-1.8)
12.	BENZENE (C_6H_6)	IS 5182 Part 11	$\mu g/m^3$	---	BDL (MDL- 0.06)

—End of Report—

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

Tested By:Akanksha Sourabh

Sample Drawn By: Siddharth Kumar & Team

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On the basis of Query Checked and Technical data verified by the Authorized signatory, the report is issued to the Director of the Date: [illegible]

Reviewed by	Authorized Signatory
T. Ahmad	
(Tauqeer Ahmad)	(P. C. Jain)
Technical Manager	Director

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

Institute for Environmental Management

Test Report

ULR No.: T C 1 5 2 9 2 2 5 0 0 0 0 0 0 5 0 7			
Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air	
Report Issue Date: 10-03-2025	Test Report No.: RN-241105005A2		
Sample ID:250307AP07002	Sample Description: Ambient Air		
Challan No./P.O. No.: 4548043345/237	Challan No./ P.No. Date: 05-11-2024		
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(Pt)4, 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: 06-03-2025 to 07-03-2025		
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series			
Sampling Location Thakurtand Village (Near Anganwadi Kendra)			
Field Meteorological Information	A. Temp. (°C):22	R.H. (%):47	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025	

—Test Results—

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM_{10})	IS 5182 Part 23:2006	$\mu g/m^3$	100	52.1
2.	Particulate Matter ($PM_{2.5}$)	IS 5182 Part 24:2019	$\mu g/m^3$	60	25.2
3.	Sulphur Dioxide (SO_2)	IS 5182 Part-02	$\mu g/m^3$	80	17.7
4.	Nitrogen Dioxide (NO_2)	IS 5182 Part-06	$\mu g/m^3$	80	29.5
5.	Ammonia (NH_3)	IS 5182 Part 25	$\mu g/m^3$	400	13.2
6.	Ozone (O_3)	IS 5182 Part 09	$\mu g/m^3$	100	18.9
7.	Arsenic(as As)	USEPA I.O. 3.2	ng/m^3	—	BDL (MDL-2)
8.	Lead(as Pb)	IS 5182 Part 22	$\mu g/m^3$	1.0	0.05
9.	Nickel (as Ni)	IS 5182 Part 26	ng/m^3	—	BDL (MDL-4)

—End of Report—

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

Tested By:Akanksha Sourabh

Sample Drawn By:Siddharth Kumar & Team

Specific Contractual Notes :
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6. In case of feedback/ complaints, please send an email at [illegible]

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

Reviewed by Authorized Signatory

T. Murmu

(Tauqeer Ahmad) Technical Manager

(Dr. S. C. Jain) Director

Corporate office - A-8, Modi Heights, Opp. All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001
[illegible]
Ranchi-834002, Jharkhand, India
Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air
Report Issue Date: 10-03-2025	Test Report No.: RN-241105005A2	
Sample ID:250307AP07002	Sample Description: Ambient Air	
Challan No./P.O. No.: 4548643346/237	Challan No./ P.No. Date: 05-11-2024	
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(Pt)4, 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: 06-03-2025 to 07-03-2025	
Protocol: CPCB Guideline(NAAQM5/36/2012-13) & IS Method 5182 Series		
Sampling Location Thakurtand Village (Near Anganwadi Kendra)		
Field Meteorological Information: A. Temp. (°C):22, R.H. (%):47, W.C.: Sunny, W.D.: NW to SE		
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025

—Test Results—

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
10.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m^3	—	BDL (MDL-0.16)
11.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m^3	—	BDL(MDL-1.8)
12.	BENZENE (C_6H_6)	IS 5182 Part 11	$\mu g/m^3$	—	BDL (MDL- 0.06)

—End of Report—

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

Tested By:Akanksha Sourabh

Sample Drawn By:Siddharth Kumar & Team

Specific Contractual Notes :
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5. Total liability of institute for Environmental Management will be limited to received amount only.
6. In case of feedback/ complaints, please send an email at jem_jamshedpur@yahoo.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. Mandir Marg, Near Hanuman Chowk, All India Radio Station, Radio Road, Ranchi, Jharkhand - 834001

Reviewed by	Authorized Signatory
(Tauqeer Ahmad)	(Dr. S. C. Jain)
Technical Manager	Director

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony,
Ranchi-834001, Jharkhand, India
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Institute for Environmental Management

Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	5	0	8

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air
Report Issue Date: 10-03-2025	Test Report No.: RN-241105005A3	
Sample ID:250307AP07003	Sample Description: Ambient Air	
Challan No./P.O. No.: 4548043346/237	Challan No./ P.No. Date: 05-11-2024	

Issued to:
Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited
Plot No IV/A-7(P)4, 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: 06-03-2025 to 07-03-2025
Protocol: CPCB Guideline(NAAQM5/36/2012-13) & IS Method 5182 Series	
Sampling Location:Khutri Village (Near Kali Mandir)	

Field Meteorological Information	A. Temp. (°C):22	R.H. (%):47	W.C.: Sunny	W.D.: NW to SE

Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025

---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM_{10})	IS 5182 Part 23:2006	$\mu g/m^3$	100	58.0
2.	Particulate Matter ($PM_{2.5}$)	IS 5182 Part 24:2019	$\mu g/m^3$	60	32.1
3.	Sulphur Dioxide (SO_2)	IS 5182 Part-02	$\mu g/m^3$	80	16.8
4.	Nitrogen Dioxide (NO_2)	IS 5182 Part-06	$\mu g/m^3$	80	32.3
5.	Ammonia (NH_3)	IS 5182 Part 25	$\mu g/m^3$	400	12.4
6.	Ozone (O_3)	IS 5182 Part 09	$\mu g/m^3$	100	15.2
7.	Arsenic (as As)	USEPA I.O. 3.2	ng/m^3	—	BDL (MDL-2)
8.	Lead (as Pb)	IS 5182 Part 22	$\mu g/m^3$	1.0	0.04
9.	Nickel (as Ni)	IS 5182 Part 26	ng/m^3	—	BDL (MDL-4)

---End of Report---

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

Tested By:Akanksha Gourlach

Sample Drawn By:Siddharth Kumar & 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.

Reviewed by Authorized Signatory

(Tauqeer Ahmad) Technical 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

Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air
Report Issue Date: 10-03-2025	Test Report No.: RN-241105005A3	
Sample ID:250307AP07003	Sample Description: Ambient Air	
Challan No./P.O. No.: 4548043346/237	Challan No./ P.No. Date: 05-11-2024	
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(P)4, 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: 06-03-2025 to 07-03-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location:Khutri Village (Near Kali Mandir)		
Field Meteorological Information	A. Temp. (°C):22 | R.H. (%):47 | W.C.: Sunny	W.D.: NW to SE
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025

—Test Results—

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
10.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m^3	---	BDL (MDL-0.16)
11.	Carbon Monoxide (CO)	IEM/SOP/AM-01-2022	mg/m^3	---	BDL(MDL-1.8)
12.	BENZENE (C_6H_6)	IS 5182 Part 11	$\mu g/m^3$	---	BDL (MDL-0.06)

—End of Report—

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

Tested By:Akanksha Sourabh

Sample Drawn By:Siddharth Kumar & 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 Institute in Made-Eligible Shape. All Indian Authorities Rule Bound, Ranchi, Jharkhand - 834002.

Reviewed by: Authorized Signatory

(Tanveer Ahmad) Technical Manager

(Dr. S. C. Jain) Director

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

Institute for Environmental Management

Test Report

ULR No.:	T	C	1	5	2	9	2	2	5	0	0	0	0	0	0	5	0	9

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air
Report Issue Date: 10-03-2025	Test Report No.: PM 2411060644	
Sample ID:250307AP07004	Sample Description: Ambient Air	
Challan No./P.O. No.: 4548043546/237	Challan No./ P.No. Date: 05-11-2024	

Issued to:
Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited
Plot No IV/A-7(P)4, 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: 06-03-2025 to 07-03-2025

Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series

Sampling Location: BCMW(Near Project Office)

Field Meteorological Information	A. Temp. (°C):22	R.H. (%):47	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025		Testing Ended: 10-03-2025	

—Test Results—

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM_{10})	IS 5182 Part 23 2006	$\mu g/m^3$	100	57.1
2.	Particulate Matter ($PM_{2.5}$)	IS 5182 Part 24 2019	$\mu g/m^3$	60	28.6
3.	Sulphur Dioxide (SO_2)	IS 5182 Part-02	$\mu g/m^3$	80	14.4
4.	Nitrogen Dioxide (NO_2)	IS 5182 Part-06	$\mu g/m^3$	80	27.1
5.	Ammonia (NH_3)	IS 5182 Part 25	$\mu g/m^3$	400	24.2
6.	Ozone (O_3)	IS 5182 Part 09	$\mu g/m^3$	100	18.0
7.	Arsenic (as As)	USEPA I.O. 3.2	ng/m^3	—	BDL (MDL-2)
8.	Lead (as Pb)	IS 5182 Part 22	$\mu g/m^3$	1.0	0.05
9.	Nickel (as Ni)	IS 5182 Part 26	ng/m^3	—	BDL (MDL-4)

—End of Report—

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

Tested By:Akanksha Sourabh

Sample Drawn By: Siddharth Kumar & 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.

Reviewed by — Authorized Signatory

(Tauqeer Ahmad) — (Dr. S. C. Jain)

Technical Manager — Director

Corporate office - A-8, Modi Heights, Opp. -All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001
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Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air
Report Issue Date: 10-03-2025	Test Report No.: RN-241105005A4	
Sample ID:250307AP07004	Sample Description: Ambient Air	
Challan No./P.O. No.: 4548043346/237	Challan No./ P.No. Date: 05-11-2024	
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(P)4, 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: 06-03-2025 to 07-03-2025	
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series		
Sampling Location: BCMW(Near Project Office)		
Field Meteorological Information: A. Temp. (°C):22, R.H. (%):47, W.C.: Sunny, W.D.: NW to SE		
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025

—Test Results—

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
10.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m^3	—	BDL (MDL-0.18)
11.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m^3	—	BDL(MDL-1.8)
12.	BENZENE (C_6H_6)	IS 5182 Part 11	$\mu g/m^3$	—	BDL (MDL- 0.06)

—End of Report—

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

Tested By:Akanksha Sourabh

Sample Drawn By:Siddharth Kumar & 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 Designee of the Competent, at Shed, Hospital, Opp.- All India Radio Station, [illegible]

Reviewed by | Authorized Signatory

(Tauqeer Ahmad) | (S. C. Jain)

Technical Manager | Director

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Annexure-X

LIST OF POLLUTION CONTROL EQUIPMENTS (BAG FILTERS)

BOKARO CEMENT MANUFACTURING WORKS, (A unit of DALMIA CEMENT BHARAT LIMITED)							
LIST OF POLLUTION CONTROL EQUIPMENTS							
S. No.	Location	Description	Application	Design dust Emission (mg/Nm3)	Volume of bag filter (m3/h)	Fan Volume	Outlet dust Emission (mg/Nm3)
	Bag House						
1.	Cement Mill Venting	Bag House 563BF4	Cement	10	1030000	1150000	≤ 30
	LIST of Nuisance Dust Collectors						
1	TT-1 492 BF1	Belt conveyor from WT to clinker silo new & existing (492 BC1) at TT-1/Clinker	Clinker	10	10000	11500	≤ 30
2	TT-2 492 BF2	Belt conveyor 492BC1 discharging to 492BC2 & BC4 at TT-2/Clinker	Clinker	10	10000	11500	≤ 30
3	TT-3 492BF4	Bag filter 492 BF3 for conveyor 492BC3 discharging to 492 BC4	Clinker	10	10000	11500	≤ 30
4	492BF5	492 BC3 discharge and clinker silo top/ Clinker	Clinker	10	15000	17250	≤ 30
5	TT-4 512BF1	Belt conveyor 512BC1 discharge to 512BC3 at TT-4/ Clinker	Clinker	10	12500	14375	≤ 30
6	TT-5	Belt conveyor 512BC2 discharge to 512BC3 at TT-5/ Clinker	Clinker	10	10000	11500	≤ 30
7	TT-6 512 BF3	Belt conveyor 512BC3 discharge to 512BC4 at TT-6/ Clinker	Clinker	10	7500	8625	≤ 30
8	512 BF4	Belt conveyor 512BC4 discharge to 512BE1 at TT-3 bottom/ Clinker	Clinker	10	5000	5750	≤ 30
9	CMH Top 533 BF1	Cement mill hopper top/ Clinker & Gypsum	Clinker & Gypsum	10	10000	11500	≤ 30
10	533 BF3	CMH extraction	Clinker & Gypsum	10	15000	17250	≤ 30
11	533 BF2	Mill feed conveyor	Clinker & Gypsum	10	10000	11500	≤ 30
12	563 BF1	Cement Mill BE feed/ Reject	Cement	10	12500	14375	≤ 30

BOKARO CEMENT MANUFACTURING WORKS, (A unit of DALMIA CEMENT BHARAT LIMITED)							
LIST OF POLLUTION CONTROL EQUIPMENTS							
S. No.	Location	Description	Application	Design dust Emission (mg/Nm3)	Volume of bag filter (m3/h)	Fan Volume	Outlet dust Emission (mg/Nm3)
		Material					
13	563 BF2	Cement Mill BE Top/ Reject Material	Cement	10	10000	11500	≤ 30
14	563 BF3	Cement Mill reject BC/ Reject Material	Cement	10	10000	11500	≤ 30
15	594 BF1	Baghouse Extraction/ Cement	Cement	10	5000	5750	≤ 30
16	594 BF2	Baghouse Extraction/ Cement	Cement	10	5000	5750	≤ 30
17	BRU K12BF1	K12 BF1 for BRU 1 & 2 (With pneumatic dampers)	Coal	10	30000	34500	≤ 30
18	TT9 K12 BF2	K12 BF2 for TT9 (Coal Handling)	Coal	10	12500	14375	≤ 30
19	FBC Hopper K12 BF3	K12 BF3 for FBC (Coal Handling)	Coal	10	7500	8625	≤ 30
20	492 BF3	492 BF3 (492BC2 to 492BC3) TT14	Clinker	10	10000	11500	≤ 30
21	232BF2	Air slide venting	Fly ash	10	4000	4600	≤ 30
22	614BF1	Cement silo cone	Cement	10	4000	4600	≤ 30
23	613BF1,	Cement silo cone	Cement	10	4000	4600	≤ 30
24	595BF1	Cement silo top	Cement	10	7500	8625	≤ 30
25	594BF3	Cement silo top	Cement	10	7500	8625	≤ 30
26	613BF2	Airslide venting	Cement	10	5000	5750	≤ 30
27	613BF3	Airslide venting	Cement	10	6000	6900	≤ 30
28	646BF1	Packing Plant	Cement	10	15000	17250	≤ 30
29	647BF1	Packing Plant	Cement	10	15000	17250	≤ 30
30	646BF2	Packing Plant	Cement	10	35000	40250	≤ 30

BOKARO CEMENT MANUFACTURING WORKS, (A unit of DALMIA CEMENT BHARAT LIMITED)							
LIST OF POLLUTION CONTROL EQUIPMENTS							
S. No.	Location	Description	Application	Design dust Emission (mg/Nm3)	Volume of bag filter (m3/h)	Fan Volume	Outlet dust Emission (mg/Nm3)
31	647BE2	Packing Plant	Cement	10	35000	40250	≤ 30

Annexure-XI

Compliance of CREP Conditions

BOKARO CEMENT MANUFACTURING WORKS

S.No.	CREP Conditions	Compliance
1	Cement plants/Standalone grinding units, which are not complying* with notified standards, shall do the following to meet the standards: • Augmentation of existing air pollution control devices- by July 2003 • Replacement of existing air pollution control devices- by July 2004	M/s. Bokaro Cement Manufacturing Works (Unit of DCBL) will comply with all the Stipulated standards given by MoEF CC/JSPCB. Company has installed of bag filter as air pollution control device (APCD) in plant to comply the notified standards. Regular monitoring of ambient air quality is also being/ will be practiced.
2	Cement plants/Standalone grinding units located in critically polluted or urban areas (including 5 km distance outside under urban boundary) will meet 100 mg/Nm3 limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm3. As per Gazette Notification MoEFCC G.S.R.497(E) dated 10th May, 2016, emission standards for PM have been prescribed as 30 mg/Nm3.	Neither the plant is located in Critically Polluted area nor in Urban areas. Plant is located in industrial area. All mesures will be undertaken to keep emission level of PM below the permission limit. The major source of air pollution (i.e. Cement mill) will be provided with Bag House. Bag Filters and de-dusting/nuisance filters will be installed in Packing Plant and all material transfer points.
3	The new cement kilns to be accorded NOC/ Environmental clearance w.e.f. 01.04.2003 will meet the limit of 50 mg/Nm3.	Unit is Stand-alone Grinding Unit only and will comply with new emission norms.
4	CPCB will evolve load-based standards by December 2003.	This is a Stand-alone grinding unit; Load based standards issued by the MoEF CC is for Kiln only for clincker isation. Hence, this condition is not applicable.
5	CPCB and NCBM will evolve SO_2 and NOx emission standards by June 2004	Unit is Stand-alone Grinding Unit only and there will not be SO2 and NOx emission during manufacturing process; this condition is not applicable.
6	The Cement industry will control fugitive emission from all the raw materials and products storage and transfer points by December 2003. However, the feasibility for	Unit is Stand-alone Grinding Unit only and there will not be SO2 and NOx emission during manufacturing process;

	the control of fugitive emission from limestone and coal storage area will be decided by the National Task Force (NTF) The NTF shall submit its recommendations within three months.	this condition is not applicable. To control the fugitive emissions the following measures are adopted/ proposed: •All measures to control emission from construction activities such • as covering of construction site, water sprinkling & covering of construction material etc. are being adopted at site. • All the conveyors will be covered with conveyer covers and hoods to offset any trapping of material in wind stream. • Storage of raw material/cement in storage shed and Silos. • Concreted internal roads and The sprinkling of water will be done all along internal roads in the plant in order to control the dust arising due to the movement of vehicular traffic. • Thick green belt is being developed around the plant to arrests the fugitive emissions. • Plugging of all leakage and enclosing storage and material handling systems.
7	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum coke as fuel in cement kiln by July 2003.	Not Applicable
8	After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operations/sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring system (CMS) by December 2003.	Continuous emission monitoring system (CEMS) will be installed at Cement Mill Stack and real time emission monitoring date will be transmitted to SPCB and CPCB website.
9	Tripping in kiln ESP to be minimized by July 2003 as per the recommendations of NTF.	Not Applicable; as the proposal is for Stand-alone Grinding Unit. However, high efficiency Bag House will be provided for Cement Mill
10	Industries will submit the target date to enhance the utilization of waste material by April 2003.	After expansion, GU will also utilize Fly ash along with Slag which are process waste generated by Thermal Power

		Plant and Steel industries and help them in getting rid of waste in most sustainable manner by converting into useful product i.e. Cement.
11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	Not Applicable
12	Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003.	Not Applicable

Annexure-XII

Ground water level report of surrounding village from October 2024 to March 2025

Location	Coordinate of Site	Distance from Plant site (KM)	Depth from ground (feet)					
		Month	October-2024,	November-2024,	December-2024,	January-2025,	February-2025,	March-2025,
Pakhiriatand (Near Anganwadi)	23070'5590"N 86006'2678" E	1	8'7"	9'2"	16'1"	17'9"	18'4"	19'8"
Tupkadi (Near Electric Pole)	23071'3362"N 86006'1573" E	1	8'3"	9'8"	13'3"	15'1"	16'0"	17'4"
Godawali (Near Temple)	23068'7751"N 86006'0031" E	1	2'6"	3'4"	5'3"	7'3"	8'1"	9'3"
Bhutkuru (Near primary School)	23070'4642"N 86005'1418" E	1	10'2"	11'6"	15'4"	17'3"	18'5"	19'2"

Ground water quality report of surrounding village

Institute for Environmental Management

Test Report

ULR No.: T C 1 5 2 9 2 2 5 0 0 0 0 0 0 5 3 1			
Discipline: Chemical	Group: Water	Sub Group: Ground Water	
Report Issue Date: 10-03-2025		Test Report No.: RN-241105009W1	
Sample ID: 250307WA03003		Sample Description: Ground Water (Dug well)	
Challan No./P.O. No.: 4546041346/237		Challan No./P.No. Date: 05-11-2024	

Issued to:
Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited
Plot No IV/A-7(P)4, 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:07-03-2025
Protocol: CPCB Guideline& IS Method 3025 Series	
Sampling Location: Khutri Village	
Sample Receiving date:07-03-2025	Testing Started:07-03-2025 / Testing Ended:10-03-2025

—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	7.4
2.	Turbidity	NTU	IS 3025 (Part-10)	1	5	<1
3.	Colour	Hazen	IS 3025 (Part-04)	5	15	<5
4.	Odour	—	IS 3025 (Part-05)	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part-16)	500	2000	212
6.	Calcium (as Ca+2)	mg/l	IS 3025 (Part-40)	75	200	38.3
7.	Total Alkalinity (as CaCO3)	mg/l	IS 3025 (Part-23)	200	600	112
8.	Total Hardness (as CaCO3)	mg/l	IS 3025 (Part-21)	300	600	146
9.	Chloride (as Cl-)	mg/l	IS 3025 (Part-32)	250	1000	28
10.	Free Residual Chlorine	mg/l	IS 3025 (Part-26)	0.2	1.0	BDL(MDL-0.07)
11.	Sulphate (as SO_4^{-2})	mg/l	IS 3025 (Part-24)	200	400	22.6
12.	Magnesium (as Mg+2)	mg/l	IS 3025 (Part-46)	30	100	12.2

—End Report—

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 1°C and Relative Humidity Back N ie all testing area as per IS 3025 (Part-1)
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500:2012
Remark	Sample Checked with particulars specification

Tested By: Yashwant Kumar
Sample Drawn By: Siddharth kumar & Team

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5. Total liability of Institute for Environmental Management will be limited to invoiced amount only.
6. In case of feedback/ complaints, please send an email at jain.ehs@dalmia.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.

Reviewed by	Authorized Signatory
(Tauqeer Ahmad)	(Dr. B. C. Jain)
Technical Manager	Director

Corporate office - A-8, Modi Heights, Opp -All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001
Laboratory Site - H No. – A 33, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony,
Ranchi-834002, Jharkhand, India
Ph - 8407804253, 8407804251, Email : iem2012@rediffmail.com

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Water	Sub Group: Ground Water
Report Issue Date: 10-03-2025		Test Report No.: RN-241209005GW1
Sample ID-250307WAB3001, 250307RC03001 & 250307WBO3001		Sample Description: Ground Water (Dug well)
Challan No./P.O. No.: 4546043346/257		Challan No./ P.No. Date: 05-12-2024

Issued to:
Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited
Plot No IV/A-7(P)4, 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:07-03-2025
Protocol: CPCB Guideline& IS Method 3025 Series	
Sampling Location: Khutri Village	
Sample Receiving date:07-03-2025	Testing Started:07-03-2025 / Testing Ended:10-03-2025

---Test Results---

Sl. No.	Tested Parameter	Unit	Method No.	Limit: Acceptable	Limit: Permissible	Results
13.	Nitrate (as NO_3^-)	mg/l	APHA 4500-B 2023	45	No Relaxation	2.8
14.	Fluoride (as F)	mg/l	APHA 4500-D 2023	1.0	1.5	0.48
15.	Copper	mg/l	APHA 3111-B 2023	0.5	1.5	BDL (MDL = 0.2)
16.	Chromium	mg/l	APHA 3111-B 2023	0.05	No Relaxation	BDL (MDL = 0.2)
17.	Lead (Pb)	mg/l	APHA 3111-B 2023	0.01	No Relaxation	BDL (MDL = 0.2)
18.	Manganese (Mn)	mg/l	APHA 3111-B 2023	0.01	0.03	BDL (MDL = 0.2)
19.	Iron (Fe)	mg/l	APHA 3111-B 2023	1.0	No Relaxation	BDL (MDL = 0.05)
20.	Total Coliform	MPN/100ml	IS 1622: 1981	Shall not be detectable in any 100 ml sample		BDL (MDL:1.8)
21.	E. Coli	MPN/100ml	IS 1622: 1981			BDL (MDL:1.8)

---END Report---

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 60±5 % in all testing area as per IS 196:1966(R)
Deviation	NIL (Minimum Detection Limit, MDL Below Detection Limit)
Limit is Specified	IS 10500: 2012
Remark	Sample Results with acceptable deviation.

Tested By: Yashomati Kumari,Sanjay Kumar & Mahar Tanni
Sample Drawn By: Siddharth kumar & Team

Specific Contractual Note :-
1. The laboratory accepts responsibility for content of this report.
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6. In case of feedback/complaints, please send an email at iem.ranchi@gmail.com

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

Reviewed by	Authorized Signatory
(Tasqeer Ahmad)	(Dr. A. C. Jain)
Technical Manager	Director

Corporate office - A/8, Modi Heights, Opp.-All India Radio Station, Kahe Road, Ranchi, Jharkhand - 834001
Laboratory Site - H.No. - A-13, Sakti Vihar, Near Sahrai Bhawan, Harmu Housing Colony,
Ranchi-834002, Jharkhand, India
Th - 8407804215, 8407804251, Email - iem2012@rediffmail.com

Institute for Environmental Management

Test Report

ULR No.: T C 1 5 2 9 2 2 5 0 0 0 0 0 0 5 3 2	
Discipline: Chemical	Group: Water / Sub-Group: Ground Water
Report Issue Date: 10-03-2025	Test Report No.: RN-241105005GW2
Sample ID: 250307WA03002	Sample Description: Ground Water (Dug well)
Challan No./P.O. No.: 4548043346/237	Challan No./ P.No. Date: 05-11-2024

Issued to:
Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited
Plot No IV/A-7(P)4, 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: 07-03-2025
Protocol: CPCB Guidelines & IS Method 3025 Series	
Sampling Location: Thakurtand Village	
Sample Receiving date:07-03-2025	Testing Started:07-03-2025 / Testing Ended:10-03-2025

—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	7.5
2.	Turbidity	NTU	IS 3025 (Part-10)	1	5	<1
3.	Colour	Hazen	IS 3025 (Part-04)	5	15	<5
4.	Odour	—	IS 3025 (Part-05)	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part-16)	500	2000	190
6.	Calcium (as Ca+2)	mg/l	IS 3025 (Part-40)	75	200	29.7
7.	Total Alkalinity (as CaCO3)	mg/l	IS 3025 (Part-23)	200	600	82
8.	Total Hardness (as CaCO3)	mg/l	IS 3025 (Part-21)	200	600	138
9.	Chloride (as Cl-)	mg/l	IS 3025 (Part-32)	250	1000	21
10.	Free Residual Chlorine	mg/l	IS 3025 (Part-26)	0.2	1.0	BDL(MDL-0.07)
11.	Sulphate (as SO_4^{-2})	mg/l	IS 3025 (Part-24)	200	400	26
12.	Magnesium (as Mg+2)	mg/l	IS 3025 (Part-46)	30	100	15.8

—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 (IS-14446).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2012
Remark	Sample Satisfy with prescribed specification.

Tested By: Yashomati Kumari
Sample Drawn By: Siddharth kumar & Team

Specific Contractual Notes: -	Reviewed by	Authorized Signatory
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	(Tauqeer Ahmad)	(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.	Technical 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

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Water	Sub-Group: Ground Water
Report Issue Date: 10-03-2025		Test Report No.: IEM-241105005GW2
Sample ID: 250307WA03002, 250307RC03002 & 250307MB03002		Sample Description: Ground Water (Dug well)
Challan No./P.O. No.: 4548043348/237		Challan No./ P.No. Date: 05-11-2024

Issued to:
Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited
Plot No IV/A-7(P)4, 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: 07-03-2025

Protocol: CPCB Guideline& IS Method 3025 Series
Sampling Location: Thakurtand Village

Sample Receiving date:07-03-2025	Testing Started:07-03-2025	Testing Ended:10-03-2025

---Test Result---

Sl. No.	Tested Parameter	Unit	Method No.	Limit		Results
				Acceptable	Permissible	
13.	Nitrate (as NO^3)	mg/l	APHA 4500 B 2023	45	No Relaxation	2.6
14.	Fluoride (as F)	mg/l	APHA 4500 D 2023	1.0	1.5	0.48
15.	Copper	mg/l	APHA 3111 B 2023	0.5	1.5	BDL (MDL = 0.2)
16.	Chromium	mg/l	APHA 3111 B 2023	0.05	No Relaxation	BDL (MDL = 0.2)
17.	Lead (Pb)	mg/l	APHA 3111 B 2023	0.01	No Relaxation	BDL (MDL = 0.2)
18.	Manganese (Mn)	mg/l	APHA 3111 B 2023	0.01	0.03	BDL (MDL = 0.2)
19.	Iron (Fe)	mg/l	APHA 3111 B 2023	1.0	No Relaxation	BDL (MDL = 0.05)
20.	Total Coliform	MPN/100ml,	IS 1622: 1981	Shall not be detectable in any 100 ml sample		BDL (MDL 1.8)
21.	E Coli	MPN/100ml,	IS 1622: 1981			BDL (MDL 1.8)

---END Report---

Env.Condition of Lab.	Laboratory is maintaining Temperature 17± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196 (Part2).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500: 2012
Remark	Sample Complie with prescribed specification.

Tested By: Yashomati Kumari,Sanjay Kumar & Maher Fatmi
Sample Drawn By: Siddharth kumar & 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.	Technical 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 - 8407804250, 8407804251, Email - iem2012@rediffmail.com

Annexure-XIII

BOKARO CEMENT MANUFACTURING WORKS

(Unit OF DALMIA CEMENT (BHARAT) LIMITED)

STP Outlet water quality analysis report from October 2024 to March 2025

Sr. No	Parameter	PH	Suspended solids mg/lit	COD mg/lit	BOD mg/lit	Oil & Grease mg/lit.
	Norms	**5.5-9.0**	**100**	**250**	**30**	**10**
1	October-2024.	7.1	16	44	13.4	BDL
2	November-2024.	7.8	14	40	14.1	BDL
3	December-2024.	7.7	19	56	15.6	BDL
4	January-2025.	7.6	18	52	13.2	BDL
5	February-2025.	7.7	15	60	12.9	BDL
6	March-2025.	7.4	16	64	19.5	BDL
	Min.	**7.1**	**14**	**40**	**12.9**	**0**
	Max.	**7.8**	**19**	**64**	**19.5**	**0**
	Avg.	**7.5**	**16**	**53**	**15.1**	**0.0**

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Pollution & Environment	Sub-Group: Waste Water
Report Issue Date: 10-03-2025		Test Report No.: IIM-241105005WW01
Sample ID: 250007PE04001		Sample Description: Waste Water (STP)
Challan No./P.O. No.: 4548043346/237		Challan No./ P.No. Date: 05-11-2024
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IVA-7(P)4, 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:07-03-2025
Protocol: CPCB Guideline & IS Method 3025 Series		
Sampling Location: STP PLANT (INLET)		
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025

—Test Result—

Sl. No.	Tested Parameters	Unit	Method No.	Norms**	Results
5.	Oil & Grease	mg/l	IS 3025 (Part-39)	--	BDL(MDL 4.0)

—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
Norms** is Specified	--
Remark	--

Tested By: Yashomati Kumari

Sample Drawn By: Siddharth kumar & team

Specific Contractual Notes -	Reviewed by	Authorized Signatory
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In the issue of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.	Technical Manager	Director

Corporate office - A-8, Multi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001
Laboratory Site - H.No. - A-15, Safal Vihar, Near Sahrai Bhawan, Harmu Housing Colony,
Ranchi-834002, Jharkhand, India
Ph : 8407804255, 8407804254, Email - iem2012@rediffmail.com

STP Outlet water quality analysis report

Institute for Environmental Management

Test Report

ULR No.:	T C 1 5 2 9 2 2 5 0 0 0 0 0 0 5 4 0
Discipline: Chemical	Group: Pollution & Environment / Sub-Group: Waste Water
Report Issue Date: 10-03-2025	Test Report No.: RN-24100500/WW03
Sample ID: 25030/PE04002	Sample Description: Waste Water (STP)
Challan No./P.O. No.: 4546043346/237	Challan No./P.No. Date: 05-11-2024
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited, Plot No IV/A-7(PI)A, 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:07-03-2025
Protocol: CPCB Guideline & IS Method 3025 Series	
Sampling Location: STP PLANT (OUTLET)	
Sample Receiving date: 07-03-2025 / Testing Started: 07-03-2025	Testing Ended: 10-03-2025

—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	7.4
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	16
3.	Biochemical Oxygen Demand (BOD)	mg/l	IS 3025 (Part-44)	30	19.5
4.	Chemical Oxygen Demand (COD)	mg/l	IS 3025 (Part-58)	250	64

—End of Report—

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

Tested By: Yashomati Kumari

Sample Drawn By: Siddharth Kumar & team

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6. In case of typing or computerised errors, please send an email or call immediately.

On the basis of Quality Checker and Technical Manager verified by the Authorised signatory, the report is issued by the Director in the Organization.

Reviewed by	Authorized Signatory
(Tauqeer Ahmad) Technical Manager	(Dr. S. C. Jain) Director

Corporate office : B-8, Modi Heights, Opp. All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001
Laboratory Site : H No. – A 13, Saket Vihar, Near Sahar Bhawan, Kanke Housing Colony,
Ranchi-834002, Jharkhand, India
Ph.- 8437804253, 8437804253, Email - iem2013@rediffmail.com

Institute for Environmental Management

Test Report

Discipline: Chemical	Group: Pollution & Environment	Sub-Group: Waste Water
Report Issue Date: 10-03-2025		Test Report No.: RN-241105085WW02
Sample ID: 250307PE04002		Sample Description: Waste Water (STP)
Challan No./P.O. No.: 4540043045/237		Challan No./ P.No. Date: 05-11-2024
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IVA-7(P)4, 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:07-03-2025
Protocol: CPCB Guideline & IS Method 3025 Series		
Sampling Location: STP PLANT (OUTLET)		
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025

—Test Result—

Sl. No.	Tested Parameters	Unit	Method No.	Norms**	Results
1.	Oil & Grease	mg/l	IS 3025 (Part-39)	10	BDL(MDL 4.0)

—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(R)
Abbreviation	BDL: Minimum Detection Limit, MDL: Below Detection Limit
Norms** is Specified	As per the Environmental (Protection) Rule – 1986
Remark	Sample Comply with prescribed specification

Tested By: Yashwnati Kumari

Sample Drawn By: Sudhanshu Kumar & team

Specific Contractual Notes	Reviewed by	Authorized Signatory
1. The laboratory assume responsibility for correct of this report. 2. This report shall not be reproduced except in full, without written approval of the IEM. 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 write on email id.	(Tanveer Ahmad) Technical Manager	Director
On the basis of Quality Checked and Technical note verified by the Authorized signatory, the report is issued by the Director of the Organization.		

Corporate office : A.K. Modi Heights, Opp. All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001
Laboratory Site : H.No. - A-13, Saket Vihar, Near Sahrai Bhawan, Harmu Housing Colony
Ranchi-834002, Jharkhand, India
Ph : 8409004203, 8407004203, Email - iem2012@rediffmail.com

Annexure-XVIII

BOKARO CEMENT MANUFACTURING WORKS

(Unit OF DALMIA CEMENT (BHARAT) LIMITED)

RWH Technical approval obtained from State Ground Water Board

Office of the Director, Ground Water Directorate,
Water Resources Department, Govt. of Jharkhand,
"Abhiyantran Bhawan", Kutchery Chowk, Ranchi 834001

Phone/Fax0651-2217141
E Mail-dirgwatran-wrd-jhr@nic.in

Letter No.: GWD / 260 / 2023 /..180../ Ranchi, dated- 18-05-2023

From,

Director,
Ground Water Directorate,
Water Resources Department,
Govt. of Jharkhand, Ranchi.

To,

Authorized Signatory,
Bokaro Cement Manufacturing Works,
Unit of Dalmia Cement, Bharat Limited,
Plot No. IV(A-7)(P)4,
Industrial Area (BIADA), Bokaro,
Dist. Bokaro-827014, Jharkhand.

Subr- **Technical Approval of "Rain Water Harvesting" Design and Plan for Ground Water Recharging for the project of Bokaro Cement Manufacturing Works, Unit of Dalmia Cement, Bharat Limited.**

Ref:- Your letter No.-NIL, dated-28.03.2023, letter No.-NIL, dated-20.04.2023 and letter No.- NIL, dated-16.05.2023

Sir,

With reference to above cited subject your Design & Plan of "Rain Water Harvesting" along with Hydrological report of the area submitted by you to this office envisages to Harvest 38661M^3 of Rainfall run-off per annum resulting in Ground Water Recharge of the order of 23197M^3 per annum.

The plan comprises of two nos. storage tanks of total capacity 1300M^3 ie (500M^3 and 800M^3) respectively, 5 (five) nos recharge pit of size dia, depth 2M and 3M respectively. As per our perception in addition to storage tank it is advised to construct 1 (One) no. recharge pit of size 15'x15'x12' with 1 (one) no. boring of 8" dia up to 60m depth to be connected with a desilting chamber of size 1.5mx1.5mx1.5m to facilitate Rain Water Harvesting in a better way.

The plan submitted by you for Rain Water Harvesting is Technically Approved subject to the following conditions:-

1. The Rainfall run-off in the premises should get **primary treatment** to make the run-off free from suspended impurities and passing through settling chamber. Necessary chemical treatment should also be undertaken, if required.

2. Sewerage treatment plant (STP) must be established with separate drainage system so that recycled water may be used for cleaning and plantation purposes.

P.T.O.-2

3. Your entire "Rain Water Harvesting" project for Ground Water Recharging must be completed within 90 days of the approval of the plan.

4. The proposed Rain Water Harvesting Recharge Pits must be filled with filter materials of standard specifications and top coarse sand filter must be changed in every alternate year before onset of monsoon.

5. The quality of Ground Water in and around the plant area must be monitored periodically (every 6 months) and the data be necessarily made available to this office and to Jharkhand State Pollution Control Board, Dhurwa, Ranchi.

6. The completion Report of the entire project must be communicated within the stipulated period of 90 days to this office as well as to Jharkhand State Pollution Control Board, immediately after completion of the project.

7. The Guidelines of C.G.W.A. will prevail time to time.

8. "This premises has elaborate Rain Water Harvesting Facility", must also be displayed prominently at the entrance and other places of your plant, in order to sensitize more people about Rain Water Harvesting.

Enclosures :- (1) Technically Approved Rain Water Harvesting Plan.

Yours Sincerely,

Director
Ground Water Directorate,
Jharkhand, Ranchi.

BOKARO CEMENT MANUFACTURING WORKS
(Unit OF DALMIA CEMENT (BHARAT) LIMITED)

RAIN WATER HARVESTING SYSTEM

Designing Details

Roof top Rain Water Harvesting System implemented in Bokaro Cement Manufacturing Works (Unit of DCBL). Rain Water Harvesting System implemented near Raw Material Handling Stacker reclaimer, Cement Mill, Project Office, Gate Complex and Packing Plant Building in our plant. Rain water collected from roof top through gutter and carrying by pipe lines in recharge tranches. 1 (One) Recharge pit constructed of Size 15'x 15 x 12'with one no boring of 8" dia up to 60 m depth constructed near packing plant. 5 Nos Recharge pit constructed of size dia depth 2 M and 3 M with recharge trenches in plant area . In plant area depth of ground water level is varying between 3 to 5 meter and no hard rock strata are available above ground water level. 2 Nos of water collection tank also constructed for collection of rain water and same rain water will be used in green belt development and dust suppression. Rain water easily percolated and recharges in ground water level. Rain water harvesting system structure constructed as per Technical approval from Ground Water Directorate, Water Resource Department Govt of Jharkhand vide letter no GWD/260/2023/180/Ranchi Dated 18.05.2023. All Rain Water Harvesting Structure Photographs attached for your information:

Display board at the factory main gate "**This Premises has Elaborate Rain Water Harvesting Facility**"

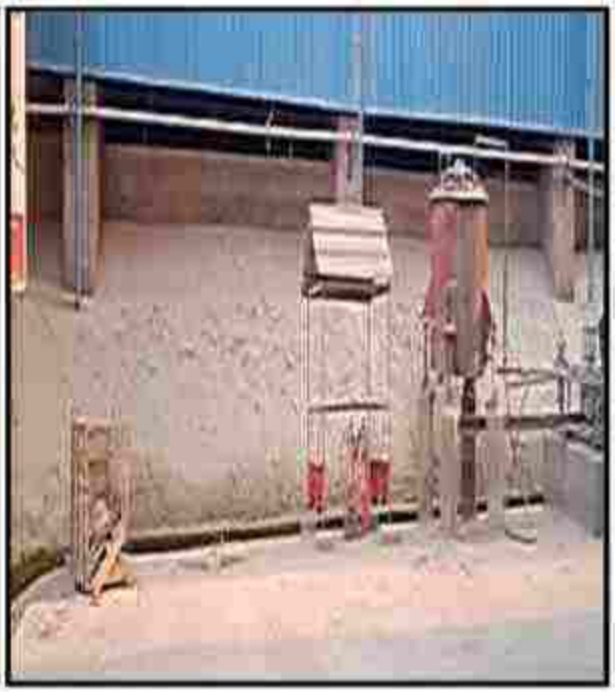
(1) Rain water harvesting recharge pit near Packing plant

Rooftop Rain water collection pipe line, concreated drain connected to recharge pit near Packing plant building

(2) Rain water harvesting recharge pit near Electrical load center

Rooftop Rain water collection pipe line, concreated drain connected to recharge pit near Electrical load center

(3) Rain Water Recharge Pit with connecting drain near stacker reclaimer



(4) Rain water recharge pit with connecting drain near mill area

(5) Rain water harvesting pit with Connecting drainage near stacker reclaimer

(6) Rain water recharge pit near packing plant covered with chamber and its connecting drainage

Rain Water collection Pond constructed Capacity: 925 KL

Rain water / Water collection tank constructed of capacity :400 KL

Annexure-XV

BOKARO CEMENT MANUFACTURING WORKS
(Unit OF DALMIA CEMENT (BHARAT) LIMITED)

Water Flow meter installed at the main gate of the factory

Annexure-XVI

BOKARO CEMENT MANUFACTURING WORKS (UNIT OF DCBL)

Noise Level report from October 2024 to March 2025

Near Project office (BCMW)							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
October-2024.	54.6	57.4	56.0		42.7	46.9	44.8
November-2024.	49.1	52.9	51.0		47.1	49.3	48.2
December-2024.	53.3	55.3	54.3		46.4	48.4	47.4
January-2025.	46.4	56.9	51.7		47.3	51.2	49.3
February-2025.	47.6	53.3	50.5		45.2	46.3	45.8
March-2025.	48.7	54.8	51.8		44.9	49.8	47.4
Min.	**46.4**	**52.9**	**50.5**		**42.7**	**46.3**	**44.8**
Max.	**54.6**	**57.4**	**56.0**		**47.3**	**51.2**	**49.3**
Avg.	**50.0**	**55.1**	**52.5**		**45.6**	**48.7**	**47.1**

Thakur Tand Village (Near Aganwadi)							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
October-2024.	44.7	45.6	45.2		41.7	40.7	41.2
November-2024.	43.5	47.9	45.7		38.3	39.4	38.9
December-2024.	47.3	49.7	48.5		40.2	42.6	41.4
January-2025.	46.8	47.3	47.1		43.3	46.7	45.0
February-2025.	47.3	48.8	48.1		42.6	43.5	43.1
March-2025.	45.4	48.4	46.9		44.3	45.7	45.0
Min.	**43.5**	**45.6**	**45.2**		**38.3**	**39.4**	**38.9**
Max.	**47.3**	**49.7**	**48.5**		**44.3**	**46.7**	**45.0**
Avg.	**45.8**	**48.0**	**46.9**		**41.7**	**43.1**	**42.4**

BOKARO CEMENT MANUFACTURING WORKS (UNIT OF DCBL)

Noise Level report from October 2024 to March 2025

Near Gorabali village (Near Temple)							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
October-2024.	42.6	43.8	43.2		37.9	42.7	40.3
November-2024.	40.2	44.3	42.3		38.1	41.4	39.8
December-2024.	42.7	43.4	43.1		37.7	42.7	40.2
January-2025.	42.1	45.8	44.0		40.1	43.9	42.0
February-2025.	40.3	43.3	41.8		39.5	41.7	40.6
March-2025.	41.8	44.2	43.0		38.3	43.8	41.1
Min.	40.2	43.3	41.8		37.7	41.4	39.8
Max.	42.7	45.8	44.0		40.1	43.9	42.0
Avg.	41.6	44.1	42.9		38.6	42.7	40.7

Near Khuturi Village (Near School)							
	Day Time dB(A)				Night Time dB(A)		
	Min.	Max.	Avg.		Min.	Max.	Avg.
October-2024.	37.5	39.4	38.5		37.3	38.7	38.0
November-2024.	39.3	41.9	40.6		35.4	40.1	37.8
December-2024.	36.9	37.2	37.1		38.5	39.7	39.1
January-2025.	41.2	42.8	42.0		39.2	42.2	40.7
February-2025.	40.8	41.4	41.1		34.8	34.7	34.8
March-2025.	37.1	38.9	38.0		36.7	37.8	37.3
Min.	**36.9**	**37.2**	**37.1**		**34.8**	**34.7**	**34.8**
Max.	**41.2**	**42.8**	**42.0**		**39.2**	**42.2**	**40.7**
Avg.	**38.8**	**40.3**	**39.5**		**37.0**	**38.9**	**37.9**

BOKARO CEMENT MANUFACTURING WORKS (UNIT OF DCBL)

Noise Level report month of March 2025

Institute for Environmental Management

Test Report

SULR No.: T C 1 5 2 9 2 2 5 0 0 0 0 0 0 5 1 4		
Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Noise Levels (Excluding Vibration)
Report Issue Date: 10-03-2025		Test Report No.: RN-241105005N1
Sample ID: 250307AP08001		Sample Description: Ambient Noise
Challan No./P.O. No.: 4548043346/237		Challan No./ P.No. Date: 05-11-2024

Issued to:
Bokaro Cement Manufacturing Works
Plot No IV/A-7(P)4, 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:06-03-2025 to 07-03-2025
Protocol: CPCB Guideline & IS Method 9989:1981	
Sampling Location: Gorabali Near Temple	
Field Meteorological Information: A. Temp. (°C):22 / R.H. (%):47 / W.C.: Sunny / W.D.: NW to SE	
Sample Receiving date:07-03-2025	Testing Started:07-03-2025 / Testing Ended:10-03-2025

—Test Result—

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	46.8	40.7	D-55 N-45

—End of Reports—

Note: -
1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
5. A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
6. Leq: It is an energy mean of the noise level, over a specified period.

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

Tested By:Akanksha Sourabh

Sample Drawn By:Siddharth kumar & Team

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

Reviewed by	Authorized Signatory
(Taugeer Ahmad)	(Dr. B. C. Jain)
Technical Manager	Director

Corporate Office :- B-8, Mahadev Heights, Opp. Allindia Radio Station, Ring Road, Ranchi, Jharkhand-834001

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

Institute for Environmental Management

Test Report

SIUR No.: T C 1 5 2 9 2 2 5 0 0 0 0 0 0 5 1 5			
Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Noise Levels (Excluding Vibration)	
Report Issue Date: 10-03-2025		Test Report No.: RN-241305005N2	
Sample ID: 250307AP08002		Sample Description: Ambient Noise	
Challan No./P.O. No.: 4548043346/037		Challan No./ P.No. Date: 09-11-2024	
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IVIA-7(Pt), 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:06-03-2025 to 07-03-2025	
Protocol: CPCB Guideline & IS Method 9989:1981			
Sampling Location: Thakurtand Village			
Field Meteorological Information: A. Temp. 22±2	R.H. 47	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date:07-03-2025	Testing Started:07-03-2025	Testing Ended:10-03-2025	

---Test Result---

Sl. No.	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	50.6	41.6	D-55 N-45

---End of Report---

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 is an energy mean of the noise that 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 (Part-I).
Abbreviation	NDL: Maximum Permissible Limit
Limit as Specified	As per Noise Pollution (Regulation and Control) Rules, 2000.
Remark	Sample Complies with prescribed specification.

Tested By Akanksha Srivastav

Sample Drawn By Sukhanth kumar & Team

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

Reviewed by: Technical Manager (Tauseer Ahmad)

Authorized Signatory: Director (Dr. B. C. Jain)

Corporate Office : Hindustan Manghrau, Opp. Jindal Hotel Radio Station, Kanke Road, Ranchi, Jharkhand-834008
Laboratory Site : H.No. – A-10, Sukat Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India
Ph.: 8407804253, 8407804251, Email : iem2013@rediffmail.com

Institute for Environmental Management

Test Report

SULR No.:	T C 1 5 2 9 2 2 5 0 0 0 0 0 0 5 1 5		
Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Noise Levels (Excluding Vibration)	
Report Issue Date: 10-03-2025		Test Report No.: RN-241105005N3	
Sample ID: 250307AP08003		Sample Description: Ambient Noise	
Challan No./P.O. No.: 4548043346/237		Challan No./ P.No. Date: 05-11-2024	
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IVIA-7(P)4, 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: 06-03-2025 to 07-03-2025	
Protocol: CPCB Guideline & IS Method 9989:1981			
Sampling Location: Khutri village			
Field Meteorological Information	A. Temp. (°C): 22	R.H. (%): 47	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date: 07-03-2025	Testing Started: 07-03-2025	Testing Ended: 10-03-2025	

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	48.2	42.6	D-55 N-45

---End of Report---

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 45±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Siddharth kumar & 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.	(Tanjeer Ahmad) Technical Manager	(Dr. S. C. Jain) Director

Corporate Office: 4th & 5th floor, Hexagon Tower, Opp. All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001
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Ranchi-834002, Jharkhand, India
Ph- 8407804253, 8407804251, Email - iem2012@rediffmail.com

Institute for Environmental Management

Test Report

SULR No.:	T C 1 5 2 9 2 2 5 0 0 0 0 0 0 5 1 7		
Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Noise Levels (Excluding Vibration)	
Report Issue Date: 10-03-2025		Test Report No.: RN-241105005N4	
Sample ID: 250307AP00004		Sample Description: Ambient Noise	
Challan No./P.O. No.: 4548043546/237		Challan No./ P.No. Date: 05-11-2024	
Issued to: Bokaro Cement Manufacturing Works, Unit of Dalmia Cement (Bharat) Limited Plot No IV/A-7(P)4, Bokaro Industrial Area Balidih Bokaro Steel City, Bokaro-827014 Jharkhand India			
Type of Industry: Cement		Customer Representative: Sanjeev Varma	
Sample Drawn by: IEM Team		Sampling Date:06-03-2025 to 07-03-2025	
Protocol: CPCB Guideline & IS Method 9989:1981			
Sampling Location: Near Project Office			
Field Meteorological Information	A. Temp. (°C):22	R.H. (%):47	W.C.: Sunny	W.D.: NW to SE
Sample Receiving date:07-03-2025	Testing Started:07-03-2025	Testing Ended:10-03-2025	

—Test Result—

Sl. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	52.1	47.4	D-75 N-70

—End of Report—

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.
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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(R).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Soutabh

Sample Drawn By: Siddharth kumar & 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.

Reviewed by	Authorized Signatory
(Tauqeer Ahmad)	(Dr. B. C. Jain)
Technical Manager	Director

Corporate Office - A-8, Mahdi Heights, Near Hill India Radha Station, Ratu Road, Ranchi, Jharkhand - 834001
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Ranchi-834002, Jharkhand, India
Ph - 8407804253, 8407804251, Email - iem2012@rediffmail.com

Annexure-XVII

Bokaro Cement Manufacturing Works (Unit of DCBL)

Solar light installed at different location of the plant

NEAR TOILT

NEAR S. T. P.

NEAR AAQMS

NEAR PROJECT OFFICE

Annexure-XVIII

Bokaro Cement Manufacturing works

Unit of Dalmia Cement (Bharat) Limited

Green belt plan

BOKARO CEMENT MANUFACTURING WORKS
(UNIT OF DCBL)

GREEN BELT DEVELOPMENT REPORT

Greenbelt/plantation will be done over 33% of the total project area i.e., about 5.2 acres (2.105 ha). The green belt will inter alia cover the entire periphery of the plant. Native fruits bearing species with large canopy will be selected for plantation.

Green Belt development report

Sl. N	Years	Area (Acres)	No. of Trees
01.	1st Year (2022-23)	0.5	550
02.	2nd Year (2023-24)	1.8	1665
03.	3rd Year (2024-25)	2.5	2380
TOTAL		4.8	4495

S.N	Year	Name of Species tree planted
1	1st Year (2022-23)	Gulmohar, Amaltash, Neem,Mihigini, shisham,Ashoka, Teak, Mango, Amala, Shiv Babool, Chatni, Jamun, Jarul
2	2nd Year (2023-24)	Gulmohar,Amaltash,Neem,Mihigini,shisham,Ashoka,Teak,Mango, Amala
3	3rd Year (2024-25)	Chatni,Gulmohar,Neem,Mihigini,Guava,Mango,Amala,Neem,Jamun Nerium

Green Belt development report

Tree plantation done at plant boundary location

Annexure-XIX

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	2022-23	2023-24
Scope-1 Emissions from Coal & Diesel consumption for the process of Cement Manufacturing.	Kg CO2 /Tone of Cementitious material	48	47

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	2022-23	2023-24
Scope-2 Emissions from Electricity consumption	Kg CO2 /Tone of Cementitious material	42	41

Summary report of GHG emission last five years in below table

Categories	UoM	2022-23	2023-24
Scope-1 Emissions from Coal & Diesel consumption for the process of Cement Manufacturing.	Kg CO_2 /Tone of Cementitious material	48	47
Scope-2 Emissions from Electricity consumption	Kg CO_2 /Tone of Cementitious material	42	41

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. Clinker silo constructed for the storage of clinker to reduces road transportation
3. We have continually increase rail transportation for inwards and outwards materials, reduce road transportation.

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

We are regular working for reduction of power consumption in plant, energy efficient enhanced by working on the areas such as energy benchmarking study to identify the gaps in specific energy consumption such as process fan and other high energy consuming equipment's. To overcome the gaps, best practice could be followed to reduce the energy consumption. These measures for improving energy efficiency would proportionally result in reduce GHG emission due to increased energy efficiency and decreased energy consumption.
Implementation of ISO 50001:2018

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

(C) Increasing power sourcing from renewal energy

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

(d) We have installed solar light & LED light in plant and colony area for the reduction of power consumption.

(e)Tree plantation regularly done in plant & village area and maintaining the green belt This will also help to reduce GHG emission.

2 Regular Assessment of GHG Emissions and Strengthening of Inventory

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

GHG Reduction Targets:

(a). To driveinnovation – resources are involved from various departments to reduce the emission. Thiswill 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 GHGReduction potential opportunities identified, priorities and implement them to achieve GHG emission reduction target as well as associated cost benefit.

Annexure: XX

BOKARO CEMENT MANUFACTURING WORKS
DALMIA CEMENT (BHARAT) LIMITED

Corporate Environment Responsibility & CSR report for the period of October 2024 to March 2025

Sl. No	Name of Activity	Place of Activity/ Village	Expense (in Rs.)
1	Tailoring Training	Bishunpur, Goraball south	45000.00
2	Soft toys making training	Goraball North	40000.00
3	Distribution of Goats	Goraball (N), Goraball (S), Kanari, Khuntri Panchayat	291816.00
4	Distribution of Poultry Chicks	Kanari	51000.00
5	General Medicine and Gynecology Camp	Goraball North	15000.00
6	Gram Parivartan Projects	Goraball (N), Goraball (S), Kanari, Khuntri Panchayat	200000.00
7	Distribution of Goats	Goraball (N), Goraball (S), Kanari, Khuntri Panchayat	450000.00
8	Support to District Administration	Goraball North	7600.00
9	Plantation	Goraball	36000.00
10	Aangawadi and Community Centre Renovation, Purnatand	Khuntri	312156.00
11	Republic Day	Bokaro DikshA	25000.00
12	Blanket Distribution	Goraball (N), Goraball (S), Kanari, Khuntri and Narkara Panchayat	348991.00
13	Skill trainning to local youths at Bokaro DiskhA	Bokaro	1000000.00
14	Digital Literacy through WoW Bus	Jaridih, Bhutkuru	857000.00
15	International Women's day celebration	DCBL	35000.00
15	Well Renovation	Goraball North	247121.00
	Total		3961686.00

Renovation of Aganwadi

Tree plant distributed in village for plantation

Distribution of Goats in nearby village

Promotion of micro enterprise

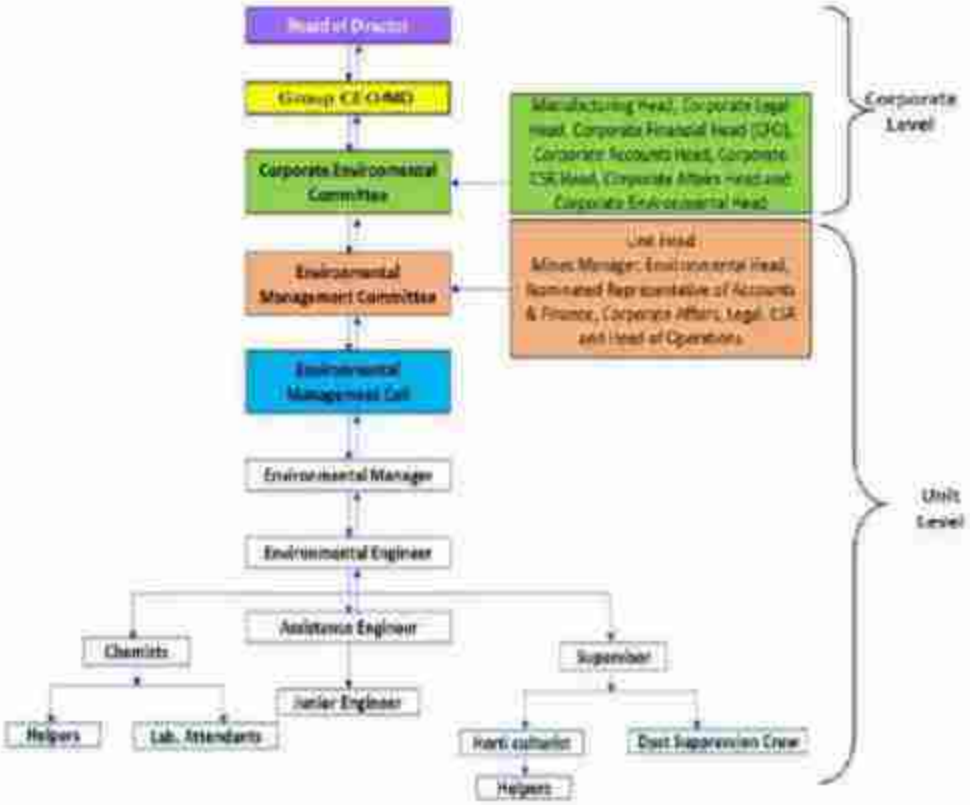
Skill training to local youths at Bokaro Diksha

Skill training to local youths at Bokaro Diksha

Annexure: XXI

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: XXII

BOKARO CEMENT MANUFACTURING WORKS

DALMIA CEMENT (BHARAT) LIMITE

Investment on Environment management up to March 2025

Sn	Item	Cost (Rs. in Crores)
1	**Cost of Air Pollution Control Systems**	
A	APCEs like Bag house with stack & auxiliary Bag filters cost	25.0
B	Cost of CAAQMS & Opacity Meter and Digital Display Board	1.0
C	Road Sweeping Machine	0.30
D	Water Tanker spraying	0.01
E	Concreting of internal road and drainage	8.0
	Sub Total	**34.31**
2	**Cost of Water conservation & Pollution Control**	
A	STP of 15 KLD	0.25
B	Rain water harvesting system with drainage pipes, Flow meter for raw water, Sprinklers & drip irrigation systems for greenbelt/plantation etc.	0.35
	Sub Total	**0.6**
3	**Cost of Solid Waste Management System-Storage with concrete flooring for Solid & Hazardous waste**	0.5
4	**Green belt development**	0.05
5	**Noise Reduction Systems-enclosures for machineries with suitable absorption material, vibration isolators for all fans, compressors etc.**	0.05
	Grand Total	**35.51**

Bokaro Cement Manufacturing Works (Unit of DCBL)

Recurring cost investment on Environment protection

October 2024 to March 2025

	Cost on Schedule maintenance	Cost in Lakhs
1	Bags replacement with new bags, Bags cleaning, De dusting line checking, cleaning and repairing work. Bag filters fan maintenance etc)	3.2
2	Power consumption in Pollution control equipment (Bag House & Bag Filter) 7102401 KWH X 5.74	407
2	Third Party Environmental Monitoring & Analysis	0.45
3	AMC of CEMS Data transmission to JSPCB& CPCB	0.15
4	AMC of CAAQMS and data transmission to Maintenance, Servicing and Calibration,	0.75
6	Calibration of Pollution Monitoring Equipment's (CEMS)	1.5
7	Calibration of Pollution monitoring instrument (RDS &Stack VSSI,Noise level meter)	0.15
9	Water Pollution Management (AMC of STP, R.O Plant, D.M Plant, & Softener Plant), Cleaning of Nala.	0.25
10	STP Operation & Maintenance	1.23
11	Road Sweeping Machine Operation & Maintenance	1.15
12	Disposal of Bio medical waste	0.03
13	Fuel consumption in water sprinkling tanker of water on dusty area	0.1
14	Green Belt Development	6.5
TOTAL RECURRING COST EXPENDITURE FROM OCTOBER 2024 TO MARCH 2025 (Rs) in Lakhs		**422.4**

Annexure: XXIII

Environment Internal audit report

October 2024-March-2025

Date: 22.03.2025

Following below members present in Environment Audit:
1. Arvind Kumar: (Head Mechanical)
2. LR Patel: (Head E&I)
3. Mahesh Sharma: (Head Civil)

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

7	On Line monitoring data display at factory main gate.	**Complied.** Online Environment monitoring data displayed at main gate	Complied.
8	Checked Third party Environment monitoring report.	Complied, third party Environment monitoring report done on quarterly basis.	Complied.
9	Checked Drinking water quality	Complied, Drinking water quality regular checked.	Complied.
10	Checked status validity of CTO & EC	Complied, within time limit	Complied.
11	Checked fugitive dust emission records	Fugitive dust emission measures taken.	Complied
12	Status of Green belt development	Complied Green belt maintained 33% of the plant	Complied
13	Rain water harvesting system	Rain water harvesting system constructed and maintained	Complied
14	Status of Bag filter Bag house	All plant Bag filter and bag house is working condition.	Complied
15	Submission of Environment statement to JSPCB	Environment Statement submitted with in time for the year 2023-2024	Complied
16	Statue of water spray tanker for control of fugitive dust emission	Water spray tanker regular water spray on the roads and dust prone area for the control of fugitive dust emission and record maintained	Complied
17	Status of road swapping machine	Regular cleaning of the roads and concreated area by road swapping machine and record maintained	Complied
18	Status of Solar light	Solar light installed at different location in the plant	Complied

Annexure: XXIV

Public notice published in "Pioneer" Newspaper & "Aaj" newspaper dated :02.03.2023

Public notice published in "Pioneer" Newspaper & "Aaj" newspaper dated :02.03.2023

the pioneer

sports 12

DALMIA CEMENT (BHARAT) LIMITED

PUBLIC NOTICE

आज

बिहार

Annexure-XXV

Receipts of copy of Environment Clearance submitted to the Regional Office of MoEFCC, MS-SEIAA, MS- JSPCB, local Panchayat and other Govt. bodies, district head quarter:

Dalmia cement

FUTURE TODAY

cement| sugar| refractories| power|

Date:02.03.2023

Regional Officer,
Jharkhand State Pollution Control Board
H.I.G.-1, Sardar Patel Nagar, Hirapur
Dhanbad - 826001

Sub : Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/A-7(p)4, Village- Gorabatt, Notified Bokaro Industrial Area Under BADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref. 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC identification No.: EC23B001JH199098, File No: EC/SEIAA/2022-23/2646/2023, letter no EC/SEIAA/2022-23/ 2646/2022/306, dated 30.01.2023 & EC issuance date 06.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/BMC/CTE-1559984/2023/128 dated 23.02.2023

Dear Sir,

With reference to above mentioned subject and reference, we would like to submit that Environmental Clearance has been granted for expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA as cited above, by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand as mentioned above under Ref. No 1. Consent to Establish for the proposed expansion has also been granted by Jharkhand State Pollution Control Board as mentioned above under Ref. No 2.

In compliance of condition no 1 of XI. MISCELLANEOUS stipulated in granted EC, we have advertised a public notice informing about the grant of EC to proposed expansion in two newspapers named "The Pioneer and Aaj on 02.03.2023" in English as well as in vernacular language i.e. hindi.

In compliance of condition no 2. of XI. MISCELLANEOUS stipulated in granted EC, A Copy of Environmental Clearance, Consent to Establish and copy of both Newspapers are being submitted herewith for your information and record.

Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorised Signatory
Encl: As above

Dalmia cement

FUTURE TODAY

cement! sugar! refractories! power!

Date:02.03.2023

To

The Director,
Ministry of Environment, Forest and Climate Change,
2nd floor Head quarter -Jharkhand State Housing Board
Harmu Chowk, Ranchi -Jharkhand
Pin- 834002

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorebali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC Identification No.: EC25B000JH199058, File No: EC/SEIAA/2022-23/2646/2023, letter no EC/SEIAA/2022-23/ 2646/2022/166, dated 30.01.2023 & EC issuance date 08.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/RNC/CTE-15395834/2023/128 dated 23.02.2023

Dear Sir,

With reference to above mentioned subject and reference, we would like to submit that Environmental Clearance has been granted for expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA as cited above, by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand as mentioned above under Ref. No 1. Consent to Establish for the proposed expansion has also been granted by Jharkhand State Pollution Control Board as mentioned above under Ref. No 2.

In compliance of condition no 1 of XI. MISCELLANEOUS stipulated in granted EC, we have advertised a public notice informing about the grant of EC to proposed expansion in two newspapers named "The Pioneer and Aaj on 02.03.2023" in English as well as in vernacular language i.e. Hindi.

In compliance of condition no 2. of XI. MISCELLANEOUS stipulated in granted EC, A Copy of Environmental Clearance, Consent to Establish and original copy of both Newspapers are being submitted herewith for your information and record.

Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorised Signatory
Encl: As above

Dalmia cement

FUTURE TODAY

cement! sugar! refractories! power!

Date:02.03.2023

Member Secretary,
Jharkhand State Pollution Control Board,
Township Administration Building (Ground Floor)
HEC Complex, Dhurwa
Ranchi-834004

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabbil, Notified Bokaro Industrial Area Under JIADA, Balath Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC Identification No.: EC23B039JH199098, File No: EC/SEIAA/2022-23/356/2023, letter no EC/SEIAA/2022-23/ 3646/2022/356, dated 30.01.2023 & EC Issuance date 08.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.- JSPCB/HO/IWC/CTE-15395804/2023/128 dated 13.02.2023

Dear Sir,

With reference to above mentioned subject and reference, we would like to submit that Environmental Clearance has been granted for expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA as cited above, by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand as mentioned above under Ref. No 1. Consent to Establish for the proposed expansion has also been granted by Jharkhand State Pollution Control Board as mentioned above under Ref. No 2.

In compliance of condition no 1 of iii. MISCELLANEOUS stipulated in granted EC, we have advertised a public notice informing about the grant of EC to proposed expansion in two newspapers named "The Pioneer and Aaj on 02.03.2023" in English as well as in vernacular language i.e. hindi.

In compliance of condition no 2. of iii. MISCELLANEOUS stipulated in granted EC, A Copy of Environmental Clearance, Consent to Establish and Original copy of both Newspapers are being submitted herewith for your information and record.

Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorised Signatory
Encl: As above

Dalmia cement

FUTURE TODAY

cement! sugar! refractories! power!

Date:02.08.2023

To
The Secretary,
Industry Department
Govt.of Jharkhand
Ranchi (Jharkhand)

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabai, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC Identification No.: EC23B0009H195098; File No: EC/SEIAA/2022-23/16462023; letter no EC/SEIAA/2022-23/ 2646/2022/366, dated 30.01.2023 & EC Issuance date 08.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/140/ANC/CTE-15398804/2023/128 dated 23.02.2023

Dear Sir,

With reference to above mentioned subject and reference, we would like to submit that Environmental Clearance has been granted for expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA as cited above, by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand as mentioned above under Ref. No 1. Consent to Establish for the proposed expansion has also been granted by Jharkhand State Pollution Control Board as mentioned above under Ref. No 2.

In compliance of condition no 1 of XI. MISCELLANEOUS stipulated in granted EC, we have advertised a public notice informing about the grant of EC to proposed expansion in two newspapers named "The Pioneer and Aaj on 02.08.2023" in English as well as in vernacular language i.e. hindi.

In compliance of condition no 2. of XI. MISCELLANEOUS stipulated in granted EC, A Copy of Environmental Clearance, Consent to Establish and Original copy of both Newspapers are being submitted herewith for your information and record.

Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorized Signatory
Encl: As above

Dalmia cement

FUTURE TODAY

cement! sugar! refractories! power!

Date:02.03.2023

To
The Deputy Commissioner,
Bokaro Steel City
Bokaro Jharkhand

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Goralari, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: **1.** Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC Identification No.: EC23B0001H199098; File No: EC/SEIAA/2022-23/2646/2023; letter no EC/SEIAA/2022-23/ 2646/2022/366, dated 30.01.2023 & EC Issuance date 08.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/BHC/CTE-1539980M/2023/128 dated 13.02.2023

Dear Sir,

With reference to above mentioned subject and reference, we would like to submit that Environmental Clearance has been granted for expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA as cited above, by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand as mentioned above under Ref. No 1. Consent to Establish for the proposed expansion has also been granted by Jharkhand State Pollution Control Board as mentioned above under Ref. No 2.

In compliance of condition no 1 of XI. MISCELLANEOUS stipulated in granted EC, we have advertised a public notice informing about the grant of EC to proposed expansion in two newspapers named "The Pioneer and Aaj on 02.03.2023" in English as well as in vernacular language i.e. hindi.

In compliance of condition no 2. of XI. MISCELLANEOUS stipulated in granted EC, A Copy of Environmental Clearance, Consent to Establish and Original copy of both Newspapers are being submitted herewith for your information and record.

Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorized Signatory
Encl: As above

Dalmia cement

FUTURE TODAY

cement? sugar? refractories? power?

Date:02.06.2023

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

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/A-F(p)A, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC identification No.: EC23B0000H093006, File No: EC/SEIAA/2022-23/394/2023, letter no EC/SEIAA/2022-23/ 2646/2021/366, dated 30.01.2023 & EC issuance date 06.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/RMC/CTE-1539804/2023/128 dated 23.02.2023

Dear Sir,

With reference to above mentioned subject and reference, we would like to submit that Environmental Clearance has been granted for expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA as cited above, by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand as mentioned above under Ref. No 1. Consent to Establish for the proposed expansion has also been granted by Jharkhand State Pollution Control Board as mentioned above under Ref. No 2.

In compliance of condition no. 1 of G. MISCELLANEOUS stipulated in granted EC, we have advertised a public notice informing about the grant of EC to proposed expansion in two newspapers named "The Pioneer and Aaj on 02.06.2023" in English as well as in vernacular language i.e. Hindi.

In compliance of condition no 2 of G. MISCELLANEOUS stipulated in granted EC, A Copy of Environmental Clearance, Consent to Establish and Original copy of both Newspapers are being submitted herewith for your information and record.

Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorised Signatory
Encl: As above

Dalmia cement

FUTURE TODAY

cement/ sugar/ refractories/ power/

Date:02.03.2023

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

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(pt), Village- Gorkhali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC Identification No.: EC23B003JH199088, File No: EC/SEIAA/2022-23/2646/2023, letter no EC/SEIAA/2022-23/ 2646/2022/369, dated 30.01.2023 & EC issuance date 08.02.2023

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/RMC/CTE-15399804/2023/128 dated 24.02.2023

Dear Sir,

With reference to above mentioned subject and reference, we would like to submit that Environmental Clearance has been granted for expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA as cited above, by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand as mentioned above under Ref. No 1. Consent to Establish for the proposed expansion has also been granted by Jharkhand State Pollution Control Board as mentioned above under Ref. No 2.

In compliance of condition no 1 of XI. MISCELLANEOUS stipulated in granted EC, we have advertised a public notice informing about the grant of EC to proposed expansion in two newspapers named "The Pioneer and Aaj on 02.03.2023" in English as well as in vernacular language i.e. Hindi.

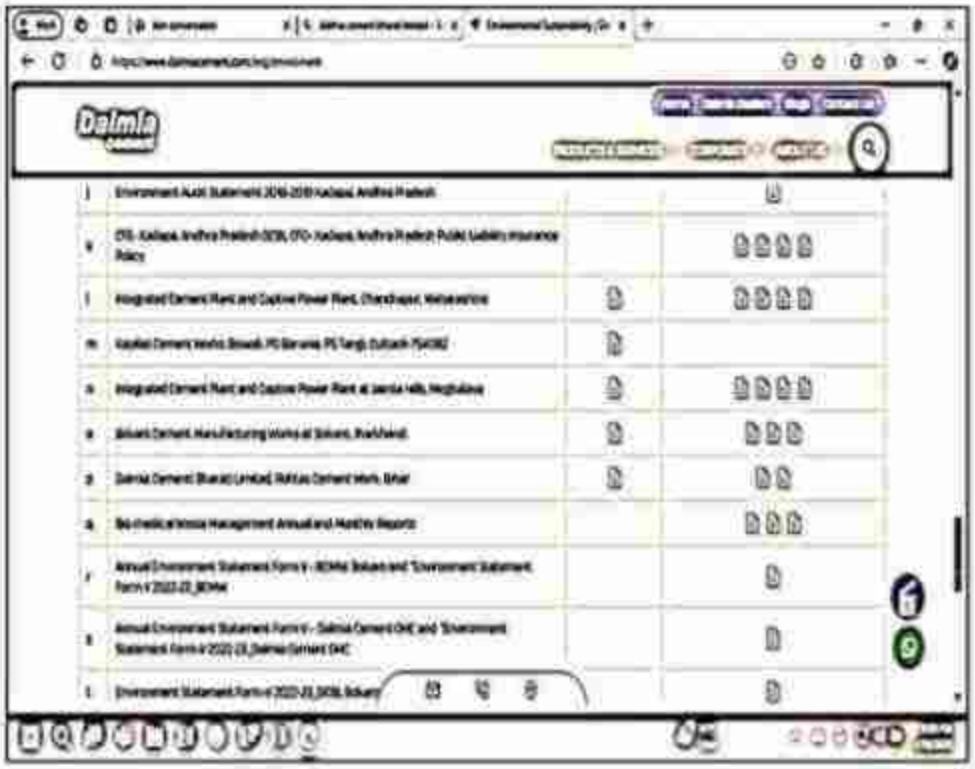
In compliance of condition no 2. of XI. MISCELLANEOUS stipulated in granted EC, A Copy of Environmental Clearance, Consent to Establish and Original copy of both Newspapers are being submitted herewith for your information and record.

Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorised Signatory
Encl: As above

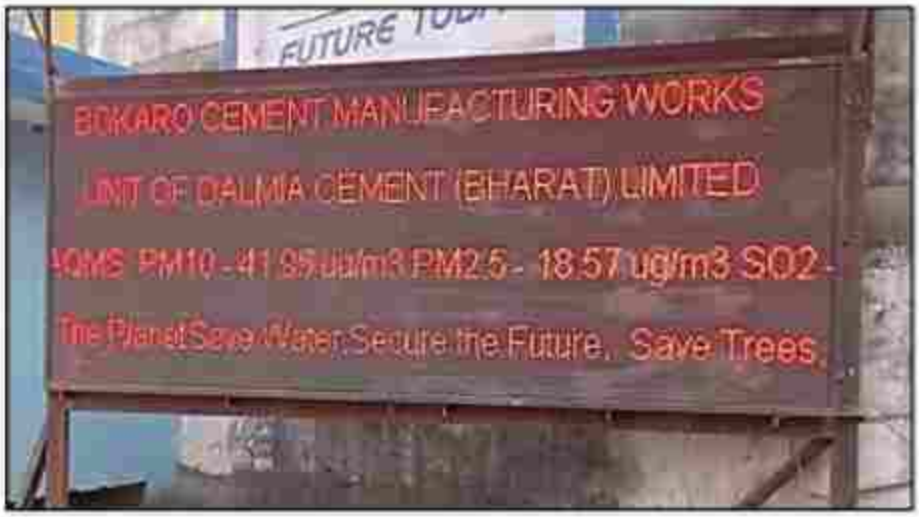
Annexure-XXVI

Half yearly EC Compliance report uploaded in company official website



Annexure-XXVII

CAAQMS Monitoring data displayed at factory main gate



Annexure: XXXI

Public notice published in "Pioneer" Newspaper & "Aaj" newspaper dated :02.03.2023

Public notice published in "Pioneer" Newspaper & "Aaj" newspaper dated :02.03.2023

the pioneer

sports 12

DALMIA CEMENT (BHARAT) LIMITED
BOKARO INDUSTRIAL AREA
BOKARO-JHARKHAND
PUBLIC NOTICE

Copies of Environmental clearance is available with the State Level Environment Impact Assessment Authority office and also at website of the Ministry of Environment, Forest and Climate Change

Authorised Signatory

आज

बिहार

डालमिया सीमेंट (भारत) लिमिटेड
बोकारो औद्योगिक क्षेत्र
बोकारो–झारखण्ड

सार्वजनिक सूचना

Annexure-XXXII

Receipts of copy of Environment Clearance submitted to the Regional Office of MoEFCC, MS-SEIAA, MS- JSPCB, local Panchayat and other Govt. bodies, district head quarter:

Dalmia cement

FUTURE TODAY

cement! sugar! refractories! power!

Date:02.03.2023

Regional Officer,
Jharkhand State Pollution Control Board
H.I.G.-1, Sardar Patel Nagar, Hirapur
Dhanbad - 826001

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC Identification No.: EC23B000JH199098, File No: EC/SEIAA/2022-23/26462023, letter no EC/SEIAA/2022-23/ 2646/2022/366, dated 30.01.2023 & EC issuance date 08.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/RNC/CTE-15399804/2023/128 dated 23.02.2023

Dear Sir,

With reference to above mentioned subject and reference, we would like to submit that Environmental Clearance has been granted for expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA as cited above, by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand as mentioned above under Ref. No 1. Consent to Establish for the proposed expansion has also been granted by Jharkhand State Pollution Control Board as mentioned above under Ref. No 2.

In compliance of condition no 1 of XI. MISCELLANEOUS stipulated in granted EC, we have advertised a public notice informing about the grant of EC to proposed expansion in two newspapers named "The Pioneer and Aaj on 02.03.2023" in English as well as in vernacular language i.e. hindi.

In compliance of condition no 2. of XI. MISCELLANEOUS stipulated in granted EC, A Copy of Environmental Clearance, Consent to Establish and copy of both Newspapers are being submitted herewith for your information and record.

Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorized Signatory
Encl: As above

Dalmia Cement (Bharat) Limited
Unit : Bokaro Cement Manufacturing Works
Plot No. 2(p), 7(P)4, Bokaro Industrial Area, Balidih, Bokaro Steel City, Bokaro-827014, Jharkhand, India
T +91 6542 253 278 / +91 6542 253 047 Toll Free 1800 2020 W www.dalmiacement.com CIN L17117TN1939PLC000260
Registered Office : Dalmiapuram, Dalmia Tiruchirapalli, Tamil Nadu - 621 651, India.
A **Dalmia Bharat Group** Company, www.dalmiabharat.com

Dalmia cement

FUTURE TODAY

ement! sugar! refractories! power!

Date:02.03.2023

To

The Director,
Ministry of Environment, Forest and Climate Change,
2nd floor Head quarter -Jharkhand State Housing Board
Harmu Chowk, Ranchi -Jharkhand
Pin- 834002

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC Identification No.: EC238000JH199098; File No: EC/SEIAA/2022-23/26462023; letter no EC/SEIAA/2022-23/ 2646/2022/366, dated 30.01.2023 & EC issuance date 08.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/RNC/CTE-15399804/2023/128 dated 23.02.2023

Dear Sir,

With reference to above mentioned subject and reference, we would like to submit that Environmental Clearance has been granted for expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA as cited above, by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand as mentioned above under Ref. No 1. Consent to Establish for the proposed expansion has also been granted by Jharkhand State Pollution Control Board as mentioned above under Ref. No 2.

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Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorized Signatory
Encl: As above

Dalmia cement

FUTURE TODAY

cement! sugar! refractories! power!

Date:02.03.2023

Member Secretary,
Jharkhand State Pollution Control Board,
Township Administration Building (Ground Floor)
HEC Complex, Dhurwa
Ranchi-834004

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

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Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorized Signatory
Encl: As above

Dalmia cement

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Date:02.03.2023

To
The Secretary,
Industry Department
Govt.of Jharkhand
Ranchi (Jharkhand)

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Goraboli, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

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2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/RNC/CTE-15399804/2023/128 dated 23.02.2023

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Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorized Signatory
Encl: As above

Dalmia Cement (Bharat) Limited
Unit : Bokaro Cement Manufacturing Works
Plot No. IV/a-7(P)4, Bokaro Industrial Area, Balidih, Bokaro Steel City, Bokaro-827014, Jharkhand, India
T +91 6542 209 278 / +91 6542 209 047 Toll Free 1800 2020 W www.dalmiacements.com CIN: U26101TN1988PLC033928
***Registered Office:** Dalmiapuram, District Tiruchirapalli, Tamil Nadu - 621 651, India.*
*A **Dalmia Bharat Group** Company, www.dalmiabharat.com*

Dalmia cement

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To
The Deputy Commissioner,
Bokaro Steel City
Bokaro Jharkhand

Date:02.03.2023

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC Identification No.: EC23B000JH199098; File No: EC/SEIAA/2022-23/28462023; letter no EC/SEIAA/2022-23/ 2646/2022/366, dated 30.01.2023 & EC issuance date 08.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/RNC/CTE-15399804/2023/128 dated 23.02.2023

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Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Sowley
6/03/23

Authorized Signatory
Encl: As above

Dalmia Cement (Bharat) Limited
Unit : Bokaro Cement Manufacturing Works
Plot No. IV/a-7(P)4, Bokaro Industrial Area, Balidih, Bokaro Steel City, Bokaro-827014, Jharkhand, India
T: +91 8042 203 270 / +91 8042 203 047 Toll Free 1800 2020 W www.dalmiacement.com CIN L26943TN1989PLC035963
***Registered Office** : Dalmiapuram, District Tiruchirapalli, Tamil Nadu - 621 651, India.*
*A **Dalmia Bharat Group** Company, www.dalmiabharat.com*

Dalmia cement

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Date:02.03.2023

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

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC identification No.: EC23B0000H199096; File No: EC/SEIAA/2022-23/2646/2023; letter no EC/SEIAA/2022-23/ 2646/2022/366, dated 30.01.2023 & EC issuance date 08.02.2023.

2. Consent to Establish granted by Jharkhand State Pollution Control Board vide Ref. No.: JSPCB/HO/RNC/CTE-15399804/2023/128 dated 23.02.2023

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Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorized Signatory
Encl: As above

Dalmia cement

FUTURE TODAY

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Date:02.03.2023

To
Member Secretary,
State Level Environment Impact Assessment Authority,
Nursery Complex, Near Dhuriwa Bus Stand, Dhurva
Ranchi-834004

Sub.: Proposed Expansion of Cement Production Capacity of "Bokaro Cement Manufacturing Works", A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Reg. Submission of copy of Environmental Clearance.

Ref.: 1. Environmental Clearance granted by State Level Environment Impact Assessment Authority (SEIAA), Jharkhand vide EC Identification No.: EC23B000JH199098; File No: EC/SEIAA/2022-23/26462023; letter no EC/SEIAA/2022-23/ 2646/2022/366, dated 30.01.2023 & EC issuance date 08.02.2023.

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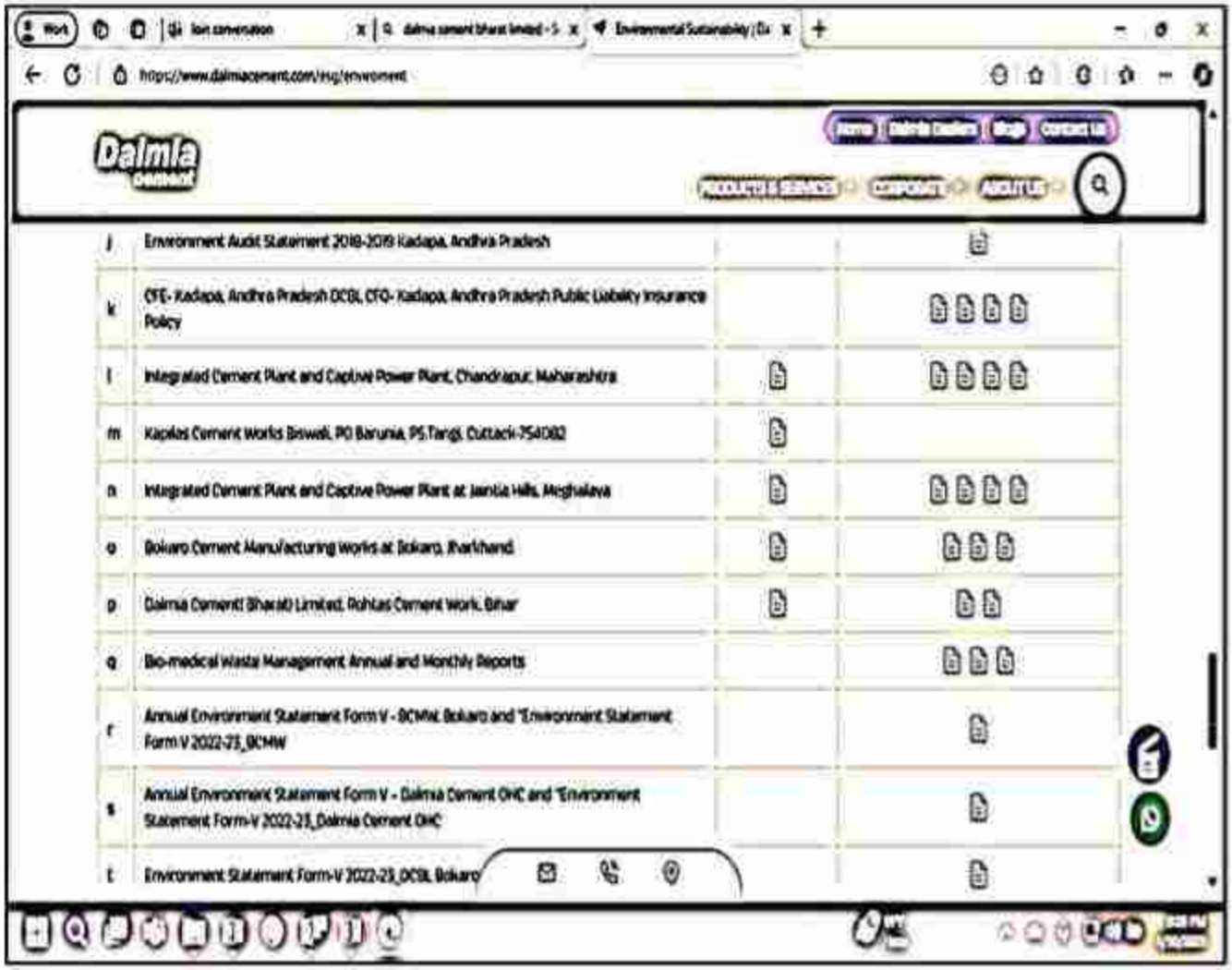
Thanking You
Yours Faithfully
For M/s. Dalmia Cement (Bharat) Ltd.
(Unit: Bokaro Cement Manufacturing Works)

Authorized Signatory
Encl: As above

Annexure-XXXIII

Half yearly EC Compliance report uploaded in company official website



j	Environment Audit Statement 2018-2019 Kadapa, Andhra Pradesh		
k	CTE- Kadapa, Andhra Pradesh DCBL CTO- Kadapa, Andhra Pradesh Public Liability Insurance Policy		
l	Integrated Cement Plant and Captive Power Plant, Chandrapur, Maharashtra		
m	Kapilas Cement Works Biswali, PO Barunia, PS Tangi, Cuttack-754002		
n	Integrated Cement Plant and Captive Power Plant at Jantia Hills, Meghalaya		
o	Bokaro Cement Manufacturing works at Bokaro, Jharkhand		
p	Dalmia Cement(Bharat) Limited, Rohtas Cement Work, Bihar		
q	Bio-medical Waste Management Annual and Monthly Reports		
r	Annual Environment Statement Form V - BCMW, Bokaro and "Environment Statement Form V 2022-23_BCMW		
s	Annual Environment Statement Form V - Dalmia Cement OHC and "Environment Statement Form-V 2022-23_Dalmia Cement OHC		
t	Environment Statement Form-V 2022-23_DCBL Bokaro		

Annexure-XXXIV

CAAQMS Monitoring data displayed at factory main gate

Annexure: XXXV

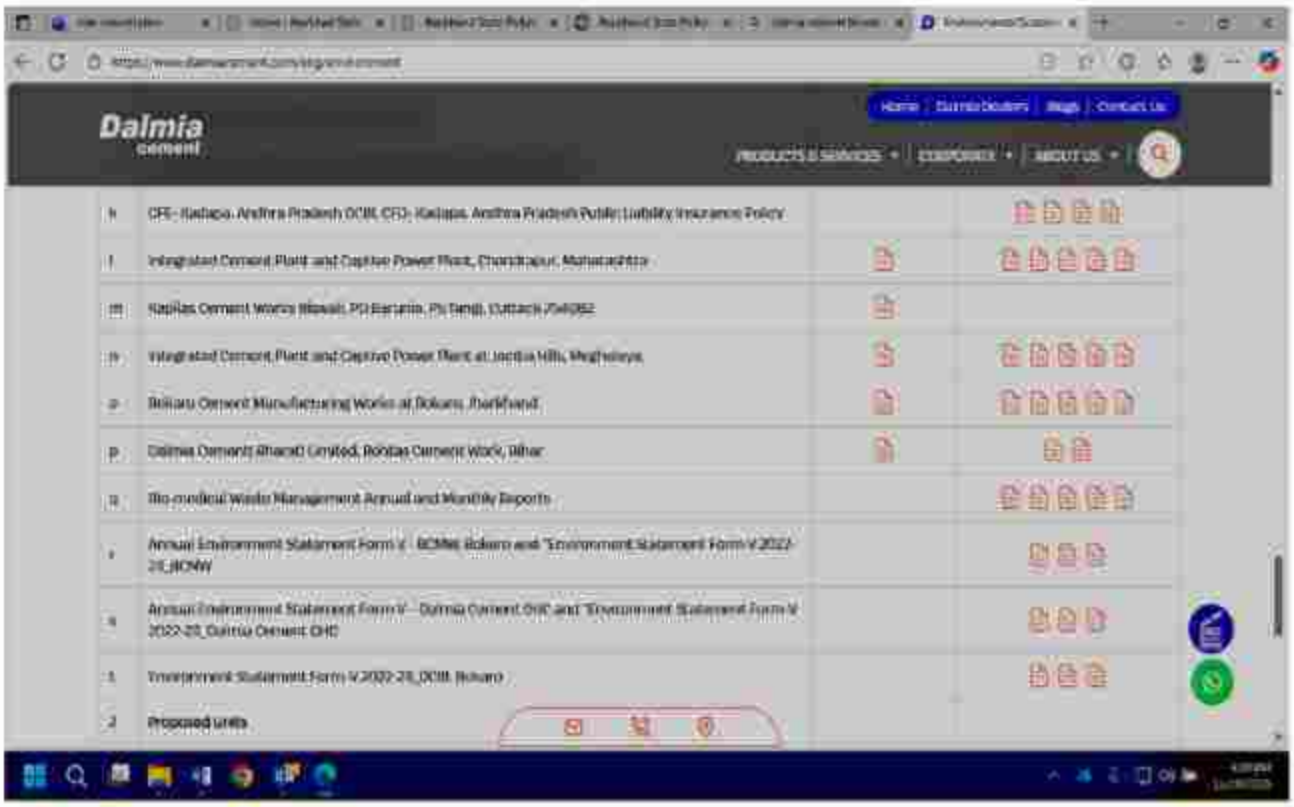
EC Compliance report uploaded in Parivesh 2.0 Portal of MOEF and CC website

Your (Half Yearly Compliance Report) has been Submitted with following details	
Proposal No	SIA/JH/IND1/413722/2023
Compliance ID	116625541
Compliance Number(For Tracking)	EC/COMPLIANCE/116625541/2025
Reporting Year	2025
Reporting Period	01 Jun(01 Oct - 31 Mar)
Submission Date	09-05-2025
RO/SRO Name	Shri Senthil Kumar Sampath
RO/SRO Email	agmu156@ifs.nic.in
State	JHARKHAND
RO/SRO Office Address	Integrated Regional Offices, Ranchi

Note:- SMS and E-Mail has been sent to Shri Senthil Kumar Sampath, JHARKHAND with Notification to Project Proponent.

Annexure: XXXVI

Environment Statement Form -V uploaded in company official website



Annexure-XXXVII

DCBL Public Liability Insurance policy copy

The Oriental Insurance Company Limited

The Document is Digitally Signed

Signer: DS THE ORIENTAL INSURANCE COMPANY LIMITED
Date: Tue Oct 07 2025 13:40:52 IST
Reason: Signing Policy for DCL

LIABILITY INSURANCE (UNDER PUBLIC LIABILITY INSURANCE ACT, 1991) POLICY SCHEDULE

Policy No.	: 312100/48/2026/200	**Prev. Policy No.**	: 4007/163007737/05/000
Cover Note No.	:	Cover Note Date	:
Insured's Code	: 200999959	Issue Office code	: 312100
Insured's Name	: M/s Dalmia Cement (Bharat) Ltd. (GSTIN: 33AADCA9414C1Z8)	Issue Office Name	: KBO KOLKATA (GSTIN: 19AAACT0627RSZU)
Address	: Dalmiapuram, Trichi Tamilnadu,Tiruchirapalli - 621651 TRICHIRAPALLI TAMIL NADU 621651	Address	: 7 RED CROSS PLACE KOLKATA WEST BENGAL 700001
Tel./Fax/Email	: / / 0 / NA	Tel./Fax/Email	: / / parikosh.biswas@orientalinsurance.co.in

Agent/Broker Details

Dev.Off.Code :

Agent/Broker : **LC0000000003 EXTRA COVER INSURANCE BROKERS PVT LTD**

Address : **21 HEMANT BASU SARANI, DALHOUSE, KOLKATTA 700001 WEST BENGAL,MOB NO 9330224364,9830015715,CALCUTTA,WEST BENGAL,700001**

Tel/Fax/Email : **9330282050/9330224364/**

Period of Insurance : FROM 00.00 ON 08/10/2025 TO MIDNIGHT OF 07/10/2028

Collection No. & Dt. : DC_I_IND 1089200348 - 07/10/2025 GST INVOICE NO :1924108678 UIN :0

Gross Premium : 400,000 GST 72000 Stamp Duty : 5 Total : 872,000

Co-insurance Details : NIL

Nature of Business : MANUFACTURING

Category of Industry : GREEN Policy Purchaser Category : Plant

Indemnity Limit : Rs. 2,500,000,000 Any One Accident

Rs. 5,000,000,000 Aggregate during the Policy Period (Not exceeding three times of any one accident of Indemnity Limit)

Retroactive Date : 08/10/2025

Contribution to the Environmental Relief Fund : 4,00,000.00 (Included in the Total Premium)

TERRITORY/JURISDICTION : INDIA / INDIA

The insurance under this policy is subject to conditions,clauses,warranties,exclusions which are available on Company's website **www.orientalinsurance.org.in** or on demand from the policy issuing office.

Specific Conditions if any :

Place : KOLKATA

Date : 07/10/2025

This Document is Digitally Signed
Signer: DS THE ORIENTAL INSURANCE COMPANY LIMITED
Date: Tue, Oct 7, 2025 13:45:52 IST
Reason: Signing Policy for OICL

Attached to and forming part of policy number 312100/48/2026/208

In the event of a claim under the policy exceeding Rs. 1 lac or a claim for refund of premium exceeding Rs. 1 lac,the insured will comply with the provisions of the AML policy of the Company.The AML policy is available in all our operating offices as well as Company's website.

If the policy has an imposed excess clause in the schedule ,then higher of the two, Compulsory excess or imposed excess, would prevail.

This Agreement excludes any loss or claims arising from:

¿ Radioactive contamination exclusion clause
¿ Patent and Trade secret infringement
¿ Fines and Penalties uninsurable under the Law.
¿ Punitive and exemplary damages
¿ War, Invasion, acts of foreign enemies including by not limited to, acts involving the use of operation, as a means of inflicting harm or causing loss, of any computer ,computer system, software programme,malicious code, computer virus or process or any other electronic system or any other electronic system,hostilities or warlike operations(whether war be declared or not),civil war,rebellion revolution insurrection civil commotion assuming the proportions of or amounting to an uprising military or usurped power.
¿ Liability arising out of Terrorism can be covered upto a limit of INR700,000,000 any one policy
¿ Nuclear Energy Risks exclusion clause
¿ Gradual Environmental Impairment Exclusion Clause
¿ North American Absolute Environmental Impairment Exclusion Clause
¿ Airlines,aircraft and airside operation of airports,including refuelling,control tower liability and construction & repair work within the airport perimeter.
¿ Workmen¿s Compensation Insurance.
¿ Any Electro Magnetic Fields (EMF) liability arising from Electric Utilities and Manufacturers of Mobile Phones.
¿ Public Liability of Indian Railways as a railway operator.
¿ Manufacturers and/or production and/or storage of fireworks, fuses, ammunition, cartridges and explosives.
¿ Any liability arising from,or in anyway connected to the use or incorporation of,exposure to, contact with or contamination by asbestos(including claims expenses)whether incurred directly or indirectly.

Excess : 0.25% of AOA limit subject min of Rs 1000/- for each and every Claim.
5% of claim amount minimum of Rs.5.00 lacs for each & every claim.

Financier Names are as per the list attached. Not applicable

Place : KOLKATA
Date : 07/10/2025

This Document is Digitally Signed
Signer: DS THE ORIENTAL INSURANCE COMPANY LIMITED O
Date: Tue, Oct 7, 2025 13:43:03 IST
Reason: Signing Hash for OIC

Attached to and forming part of policy number 312100/48/2025/208

This Agreement excludes any loss or claims arising from:
¿ Financial Guarantee and insolvency
¿ Sanction limitation and exclusion clause
¿ Communicable disease exclusion clause
¿ Cyber liability exclusion clause
¿ No Cover for products manufactured, assembled, formulated in USA, Canada
¿ Fiduciary liability,unless where incidental to operations.
¿ Ocean marine liability including shipowner¿s liability
¿ Any liability arising out of Mining processing manufacturing,distributing,storage and/or removal of pure asbestos and/or products made entirely or mainly of asbestos.
¿ Use of product made entirely or mainly of asbestos
¿ Ownership,operation or use of
¿ Aircraft and air cushioned vehicles including construction repair or installation work on aircrafts
¿ Vessels including their navigation
¿ Motor insurance as per Motor Vehicles Act 1988 in India or equivalent in any other jurisdiction,with the exception of Motor Excess Insurance.
¿ Manufacture and/or production of
Fireworks,fuse(s),cartridges,ammunition,powder,nitroglycerine or any explosives
¿ Mining risks other than¿Drift¿and/or¿Open-cast¿(applicable to General Public Liability only).
¿ Offshore related

This Agreement excludes any loss or claims arising from:
¿ Underground and underwater mines and collieries and all underground services in connection therewith
¿ Product Liability and product completed operations
¿ Absolute professional liability exclusion
¿ Contractual Liability assumed by the Insured and which would not have attached in the absence of such contract
¿ Perfourinated compounds, perfluoroalkyl and polyfluoroalkyl substances (PFAS) Exclusion
¿ Product Liability, recall, warranty, guaranty and inefficacy
¿ Professional Indemnity, D&O liability, Clinical Trials, Medical Malpractice
¿ Pure & Consequential financial loss.
¿ Political Risks, War and Sabotage, Terrorism Liability NMA 2919
¿ Workmen Compensation, Employer¿s liability
¿ Auto Liability,
¿ Aviation Liability, Airside Liability, Damage to aircraft, Drone Liability
¿ Marine Liability , Hauler Liability, Damage to Watercraft, Vessel
¿ Asbestos, Silica, lead
¿ GMO, TSE, Toxic Mold, EMF
¿ T&D lines
¿ PFAS,PFOA
¿ Fluctuation/Failure to Supply

This Document is Digitally Signed

Signer: Dn: The Oriental Insurance Company Limited
Date: Tue, Oct 7, 2025 13:43:52 IST
Reason: Signing Policy for OICL

The Oriental Insurance Company Limited

Attached to and forming part of policy number 312100/48/2026/208

Entered By : MR SANJOY BHATTACHARYYA

Examined By : R.K.DAS

Policy Printed By : 339687

IP :

Policy Printed On : 07-OCT-25 13:43:52

MAC :

Digitally Signed
By
Authorised Signatory

This is an electronically generated document (Policy Schedule).The Policy document duly stamped will be sent by post.

In case of any query regarding the Policy please call Toll Free No. 1800 11 8485 and 011 33208485.

CIN: U66010DL1947GOI007158. All the Amounts mentioned in this policy are in Indian Rupees.

IRDA Regn. No. 556 - Now you can buy and renew selected policies online at **www.orientalinsurance.org.in** and through other digital platforms including Whatsapp (Send "Hi" to 9868071200).

Place : KOLKATA

Date : 07/10/2025

OTHER TERMS & CONDITIONS

- Claims Made policy
- No knowledge of circumstances that might lead to a loss
- No additional limits to be bought without consumerce of OICL
- If there exists any other policy covering the same risk, our policy would contribute proportionately in case of a claim.
- The insured should not have any global policy for higher limit, i.e. our policy should not act as a Deductible cut back for the larger policy
- Above approval is subject to written confirmation from the client, of no known or reported losses / circumstances which may lead to a claim / liability in future.
- Right to defend
- Designated premises list & details of surrounding area to be provided prior to binding
- List of hazardous goods to be provided prior to binding
- Warranted that All environmental clearances and operating licenses from regulatory authorities to be in place.
- Warranted that Accurate record of hazardous material being handled should be maintained at all times.
- Warranted that safety audits to be regularly conducted as prescribed time limits
- Warranted that All regulatory compliances in place at all times
- Warranted that Disaster Management Plan with regard to on site emergency response plan, mock drills, trained safety personnel to be available and followed at all times
- Warranted that all safety and security protocols to be followed at all times.
- Any change in exposure / risk to be duly informed to the u/w and approval to be taken for the same

DEDUCTIBLE: 5% of claim amount minimum of Rs.5.00 lacs for each & every claim. Any other deductible/policy excess, if mentioned elsewhere in this policy schedule, is not valid.
EXTENSIONS ALLOWED UNDER THE POLICY As per Public Liability Act, 1991 Insurance policy. HO Approval uploaded.
RETRO DATE: 09/10/2024 LIMIT: Rs.15,00,00,000 (AGG) / Rs.5,00,00,000/- (AOA)

Warranted that in case of dishonour of premium cheque(s) the Company shall not be liable under the policy and the policy shall be void ab-initio (from inception).

In witness whereof the undersigned being authorised by and on behalf of the Company has/have hereto set his/their hands at KMO KOLKATA (0511) TMAAC10627G000 on 07th DAY OF OCTOBER 2025.

Place : KOLKATA
Date : 07/10/2025