



To Date: 26.11.2024
The Member Secretary,
State Level Environment Impact Assessment Authority, Jharkhand
Nursery Complex, Near Dhurwa Bus Stand, Dhurwa,
Ranchi-Jharkhand -834004

Subject: Half yearly Environment Clearance (EC) Compliance report of Dalmia Cement (Bharat) Limited, Bokaro for the period of April 2024 to September 2024.

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

Dear Sir,

Please find enclosed herewith half yearly Environment Clearance compliance report of Dalmia Cement (Bharat) Limited, Bokaro, Jharkhand for the period of April' 2024 to September 2024 for your kind perusal.

Thanking you.

Yours Sincerely,

For Dalmia Cement (Bharat) Limited, Bokaro

**Authorized Signatory** 

# Copy:

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

#### Enclosed:

- 1. EC Compliance Report
- 2. Annexure -1 to 24

# DALMIA CEMENT (BHARAT) LIMITED, BOKARO

Environment Clearance compliance report of Dalmia Cement (Bharat) Limited from April 2024 to September 2024.

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



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

# DALMIA CEMENT BHARAT LIMITED.BOKARO

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

# ENVIRONMENT CLEARANCE COMPLIANCE REPORT OF DALMIA CEMENT (BHARAT) LIMITED FOR THE PERIOD OF APRIL 2024 TO SEPTEMBER 2024

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

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

4	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	Complied with. Our Unit has obtained CTE from JSPCB Ranchi vide letter no JSPCB/HO/RNC/CTE-11785214/2022/96 Dated: 06.03.2022. CTO obtained and renewed vide letter no JSPCB/HO/RNC/CTO-14970501/2023/503, Dated15.03.2023 for the plant expansion from 3.7 MTPA to 4.50 MTPA from JSPCB Ranchi and CTO valid up to 31.03.2027. attached as CTE Annexure-1 & CTO Annexure-2
5	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project	Complied with. The permission for water connection has been obtained from JIADA Bokaro vide Agreement dated 17.03.2011. The same agreement copy is attached herewith as per <b>Annexure 3</b> .
6	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time	Complied with. DCBL, Bokaro has obtained Authorization of Hazardous waste from JSPCB, Ranchi vide letter no JSPCB/HO/RNC/HWM-9675664/2021/26, Dated 09.04.2021, which is valid up to 31.12. 2026.Copy of the same attached as per Annexure 4
7	No mining /activity shall be undertaken in the forest land or deemed forest without obtaining prior forestry clearance.	Not Applicable to our unit.
8	This Environmental Clearance is granted subject to final outcome of Hon'ble supreme court of India. Hon'ble High Court, Hon'ble NGT, MoEF&CC and any other Court of Law, if any, as, may be applicable to this project.	Agreeable
9	Environmental Clearance is subject to obtained prior clearance from forestry and wildlife angle including clearance from standing committee of NBWL as may be applicable to this project (in case any fauna occurs /is found in the project area or if the area involves forest land or Wildlife habitat I.e core zone of elephant/tiger reserve etc. and located within 10 km of protected area.	Not applicable. The unit is located in notified Industrial area at JIADA, Bokaro, Jharkhand with due allocation through Govt of Jharkhand.
10	The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue delay, which till process on their	Not applicable. The unit is located in notified Industrial area at BIADA, Bokaro, Jharkhand with due allocation through Govt of Jharkhand.

	respective merits, no rights will vest in or accrue to them unless all clearance are obtained.	
Ш	Air quality monitoring and preservation	
1	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. no 612 (E) dated 25 August ,2014 (Cement) and subsequent amendment dated 9th May 2016 (Cement) and connected to SPCB and CPCB online server and calibrate these system from time from time to according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.	Complied with. Unit has already installed on line continuous emission monitoring system in our process stack and connected to JSPCB & CPCB server. On line stack emission monitoring data continuously transmitted to CPCB & JSPCB server. Regular maintenance and calibration are being done of stack emission monitoring equipment. Fugitive emission is being regularly monitored in the plant premises and data is being regularly submitted to JSPCB & CPCB, On line CEMS and Manual stack emission monitoring data for the period of April 2024 to September 2024 attached as per Annexure-5
2	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.).	Complied with. We are regularly monitoring fugitive dust emission in our plant by Inhouse and JSPCB & NABL approved laboratory. Copy of fugitive emission monitoring reports from April 2024 to September 2024 is attached as per Annexure-6
3	The project proponent shall install system to carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM-10 and PM-2.5 in reference to PM emission, and S02 and NOx in reference to S02 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)	Complied with. We have installed 2 Nos On-line Continuous AAQM monitoring station in up wind and downwind directions with parameter of PM-10, PM-2.5, SO2 & NOx, at the boundary location of the unit. CAAQM monitoring equipment is transmitting data to JSPCB, & CPCB server through wide area network. The same data is also displayed at the factory main gate.  Unit have also installed manual AAQM monitoring station at 120-degree direction of a plant boundary location. AAQM reports are being regularly submitted to JSPCB Ranchi and Regional office at Dhanbad on monthly basis. six monthlies average AAQM report for the period of April 2024 to September 2024 attached as per Annexure-7
4	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of	Complied. Six monthly environmental monitoring reports from April 2024 to September 2024

	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	is attached as per <b>Annexure-6 &amp;7</b>
5	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Complied.  We have installed 2 nos Bag house in VRM mills for the control of air pollution. The Bag house stack emission maintained below 30 mg/Nm3. Apart from this 33 nos of nuisance bag filter installed in all material transfer points to control the fugitive dust emission. List of APC system installed in plant attached as per Annexure:8 All belt conveyors are fully covered for the control off fugitive dust emission. Raw materials and products are stored in covered sheds and silos. regular cleaning of roads by 2 nos road sweeping machine. Good housekeeping is being maintained all around the plant.
6	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Complied.  Regular maintenance of bag filters, leakage checking, cleaning of bag filters is being done by dedicated mechanical maintenance team as per schedule.
7	Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.	Complied.  Applicable CREP compliance conditions complied. CREP compliance report attached as per Annexure: 9
8	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Complied. Regular road sweeping and -floor cleaning is being done by 2 nos of vacuum sweeping machine for the control of fugitive dust emission. Good housekeeping is being maintained in all around plant premises area. Photographs of road swapping machine with cleaning of roads/floor and log book of road swapping machine attached as per Annexure :10
9	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.	Complied. All raw materials are being transported in covered belt conveyors. Raw material & products is being transported in covered tarpaulin trucks / bulkers /rail for the control of material spillage as well as control of fugitive dust emission.

10	Provide wind shelter fence and chemical spraying on the raw material stock piles;	Complied. We have constructed plant boundary walls around the plant along with thick green belt, which act as wind shelter or wind shield for contaminants. We have boundary wall erected between plant and hostels which act as wind shields. We have also constructed walls around packing unit and raw material yard, which act as wind shelter. Raw materials stored in covered sheds and silos.
11	Have separate truck parking area and monitor vehicular emissions at regular interval.	Complied. Separate truck parking facility provided to park trucks. Regular checking of vehicles PUC certificates which entering in plant to control of vehicular emission.
12	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport.	Complied. All raw materials and products are being transported in covered trucks, bulker, covered conveyor belts/railways to reduce the fugitive dust emission.  Regular water sprinkling and road swapping is being done on the roads through water spray tanker to control of fugitive dust emission.
13	Ventilation system shall be designed for adequate air changes as per ACGIH Document for all tunnels, motor houses, cement bagging plants.	Complied. Air ventilation system arrangement done for adequate air change in motor houses and packing plant area.
IV	Water quality monitoring and preservation	n:
1	The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 as amended from time to time and connected to SPCB and CPCB online servers and calibrate this system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)	Our unit is standalone cement grinding unit and does not require water for process. The water is only used for equipment cooling in closed loop. Makeup water is only added. Therefore, there is no effluents generated from our process. In view of this effluent monitoring system is not relevant for our unit.
2	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of	<b>Not Applicable.</b> No Ground water withdrawal from our plant. The permission for water connection has been obtained from

	piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	BIADA. There will not be any effluent generation from the plant. Domestic waste water treated in STP, treated water is being used within plant for greenbelt development and dust suppression. however, we are regularly monitoring ground water quality and depth level in surrounding village wells. Ground water quality & water depth level reports of surrounding village for the period of April 2024 to September 2024 is attached as per <b>Annexure-11</b>
3	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	There is no effluent generation from our unit as it does not require water for its process. Our unit has STP 100 KLD for the treatment of domestic waste water. STP treated water quality analysis report attached as per Annexure 12. STP Treated water is being used in greenbelt development and dust suppression. Ground water monitoring reports are being regularly submitted to MoEF&CC regional office, Zonal office of CPCB and regional office of SPCB as a part of EC compliance report. Ground water quality analysis report attached as per Annexure-11
4	Adhere to 'Zero Liquid Discharge	<b>Complied with</b> . Zero Liquid Discharge is being maintained.
5	Sewage Treatment Plant shall be provided for treatment of domestic waste water to meet the prescribed standards.	Complied with.  100 KLD STP is in operation for the treatment of domestic waste water. Treated sewage quality meet the prescribed standard norms. Treated water quality analysis report attached as per Annexure-12
6	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off.	Complied with. Garland drain are existing in the raw material yard to accumulate run off water in a settling pit. As a practice, we collect water from pit in water tanker and use it for water sprinkling on our internal roads, on daily basis.
7	The project proponent shall practice rainwater harvesting to maximum possible extent.	Complied with. Rain water harvesting system implemented in our unit to recharge the ground water and same is also approved from Ground Water Board, Ranchi. Vide letter no 320 Ranchi Dated 06.09.2013. attached as per Annexure: 13.

VII	Waste management	
3	Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS Standards. Waste management	Complied with. Slag and fly ash are being used as a raw material for cement manufacturing as per BIS norms.
2	Provide the project proponent for LED lights in their offices and residential areas,	Complied with. LED bulbs are being used in all offices and residential areas for the lighting purpose.
1	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.	plate light in plant, colony area. Photographs
VI	Energy Conservation measures-:	
2	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	Being complied.
1	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six- monthly compliance report.	Compiled Noise level are being regularly monitored in different locations of our unit. Noise level report is being regularly submitted to Ministry, CPCB, JSPCB as a part of six-monthly EC Compliance report. Six monthly noise level report (April 2024 to September 2024) attached as per Annexure-15
V	Noise monitoring and prevention	
9	The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water practicing cascade use and by recycling treated water.	<b>Complied</b> . Optimum use of water is practiced and all necessary efforts has been made to reduce water consumption in our plant.
8	Water meters shall be provided at the inlet to all unit processes in the cement plant.	Complied. Water meter installed at inlet of our unit. water flow meter photographs attached as per Annexure: 14
		pounds near surrounding village area to conserve the rain water.

1	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Trans boundary Movement) Rules, 2016.	Complied with. Hazardous waste Authorization obtained from JSPCB vide letter no JSPCB/HO/RNC/HWM-9675664/2021/26, Dated 09.04.2021, which is valid up to 31.12. 2026. Hazardous waste such as used oil, waste oil disposed through authorized vendor.
2	Kitchen waste shall be composted or converted to biogas for further use. (to be decided on case to case basis depending on type and size of plant)	<b>Complied with.</b> Kitchen waste composted and used in greenbelt development.
VIII	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 cover the entire periphery of the plant	Complied with. We have developed greenbelt in 33% of the total land of unit. Tree plantation report attached as per Annexure-17
2	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation	Dalmia Cement (Bharat) Limited Bokaro is a standalone cement grinding unit for the manufacturing of blended cement by utilizing industrial waste -such as slag, fly ash and gypsum. Only small quantity of coal is used in HAG for moisture drying in raw material slag.  The GHG emission inventory and action plan for the reduction of GHG emission report attached as per <b>Annexure-18</b> .
IX	Public hearing and Human health issues	
1	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Complied with. On side emergency preparedness plan, Hazard identification and Risk Assessment (HIRA) already prepared and same is approved by Chief Factory Inspector of Jharkhand.
2	The PP shall provide Personal Protection Equipment (PPE) as per the norms of factory Act.	Complied with. All Personal protective equipment's (PPE) Safety shoes, Nose mask, safety helmet, earplug, provided to all employees and contract workers for their safety.
		Safety training is being regularly done among the employees for the awareness of safe working culture.

3	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking. mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied with. All necessary infrastructure / facility provided to construction labour during construction phase of the project and also removed temporary houses after completion of project
4	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act	Complied Periodic medical health checkup is being regularly done to all employees and workers every six months. reports are being maintained as per Factory Act.
X	Corporate Environment Responsibility	
1	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	<b>Being Complied.</b> we are regularly doing CER surrounding village area which is as follows:
		Nells & Pond renovation done surrounding village area for water conservation.
		2. street light & solar light installed in village
		3.Tree plantation done surrounding village
		4 Toilet constructed in schools
		5. Renovation of school building, community hall and Aganwadi surrounding village area. CER report for the period April 2024 to September 2024 attached as per <b>Annexure:</b> 19
2	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six- monthly report.	Complied with. DCBL Bokaro have Environmental Management Policy duly approved from Board of Director. copy of Environment policy attached herewith as per Annexure-20

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3	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of Senior Executive. who will directly to the head of the organization.	Complied. Environment Management Cell has been established at our plant as well as at Corporate headquarter for the management of environmental activities with qualified person. Environment management cell is headed by Executive Director (Plant Head) in our unit.
4	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.	Action plan for EMP implementation is in place. Separate budget allocated for Environment Protection. It is ensured that budget shall not be diverted for any other purpose. Expenditure on environmental protection is being regularly submitted to Ministry and his Regional Office as a part of EC compliance report. Expenditure on Environment Protection (Capital cost & Recurring cost) from April 2024 to September 2024 is attached as per Annexure-21
5	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Complied with. Self-Environment audit is being regularly done for the continual improvement of environment quality in our plant. Self-Environment audit report attached as per Annexure-22. Third party Environment audit report submitted in pervious compliance report
6	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented. Miscellaneous:	Not relevant
X	Miscellaneous	
1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	We have advertised our Environmental Clearance in local new papers (Hindustan Times Ranchi, Hindi News Aaj), which are widely circulated in the region and copy of the same attached herewith as per Annexure-23.
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	Complied. We have submitted Environment Clearance copy to local Panchayat and other Govt. bodies, district head quarter. receiving copy of the same attached herewith as per

	offices of the Government who in tun has to display the same for 30 days from the date of receipt.	Annexure-24
3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Complied.
4	The project proponent shall monitor the criteria pollutants level namely; $PM_{10}$ , $SO_2$ . $NO_x$ (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	<b>Complied</b> . On-line environment monitoring data is being regularly displayed at factory main gate for the notice of public.
5	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied.
6	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied Environment Statement in Form V is regularly submitted to JSPCB, Dhanbad & Ranchi. Last Environment Statement was submitted vide our letter no. DCBL/ENV-ES/23-24/01, 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.	Date of final approval: 04.02.2019 for change of energy efficient motor in VRM mill (for 3.70 MTPA EC) Date of financial closure:10.10.2019 (for 3.70 MTPA EC) Date of Land development: There is no land development as the change happen due to change in energy efficient motor replaced 10.01.2020. Date of Production date: 15.06.2022 (4.50 MTPA)
7(I)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Noted & agreed.
7(II)	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their	Commitments and recommendations made in EIA/EMP is being complied. DCBL located in notified industrial area (BIADA), hence,

	presentation to the Expert Appraisal Committee	Project exempted for public hearing.
8	It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned SEIAA, Regional Office of MoEF&CC at Ranchi, Jharkhand State Pollution Control Board(JSPCB) Ranchi, and Central Pollution Control Board(CPCB)	Noted & agreed
9	Concealing factual data or submission of false /Fabricated data and failure to comply with any of the conditions mentioned above may results in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act,1986.	Noted & agreed.
10	The SEIAA, Jharkhand or any other competent Authority may alter modify the above condition or stipulated any further condition in the interest of Environment Protection.	Noted & agreed.
11	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted & agreed
12	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted & agreed.
13	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions not satisfactory.	Noted & agreed.
14	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted & agreed.
15	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the	Noted & agreed.

	Regional Office by furnishing the requisite data / information/monitoring reports.	
16	The above conditions shall be enforced, interalia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	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 cf the National Green Tribunal Act,	Noted & agreed
18	This environmental clearance is valid for seven years from the date of issue.	Noted & Agreed.

# Consent to Establish (CTE) copy



### 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-11785214/2022/96 Dated: 2022-03-06

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

 Reference: Application (s) No.-11785214 / dated: 23/12/2021 of Dalmia Cement (Bharat) Limited, Venkatesan Thyagarajan 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 Inspection Report (I/R) checklist 28.12.2021 issued vide Ref. No. 1436 dated 28.12.2021 of R O-Cum-Laboratory, J.S.P.C.Board, Dhanbad.
- (b) The content of copy of Environmental Clearance granted vide letter No. EC/SEIAA/2018-19/2138/2019/474 dated 23.09.2019 for "Upgradation of technology at existing standalone cement Grinding unit of M/s Dalmia Cement (Bharat) Ltd., at Bokaro Industrial Area, Balidih, Bokaro, Jharkhand from 3.0 MTPA to 3.7 MTPA" with compliance report.
- (c) The content of Copy of CTE issued vide Ref No.; ; JSPCB/HO/RNC/CTE-6897145/2020/11 Dated ; 07.01.2021 for production of Portland Slag Cement and Composite Cement –3.0 MTPA to 3.7 MTPA.
- (d) The content of copy of CTO issued vides Ref No. JSPCB/HO/RNC/CTO-7428223/2020/560 dated 04.03.2020 for the period of 31.03.2022 for production of Portland Slag Cement and Composite Cement -3.0 MTPA to 3.7 MTPA and its compliance report.
- (e) The content of Copy of the No Increase In Pollution Load Certificate issued by the Board vide letter ref. no. B-1998 dated 22.11.2021.
- (f) The content of Executive Summary related to No Increase in Pollution load with increase in production capacity to 4.5 MTP. Athrough change in Product Mix and Modernisation in Technology in Existing Standalone Grinding Unit of M/s Dalmia Cement (Bharat) Limited, at Bokaro Industrial Area(BIADA), Bokaro
- (g) The content of unit has installed CAAQMS in the single stack and has assured to comply most of the conditions as mentioned in EC.
- 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
  Mauza-Kanari, P S -Bokaro Steel City, District-BOKARO as follows:

Project	Site-Area		Investment (Rs)/ Year	Product & Capacity	Period of CTE
	Plot Nos.	Area			

In Expansion	Mauza -Kanari, Plot No. IV/A- 7(P), - Industrial area, BIADA, Bokaro	280002 Sq. Mtrs or 20.24 Hactare as per CTO	55.66 Crore	Portland Slag Cement, Portland Composite Cement & Portland Pozzolana Cement (PSC, PCC & PPC) - From 3.7 MTPA to 4.5 MTPA (As per EC Exp.)	date of issue to six months
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# (A) Specific Conditions:

- That, the occupier shall make Work area and transport roads and approach road off the main road concrete/ black top before commissioning of the project.
- That, the occupier shall install fixed type water sprinklers to cover all dusty places in the premises to impart water spraying intermittently
- 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).
- That, the occupier shall install online certified PM10 analyzer with onsite display and connectivity to JSPCB server.
- That, the occupier shall ensure that there shall be no leakage from the doors of the ovens and doors must remain sealed in order to minimize the fugitive emissions;
- 7. 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.;
- 8. 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.
- 9. That, the occupier shall use fly ash and or fly ash bricks in construction of the project.
- 10. That, the occupier shall implement all pollution control measures as recommended in EIA/EMP.
- 11. That, the occupier shall comply the recommendations of CREP;
- 12. That, the occupier shall comply all the conditions of Environmental Clearance issyed by MOEF, Govt. of India, New Delhi
- 13. That, the occupier shall use all solid wastes as resource as a raw material or a product,

In Expansion	Mauza -Kanari, Plot No. IV/A- 7(P), - Industrial area, BIADA, Bokaro	280002 Sq. Mtrs or 20.24 Hactare as per CTO	55.66 Crore	Portland Slag Cement, Portland Composite Cement & Portland Pozzolana Cement (PSC, PCC & PPC) - From 3.7 MTPA to 4.5 MTPA (As per EC Exp.)	date of issue to six months
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- 11. That, the occupier shall comply the recommendations of CREP;
- That, the occupier shall comply all the conditions of Environmental Clearance issued by MOEF, Govt. of India, New Delhi
- 13. That, the occupier shall use all solid wastes as resource as a raw material or a product.

14. That, as a stake holder in Dhanbad Action Plan the occupier shall ensure the compliance of action to be taken to reduce the pollutants as suggested in Dhanbad Action Plan by them.

#### (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.
- This order shall be valid subject to compliance of all other legal requirements applicable to the 6. 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 Digitally signed Kumar Das

by Yatindra Kumar Das Date: 2022.03.06 11:24:28 +05'30'

(Yatindra Kumar Das) Member Secretary

Member Secretary

Memo No.: JSPCB/HO/RNC/CTE-Dated: 2022-03-06

11785214/2022/96

Copy to: Sri. Venkatesan Thyagarajan, Director of M/s Dalmia Cement (Bharat) Limited, At-Plot No. IV/A-A-7(P), Bokaro Industrial Area Development Authority, 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.

> Digitally signed (Yatindra Kumar Das) Yatindr by Yatindra Kumar Das a KumarDate: 2022.03.06 Das 11:23:51 +05'30'

Dated: 2023-03-15

# Consent to operate (CTO) Copy

### 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-14970501/2023/503

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

 Application (s) dated 2022-12-15 of Dalmia Cement (Bharat) Limited, Occupier Name: Venkatesan Thyagarajan 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 Consent to Establish (CTE), Ref No.-JSPCB/HO/RNC/CTE-11785214/2022/96 Dated; 06.03.2022 for Portland Slag Cement, Portland Composite Cement & Portland Pozzolana Cement (PSC, PCC & PPC) From 3.7 MTPA to 4.5 MTPA (As per EC Exp.) with compliance report.
- (b) The content of copy of Environmental Clearance granted vide letter No. EC/SEIAA/2018-19/2138/2019/474 dated 23,09.2019 for "Upgradation of technology at existing standalone cement Grinding unit of M/s Dalmia Cement (Bharat) Ltd., at Bokaro Industrial Area, Balidih, Bokaro, Jharkhand from 3.0 MTPA to 3.7 MTPA" with compliance report.
- (c) The content of Copy of the No Increase In Pollution Load Certificate issued by the Board vide letter ref. no. B-1998 dated 22.11.2021.
- (d) The content of Executive Summary related to No Increase in Pollution load with increase in production capacity to 4.5 MTPA through change in Product Mix and Modernization in Technology in Existing Standalone Grinding Unit of M/s Dalmia Cement (Bharat) Limited, at Bokaro Industrial Area(BIADA), Bokaro.
- (e) The content of Self-declaration for procurement of Raw Material from valid source.
- (f) The content of Consent to Operate (CTO), vide ref. no. JSPCB/HO/RNC/CTO-13089032/2022/837, dated 12.06.2022 for the production of Portland Slag Cement, Portland Composite Cement & Portland Pozzolana Cement (PSC, PCC & PPC) From 3.7 MTPA to 4.5 MTPA (As per EC Exp.) for the period upto 31.03.2023.
- (g) The content of authorization under HoWM Rules' 2016 vide ref. no. JSPCB/HO/RNC/HWM-9675664/2021/26, dated 09.04.2021.
- (g) The content of Inspection Report (I/R), Ref No.-1513 dated 31.12.2022 of R.O., JSPCB, Dhanbad.
- 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 Kanari, PS Bokaro Steel City, District BOKARO, as follows:

Project Site-Area	Investment (Rs)	Product & Capacity	Period of CTO
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	Plot Nos.	Area			Date of issue To
In Expansion	At- Industrial area, BIADA, Bokaro, Plot No. IV/A-7(P)	280002 Sq. Mtrs or 20.24 Hactare	55.66 Crore	Portland Slag Cement, Portland Composite Cement & Portland Pozzolana Cement (PSC, PCC & PPC) - From 3.7 MTPA to 4.5 MTPA (As per EC Exp. and previous CTO)	31/03/2027

# (A) Specific Conditions:

- 1. That, the occupier shall install, operate and maintain dust containment cum suppression system.
- 2. That, the occupier shall carry out grinding and packing under covered area.
- That, the occupier shall maintain the new emission guideline as prescribed by CPCB/MoEF for cement industry.
- That, the occupier shall cover the truck/dumpers used for transportation of Limestone, Gypsum, Coal,
   Cement and other materials and shall use least habitation route for their movement.
- That, the occupier shall install & maintain fixed type water sprinkler all along the road and the points of loading & unloading points.
- 6. That, the occupier shall construct pucca approach road and internal roads and shall do sprinkling of water along these area.
- That, the occupier shall harvest rain water of the premises and recharge it to the ground by the method of Central Ground Water Board that fits most to such project.
- 8. That, the occupier shall keep surface run off within the premises and should construct garland drain and settling pit for this purpose.
- 9. That, the occupier shall transport the product by leak proof and covered vehicles with tarpaulin sheet.
- That, the occupier shall establish and operate well equipped environmental laboratory with facilities to monitor at least all regulatory parameters and duly accredited by NABL.
- That, the occupier shall operate and maintain air pollution control devices to such as bag filters to control fuel dust emission.

- 12. That, the occupier shall submit the disposal and utilization of fly ash generated in the plant.
- 13. That, the occupier shall comply conditions of the CREP and shall report to the Board regularly.
- 14. That, occupier shall maintain the operation of Pollution control system installed at-Ball Mills and Silos. Also the power supply to production units & Silos shall be interlinked with pollution control arrangement;
- 15. That, the occupier shall operate and maintain the pollution control equipments such as bag filters and others.
- 16. That, the occupier shall operate and maintain the CAAQMS and PM 10 analyzer and ensure transmission of data to JSPCB and CPCB server uniterruptedly.
- 17. That, the occupier shall comply all the conditions of EC and CTO and submit six monthly compliance report to Board and other relevant documents alongwith the analysis reports successively.
- 18. that, the occupier shall dispose the solid waste as per prescribed norms.
- That, the occupier shall dispose the hazardous waste as per HoWM Rules' 2016 and shall obtain authorization under HoWM Rules' 2016.
- 20. That, the occupier shall submit online applications for renewal of consent under section 25 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 documents showing compliance of all of the above conditions.
- That, this CTO supersedes the CTO granted earlier vide ref. no. JSPCB/HO/RNC/CTO-13089032/2022/837, dated 12.06.2022.

## (B) General Conditions :

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

			Concentration	in Ambient Air	
IN	Pollutant	Pollutant Time Weighted Average Industrial, Residential, Rural and Other Area		Ecologically Sensitive Area (notified by Central Govt.)	
(1)	(2)	(3)	(4)	(5)	
L	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:

SN	Parameter	Standard	
1	Particulate Matter	150 mg/Nm <sup>3</sup>	

(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:

SN	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:

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

This is issued with the approval of the Competent authority

Yatindra Digitally signed by Yatindra Kumar Kumar Das

Das (Yatindra Kingar Das)
Member Secretary

Memo No.; JSPCB/HO/RNC/CTO- Dated: 2023-03-15

14970501/2023/503

Copy to: M/s Dalmia Cement (Bharat) Limited, At- Plot No. IV/A-A-7(P), Bokaro Industrial Area Development Authority, 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 Digitally signed (Yatindra Kumar Das)
by Yatindra Member Secretary
Kumar Das
Date: 2023.03.15

Das 21:27:17 +05'30'

# Water agreement copy from BIADA



# AGREEMENT BOND FOR INDUSTRIAL METERED WATER SUPPLY SERVICE CONNECTION

An Agreement made this 17thday of March 2011 between the Bokaro Industrial Area Development Authority (Hereinafter called the owner) on the first part and M/s Bokaro Jaypee Cement Limited, "JA House", 63 Basant Lok, Vasant Vihar, New Delhi-110057 hereinafter called "THE CONSUMER" on the second part.

The particulars of the industrial plot to which supply is to be given in the factory premises.

Description of premises

- (a) Industrial Plot No.: IV/A 7(P)
- (b) Chauhadi of the industrial plot: As per Annexure 01
- (c) Industrial Plot No : IV/A 7(P)
- (d) Revenue plot & No.: As per Annexure 02

Whereas the consumer desired to obtain supply of water for industrial purposes for his Premises as described from the distribution mains of the Authority and has made a written application to the Authority for this purpose and the Authority has decided to grant it, it is hereby covenanted and agreed as under:

anted and agreed as under

(Authorised Signatory)

OF BLIKARO JAYPEE CEMENT LTO

Bild Accounts Office

- 1) The Authority shall provide a connection and turn on the water to this premise, on the completion of the communication pipes laid by the 2<sup>nd</sup> part by the Authority at the cost of the consumer or on receipt of D.O. certificate of satisfactory completion of the communication pipes by the consumer. The sanctioned plan with details noted over it regarding no. of tap and size of water meter, Ferrule or storage tanki etc. by the Authority.
- 2) The consumer shall pay water rate/water tax to the Authority as per rates fixed by the Authority from time to time. The rates effective from 01.11.95 are as under:-
  - Rs. 14/- Per 1000 liters of water supplied.
- 3) a) The meter of required size shall be purchased by the consumer at his own cost which shall be approved by the Authority before its installation. Whenever meter will be found stolen or defective it will be replaced at the cost of the consumer. Every new metre shall be approved by the Authority. In case the meter is not installed, billing will be on the basis of Water requirement plus 10%.
- b) The register of meter reading shall be prima-facie evidence of the quantity of water consumed and bills for water rates shall be based on the meter reading taken monthly, a copy of which will be supplied to the consumer on demand.
- c) Provided that if any meter is out of order and if in the opinion of the D.O it is not registering correctly the Authority may estimate the quantity to be billed for, for the period of defective meter as certified by the DO/DDO/ADO in the manner terms and conditions laid down on the allotment of land/lease deed. The defective water meter will have to be replaced at the cost of consumer supplied by the consumer. The water meter of required size and make to be approved by the Authority shall be purchased by the consumer.
  - 4. Bills of water rates shall be presented by the Authority monthly and shall be paid by consumer within seven days of presentation. For this purposes the date of presentation shall mean the date of issue of the bill on the address of the unit.
  - 5 Security Deposit= Water requirement per day X 90 i.e 5,50,000 liter X 90 X14
    - Rs. 6,93,000.00(Rupees 5ix Lakh Ninety Three Thousand) only will be deposited by the party in Authority fund.
  - The cost of stamping this agreement shall be borne by the unit concerned.
  - This agreement may be terminated with the cancellation of the plot allotted.

or BOKARO JAYPEE CEMENT LTD.

me: 17/3/11/2000

- The Authority will have right to shut off the supply temporarily for purposes of necessary repairs/maintenance of water supply pipelines etc. giving a prior notice to the concerned unit.
- That the mater chamber shall be the property of the Authority even, if it is constructed by the consumer at his own cost but it will be got repaired by consumer or if Authority get it repaired, the cost will be received from consumer. The safety of water meter will lie with consumer.
- That the consumer shall take proper care for the safety of the meter which will be 10. installed in the meter chamber situated within the premises of the unit and that in case of its theft he will be responsible and be liable for replacement of the meter within a week time.
- in case of any dispute regarding this water connection, the decision of Bokaro Industrial Area Dev. Authority will be final and binding upon the party.
- If the consumer fails to pay the water charges due under this agreement within seven 12. days of the date on which the payment fails due, the consumer shall be liable to pay interest @ 10% simple per annum on earlier bill amount.
- Every sum that may become due from the consumer to the Authority under or in 13. pursuance of the provisions of this agreement shall be payable to the Authority and shall be recoverable as public demand under the Bihar & Orissa public Recovery Act, 1914.
- In case the consumer desires to increase/decrease connected demand the Authority may require to be given 3 months notice in writing standing the required demand.
- If the consumer uses the water supplied or deals with it in any manner so as unduly 15. or improperly to interfere with the efficient supply of water to any person by the Authority or sells or diverts water to premises other than his/her own, the Authority may discontinue the supply with prior notice.
- The consumer shall not cause or permit any such repairs additions or alternations to 16 be done otherwise than by the Authority shall when any such repairs are required to be done, inform such officers of the Authority for this purpose.
- 17 All payment referred to above shall unless otherwise direct by the Authority to be made by the consumer by cash/draft in the office of M.D. BIADA.

OF BOKARO JAYPEE CEMENT LTD.

The Authority shall be at liberty at any time to alter charges, minimum guarantee, any terms and conditions in the agreement bond etc. as set out in such hereafter and the same shall be binding on the consumer.

18. Point of supply. : From Water Tank No: 02 to Plot No:IVA-7(P)

19. Connected fitting

- (a) Water meter with enclosure
- (b) 200 N.B. Pipe with valve
- Qty of water required per month in 1.65 Crores Liters. 20.
- Minimum guarantee by the consumer (25% of above connected load) 21
  - Tariff Rs.14/- only per 1,000 liters up to 1.65 Crores liters per Month. (125% of monthly demand)
  - Charge for additional quantity......NIL.....per 0.00 gall./lit.(provisional (ii) and subject to revision)
- Building plans in triplicate showing pipeline and all fixtures including index plan 22. showing size of ferrule, meter pipeline and stop cock etc. duly signed by the licensed plumber. Asstt. Engineer.

In within where of the said parties hereunder set & subscribed their respective hands and seals the day and year first above written.

Singed by the consumer

In presence of

21 RAJEEU KUMAR SINHA Pay

Signed for and on behalf of the BIADA. ...

In presence of

OF BUNARO JAYPER CEMENTLIPO

# **Hazardous waste Authorization copy**



### 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

No. of authorization and date of issue: JSPCB/HO/RNC/HWM-9675664/2021/26 09/04/2021

Reference of application(No. and date): 9675664 30/12/2020

 Dalmia Cement (Bharat) Limited of Venkatesan Thyagarajan 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 Distt. Bokaro

#### 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	5.1 Used Oil/Spent oil	Sold to authorised recycler	1.5 KL/Annum
2	5.2 Used Oil Cotton	Sold to authorised recycler	1.0 KL

- (1) The authorisation shall be valid for a period of date of issue to 31.12.2026 years
- (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:

- The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the
  rules made there under.
- The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
- The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
- 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.

- 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.
- 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"
- It is the duty of the authorised person to take prior pennission of the State Pollution Control Board to close down the facility.
- 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.
- 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.
- 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.
- 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 comply the provisions of the Environment Protection Act and Rules.
- (2) That, the authorization shall be produced at the time of inspection.
- (3) That, the occupier authorized shall not rent/sell or otherwise transport the H/W without obtaining prior permission of the Board.
- (4) That, any un-authorization change shall constitute a breach the authorization.
- (5) That, it is the duty of authorized person to take prior permission of the Board to close down the facility.
- (6) That, the renewal of authorization shall be made as laid down in the rules.
- (7) That, any other condition for compliance as per the guidelines issued by the MoEF for CPCB.
- (8) That, the occupier shall submit annual return for the financial year before 30th June, every year.
- (9) That, the occupier shall comply all the conditions.
- (10) That, the occupier shall submit quarterly and annual information on hazardous wastes consumed its source, products generated or resources conserved (specifying the details like type and quantity of resources conserved) to the concerned SPCB.
- (11) That, the occupier shall complied all directions given by standard operating and procedure.

DILIP Digitally signed by DILIP KUMAR Date:
KUMAR 2021-04-09
12:10:28 + 05:30
Dilip Kumar
Environmental Engineer

Memo No:JSPCB/HO/RNC/HWM-9675664/2021/26 Date: 09/04/2021

### Copy To:

Sri Sunil Kumar Gupta, Executive Director (Manufacturing Head East) of M/s Dalmia Cement (Bharat) Limited, At- Plot No. IV/A-A-7(P), Bokaro Industrial Area Development Authority, Bokaro Steel City, Dist- Bokaro / Director of Industry, Government of Jharkhand, Ranchi/ Deputy Commissioner, Bokaro/ Chief Inspector of Factories, Ranchi/ R.O., Dhanbad for information & ensuring compliance of the above.

DILIP

Digitally signed

DILIP Digitally signed by DILIP KUMAR Date: 2021.04.09 KUMAR 12:09:59 +05'30'

Dilip Kumar Environmental Engineer

# **Annexure-5**

# **DALMIA CEMENT BHARAT LIMITED, BOKARO**

# Manual Stack emission monitoring report from April 2024 to September 2024

Month	Min.	Max.	Avg.
April-2024	10.6	20.6	15.3
May-2024	9.7	16.9	12.7
June-2024	6.8	13.5	10.6
July-2024	7.9	21.4	13.2
August-2024	9.5	19.2	11.5
September-2024	8.9	18.5	15.2
Min.	6.8	13.5	10.6
Max.	10.6	21.4	15.3
Avg.	8.9	18.1	13.1

# On Line CEMS report from April 2024 to September 2024

Month	Min.	Max.	Avg.
April-2024	6.4	22.1	15.7
May-2024	9.3	24.3	17.4
June-2024	7.8	15.3	12.1
July-2024	6.8	21.6	16.2
August-2024	8.0	17.5	14.3
September-2024	6.2	20.8	16.2
Min.	6.2	15.3	12.1
Max.	9.3	24.3	17.4
Avg.	7.5	20.2	15.2

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



# Institute for Environmental Management



# Test Report

ULR No.:	T	C	1	1	5	1	5	2	4	0	0	0	0	0	1	4	4	5
Discipline: Chemical Group: Atmosph						heric Pollution Sub-Group: Stack Emission												
Report Issue Date: 27-09-2024								Test Report No.: RN-230308001S1										
Sample ID: 24	0924AF	0400	1						Sam	ple	Desci	riptio	on: Sta	ck Emi	ssion	1		
Challan No./P	.O. No.	: 4548	303207	1/237	7				Cha	llan	No./	P.Ne	. Date	: 26-08	3-2023	3		
Plot	No IV	A-7(P	), Boka	ro Ir	ndust	. (Jhark	a Bali	idih		orks	s)							
Dali Plot Bok	No IV/ aro Ste	A-7(P	), Boka	ro Ir	ndust		a Bali	idih	ı			pre	sentati	ve: Sa	nieev	Verm	9	
Dalı Plot	No IV/ aro Ste try: Cer	A-7(P sel Cit nent	), Boka y, Bok	ro Ir	ndust	rial Are	a Bali	idih	Cus	tom	er Re	- Contract	sentati 4-09-20	-	njeev	Verm	a	
Dali Plot Bok Type of Indus	No IV/ aro Ste try: Cer n by: IE	A-7(P sel Cit nent EM Te	), Boka ty, Bok am	iro Ir aro-8	ndust 82701	rial Are 14 Jhari	a Bali chand	idih India	Cus 5am	tom	er Re	- Contract	were the transfer of	-	njeev	Verm	3	
Dali Plot Bok Type of Indus Sample Draw	No IV/ aro Ste try: Cer n by: IE B Guide	A-7(P pel Cit nent EM Te eline (I	), Boka y, Bok am LATS/80	ro Ir aro-8	13-14	rial Are 14 Jhari	a Bali khand lethod	idih India	Cus 5am	tom plin	er Ro	e: 2	were the transfer of	24		Verm		

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

Flue Gas Temperature (K): 370 Flue Gas Velocity (m/s): 18.6 Flue Gas Volumetric Flow Rate (Nm³/hr):564119.3

SI. NO.	Parameters	Test Methods	Unit	Result	Limits
1.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm <sup>3</sup>	19.4	30.0

D. Cal	ar the	44.6
Dust	Kg/hr	14.6

---End of Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2 <sup>6</sup> C and Relative Humidity 65±5 % in all testing area as per IS 196-1966(C).
Abbreviation	MDL Minimum Detection Limit, BDL Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Reviewed by Authorized Signatory			
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6. In case of feedback/ complaints, please send an email at grill emeco@gmail.com	(Taugeer 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 Manage Ray Director			

Page 1 of 1

Annexure-6

# DALMIA CEMENT BHARAT LIMITED, BOKARO

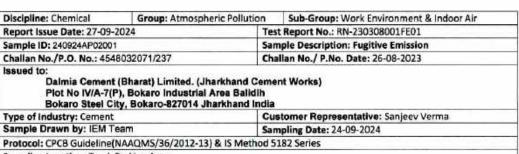
# FUGITIVE DUST EMISSION MONITORING REPORT FROM APRIL 2024 TO SEPTEMBER 2024

Sr. No	Date of monitoring	Near Mill area µg/m3	Near Coal yard µg/m3	Near Packing plant μg/m3	Near raw material yard µg/m3
1	April-2024	901.4	825.7	862.8	781.5
2	May-2024	824.1	729.6	786.4	834.3
3	June-2024	915.9	629.4	809.3	983.7
4	July-2024	732.5	642.2	812.4	756.6
5	August-2024	845.6	762.3	704.7	819.8
6	September-2024	786.4	643.9	769.1	751.3
	Min.	732.5	629.4	704.7	751.3
	Max.	915.9	825.7	862.8	983.7
	Avg.	834.32	705.52	790.78	821.2



Jharkhand State Pollution Control Board, JSPCB & MoEFCC





Sampling Location: Truck Parking Area

Field Meteorological Information A. Temp. (°C): 28 R.H. (%): 69 W.C.: Partly Sunny W.D.: SE to NW

Sample Receiving date: 24-09-2024 Testing Started: 24-09-2024 Testing Ended: 27-09-2024

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

SI. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	µg/m³	2000	1292.9

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

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -Reviewed by thorized Signatory Specific Contractual Notes:

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5. Total leability of Institute for Environmental Management will be limited to involced amount only.

6. In case of feedback/ complaints, please send an email at gm/lemecod@gmail.com Technical Manager

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

Page 1 of arporate office - A-8, Modi Heights, Opp. All India Radio Station, Ratu Road, Ranchi, Jharkhand 834001

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



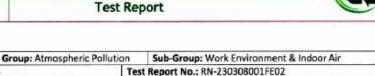
Discipline: Chemical

Report Issue Date: 27-09-2024

# Institute for Environmental Management

Jharkhand State Pollution Control Board, JSPCB & MoEFCC





W.D.: SE to NW

Sample Description: Fugitive Emission

Sample ID: 240924AP02002	Sample Description: Fugitive Emiss
Challan No./P.O. No.: 4548032071/237	Challan No./ P.No. Date: 26-08-20
Issued to: Dalmia Cement (Bharat) Limited. (Jha Plot No IV/A-7(P), Bokaro Industrial A Bokaro Steel City, Bokaro-827014 Jha	rea Balidih arkhand India
Type of Industry: Cement	Customer Representative: Sanjee
MACHINE HOW THAT THE PROPERTY OF THE PROPERTY	

ev Verma Sample Drawn by: IEM Team Sampling Date: 24-09-2024 Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series

Sampling Location: Near Clinker Silo(Raw material yard)

Field Meteorological Information A. Temp. (°C): 28 R.H. (%): 69 W.C.: Partly Sunny

Sample Receiving date: 24-09-2024 Testing Started: 24-09-2024 Testing Ended: 27-09-2024 ----Test Results---

SI. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	µg/m³	2000	1026.4

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

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes thorized Signatory The laboratory accepts responsibility for content of this report. The laboratory accepts responsibility for content of this report.
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 In case of feedback/ complaints, please send an email at gmienteo@gmail.com
 On the basis of Quality Checked and Technical data verified by the Authorized signatury, the report is issued by the Director of the Organization. Dr. S. C. Jain) (Taugeer Ahmao Technical Manager Director



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



### Test Report

Discipline: Chemical Group: Atmospheric Polluti			Ilution	tion Sub-Group: Work Environment & Indoor Air		
Report Issue Date: 27-09-2	2024		Test Report No.: RN-230308001FE03			E03
Sample ID: 240924AP02003			Samp	Sample Description: Fugitive Emission		
Challan No./P.O. No.: 454	8032071/	237	Challan No./ P.No. Date: 26-08-2023			023
Bokaro Steel Ci		o Industrial Area B ro-827014 Jharkha	nd India	amar Bansan	antativa: Canio	an Varma
Bokaro Steel Či Type of Industry: Cement	ty, Bokar		nd India Cust		entative: Sanje	ev Verma
Bokaro Steel Či Type of Industry: Cement Sample Drawn by: IEM Te	ty, Bokar eam	ro-827014 Jharkha	nd India Custo Samp	oling Date: 24		ev Verma
Bokaro Steel Či Type of Industry: Cement Sample Drawn by: IEM To Protocol: CPCB Guideline(I	ty, Bokar eam NAAQMS	ro-827014 Jharkha	nd India Custo Samp	oling Date: 24		ev Verma
Bokaro Steel Či Type of Industry: Cement	eam NAAQMS,	ro-827014 Jharkha	nd India Custo Samp Method 518	oling Date: 24 32 Series		ev Verma  W.D.: SE to NW

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

		1 Con II Courts		14	
SI. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	μg/m³	2000	1180.3

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

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes:

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5. Total liability of institute for Environmental Management will be limited to involced amount only.

6. In case of feedback complaints, piesse send an email at gm\_enco@bmail.com

Con the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Discorr of the Organization. Authorized Signatory (Tauqeer Ahmad) S. C. Jain) Technical Manager Director

Page 1 of 4 porate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001



Accredited by

Jharkhand State Pollution Control Board, JSPCB & MoEFCC



## Test Report

Discipline: Chemical Group: Atmospheric Polluti			llution :	ion Sub-Group: Work Environment & Indoor Air		
Report Issue Date: 27-09-	2024		Test R	Test Report No.: RN-230308001FE04		
Sample ID: 240924AP02004	4		Sampl	Sample Description: Fugitive Emission		
Challan No./P.O. No.: 4548032071/237 Cha			Challa	Challan No./ P.No. Date: 26-08-2023		
Diet No IV//A 7/I						
Bokaro Steel C	ity, Bokar	o Industrial Area B ro-827014 Jharkha	nd India	mer Penra	centative: Sanie	eu Verma
Bokaro Steel C Type of Industry: Cement	ity, Bokai		nd India Custo	The second second second second	sentative: Sanje 4-09-2024	eev Verma
Bokaro Steel C Type of Industry: Cement Sample Drawn by: IEM T	ity, Bokar eam	ro-827014 Jharkha	nd India Custo Sampi	ing Date: 2	Charge process and the second contract of the	ev Verma
Bokaro Steel C Type of Industry: Cement	eam NAAQMS	ro- <b>827014 J</b> harkha /36/2012-13) & IS N	nd India Custo Sampi	ing Date: 2	Charge process and the second contract of the	ev Verma
Bokaro Steel Ci Type of Industry: Cement Sample Drawn by: IEM T Protocol: CPCB Guideline	eam NAAQMS, Packing Pl	ro-827014 Jharkha /36/2012-13) & IS N ant	nd India Custo Sampi Method 518	ing Date: 2 Series	Company of the second company of the second	w.D.: SE to NW

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

I. No.	Parameters	Test Method No.	Unit	Limit	Results
1.	Suspended Perticulate Matter (SPM)	IS 5182 Part - 04	µg/m³	2000	1013.8

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

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -Reviewed by debated Signatory Specific Contractual Notes:

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6. In case of feedback/ complaints, please send an email at <a href="mailto:communication-S.C. Jain) (Taugeer Ahmad) Technical Manager Director

# DALMIA CEMENT BHARAT LIMITED, BOKARO

# AMBIENT AIR QUALITY MONITORING REPORT FROM APRIL 2024 TO SEPTEMBER 2024

Ambient air quality monitoring report: Near Time Office						
	SO2	NOx	PM-10	PM-2.5		
	μg/m3	μg/m3	μg/m3	μg/m3		
April-2024	9.4	21.1	46.6	27.4		
May-2024	8.2	19.55	48.25	25.71		
June-2024	10.3	21.38	50.66	26.6		
July-2024	8.8	19.7	49.2	24.8		
August-2024	6.3	15.1	44.8	20.9		
September-2024	4.2	11.3	41.9	16.7		
Min	4.2	11.3	41.9	16.7		
Max	10.3	21.4	50.7	27.4		
Average	7.8	18.0	46.9	23.7		

Aml	Ambient air quality monitoring report: Near FH 3&4 Building						
	SO2	PM-10	PM-2.5				
	μg/m3	μg/m3	μg/m3	μg/m3			
April-2024	6.5	17.3	45.8	25.78			
May-2024	7.4	15.7	46.7	24.7			
June-2024	8.3	16.1	48.1	27.9			
July-2024	6.7	15.3	47.8	23.6			
August-2024	5.8	12.9	43.1	18.4			
September-2024	4.0	10.4	39.6	15.6			
Min	4.0	10.4	39.6	15.6			
Max	8.3	17.3	48.1	27.9			
Average	6.2	14.4	44.8	22.5			

# JSPCB Norms

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

# **DALMIA CEMENT BHARAT LIMITED, BOKARO**

# AMBIENT AIR QUALITY MONITORING REPORT FROM APRIL 2024 TO SEPTEMBER 2024

Ambient air quality monitoring report: Near Wagon Tippler						
	SO2	NOx	PM-10	PM-2.5		
	μg/m3	μg/m3	μg/m3	μg/m3		
April-2024	15.4	22.2	51.0	28.0		
May-2024	16.6	20.9	52.6	26.9		
June-2024	17.4	22.4	53.1	27.6		
July-2024	11.5	21.2	52.4	26.4		
August-2024	9.7	17.0	48.2	22.5		
September-2024	7.6	13.9	45.4	19.3		
Min	7.6	13.9	45.4	19.3		
Max	17.4	22.4	53.6	28.0		
Average	13.0	19.6	50.5	25.1		

A	Ambient air quality monitoring report: Fabrication yard					
	SO2	NOx	PM-10	PM-2.5		
	μg/m3	μg/m3	μg/m3	μg/m3		
April-2024	13.6	23.0	49.2	26.4		
May-2024	12.0	22.2	50.5	25.2		
June-2024	13.5	24.7	52.7	26.2		
July-2024	10.1	23.4	47.9	27.5		
August-2024	6.8	19.3	45.3	20.0		
September-2024	3.9	13.7	42.6	14.9		
Min	3.9	13.7	42.6	14.9		
Max	13.6	23.7	52.7	27.5		
Average	10.0	21.0	48.1	23.4		

# **JSPCB Norms**

SO <sub>2</sub>	NOx	PM <sub>10</sub>	PM <sub>2.5</sub>
$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$
80	80	100	60





# **Test Report**

ULR No.:	T	C	1	1	5	1 5	2	4	0	0	0	0	0	1	4	3	7
Discipline: C	nemical	-			1	Group: At	mosp	heric Po	llution	1	-J	Sub-G	roup:	Ambi	ent Air		
Report Issue	Date: 2	7-09-2	2024					Test R	eport	No.:	RN-2	303080	01A0	1			
Sample ID: 2	40924AP	01001						Sample	e Des	cripti	on: A	mbien	t Air				
Challan No./	P.O. No.	: 454	803207	1/237				Challa	n No.	P.No	o. Da	te: 26-0	08-202	23			
Pic	t No IV	A-7(F	), Boka	ro In	dust	i. (Jharki trial Area	Balic	lih	Work	s)							
Pic Bo	t No IV	A-7(F	), Boka	ro In	dust		Balic	ih ndia		(U)		ation C	'aniaa	u Mari			
Pic Bo Type of Indu	karo Ste stry: Cer	A-7(Peel Cir ment	), Boka ty, Bok	ro In	dust	trial Area	Balic	ih ndia Custo	mer R	epre	PRODUCTION OF THE PARTY OF	MARKET MARKET	memory of the same	COMMERCIAL SECTION	_		
Pic Bo Type of Indu Sample Draw	karo Ste stry: Cer vn by: I	A-7(Feel Cir ment EM Te	), Boka ty, Boka sam	ro In aro-8	dust 2701	trial Area 14 Jharki	Balic and I	ih ndia Custo Sampli	mer R	epre	PRODUCTION OF THE PARTY OF	MARKET MARKET	memory of the same	COMMERCIAL SECTION	_		
Pic Bo Type of Indu Sample Draw Protocol: CP	karo Ste stry: Cer vn by: It	A-7(Feel Cir ment EM Te	), Boka ty, Boka sam NAAQM	ro In aro-8	dust 2701	trial Area 14 Jharki	Balic and I	ih ndia Custo Sampli	mer R	epre	PRODUCTION OF THE PARTY OF	MARKET MARKET	memory of the same	COMMERCIAL SECTION	_		
Pic Bo Type of Indu Sample Dra	karo Ste stry: Cer vn by: It CB Guide ation: N	A-7(Peel Cir ment EM Te eline(I	), Boka ty, Boka sam NAAQM fain Gat	ro In aro-8 S/36,	2701 2701	trial Area 14 Jharki	Balic and I	ih ndia Custo Sampli	mer R ing Da 2 Serie	epre ite: 2	3-09-	MARKET MARKET	24-0	9-202	_	o SW	

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

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006	µg/m³	100	65.9
2.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 Part 24:2019	µg/m³	60	28.7
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part-02	µg/m³	80	16.0
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part-06	µg/m³	80	27.7
5.	Ammonia (NH <sub>3</sub> )	IS 5182 Part 25	µg/m³	400	40.1
6.	Ozone (O <sub>3</sub> )	IS 5182 Part 09	µg/m³	100	21.2
7.	Arsenic (as As)	USEPA I.O. 3.2	ng/m³	****	BDL (MDL-2)
8.	Lead (as Pb)	IS 5182 Part 22	µg/m³	1.0	0.02
9.	Nickel (as Ni)	IS 5182 Part 26	ng/m³	****	BDL (MDL-4)

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

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

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Reviewed by	Authorized Signatory
T. Ahmad	
(Taugeer Ahmad)	(Dr.S. C. Jain)
Technical Manage	director
	T. Ahmad





# **Test Report**

Discipline: Chemical	pline: Chemical Group: Atmos		on Sub-Grou	p: Ambient Air
Report Issue Date: 27-09-2024	Test Report No.: RN-230308001A01			
Sample ID: 240924AP01001	Sample De	scription: Ambient Air		
Challan No./P.O. No.: 4548032071/	237	Challan No	./ P.No. Date: 26-08-2	023
Dalmia Cement (Bharat) Plot No IV/A-7(P), Bokan Bokaro Steel City, Bokan Type of Industry: Cement	o Industrial Area Ba	alidih nd India	Representative: Sanj	eev Verma
Sample Drawn by: IEM Team		Sampling Date: 23-09-2024 to 24-09-2024		
Protocol: CPCB Guideline(NAAQMS,	/36/2012-13) & IS M	ethod 5182 Ser	ies	70.2010/2 #B67/1042
Sampling Location: Near Main Gate				
Field Meteorological Information	A. Temp. (°C): 26	R.H. (%): 68	W.C.: Semi Cloudy	W.D.: NE to SW
Sample Receiving date: 24-09-2024	ted: 24-09-202	1 Testing Ende	d: 27-09-2024	

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

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m³		BDL (MDL-0.18)
2.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m³		BDL(MDL-1.8)
3.	Benzene (C <sub>8</sub> H <sub>8</sub> )	IS 5182 Part 11	µg/m³		BDL (MDL- 0.06)

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

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

Tested By: Akanksha Sourabh

Sample Drawn By:Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Reviewed by	Authorized Signatory
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In case of feedback/ complaints, please send an email at <u>gm_iemeco@gmail.com</u>	(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
		TRAIN

Page 2 of 2





### Test Report

ULR No.:	T	C	1	1	5	1	5	2	4	0	0	0	0	0	1	4	3	8
Discipline: C	hemical	- Annual Control		-		Group: A	Atmo	sphe	ric Pol	lution	1		Sub-G	roup:	Ambi	ent Air		
Report Issue	Date: 2	7-09-2	2024					1	est Re	port	No.:	RN-2	303080	01A02	2	-		
Sample ID: 2	40924AP	01002				U		5	sample	Des	criptio	on: A	mbient	t Air				
Challan No./	P.O. No	: 454	303207	71/23	7			-	Challar	No.,	P.No	. Da	te: 26-0	08-202	23			
			), Bok	aro I	ndus	l. (Jhark trial Are	a Ba	ildih		, TO, K.	-,							
Во	karo St	el Ci	), Bok	aro I	ndus		a Ba	d Ind	lia			sent	ative: S	aniee	v Verr	ma		_
Bo Type of Indu	karo Sto stry: Ce	el Ĉi ment	), Bok ty, Bol	aro I	ndus	trial Are	a Ba	d Ind	lia Custor	mer R	Repre		ative: S	-	-			_
Bo Type of Indu Sample Drav	karo Sto stry: Cer wn by: I	eel Cit ment EM Te	), Bok ty, Bol eam	aro I karo-	ndus 8270	trial Are 14 Jhark	a Ba chan	alidih d ind	lia Custor Sampli	mer R	Repre			-	-			
	karo Sto stry: Cer wn by: I CB Guide	eel Cit ment EM Te eline(f	), Bok ty, Bol eam	karo-	8270 8270	trial Are 14 Jhark	a Ba chan	alidih d ind	lia Custor Sampli	mer R	Repre			-	-			
Type of Indu Sample Draw Protocol: CP	karo Sto stry: Cer wn by: I CB Guide cation: N	ment EM Te eline(I	eam NAAQN abricat	MS/36	8270 8270 5/201 ard	trial Are 14 Jhark 2-13) &	a Ba chan	ethod	lia Custor Sampli d 5182	mer R ng Da Serie	Repres ate: 2	3-09-		24-0	9-202		o SW	

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

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006	µg/m³	100	64.6
2.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 Part 24:2019	µg/m³	60	32.1
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part-02	µg/m³	80	17.9
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part-06	µg/m³	80	32.6
5.	Ammonia (NH <sub>3</sub> )	IS 5182 Part 25	µg/m³	400	35.7
6.	Ozone (O <sub>3</sub> )	IS 5182 Part 09	µg/m³	100	20.0
7.	Arsenic (as As)	USEPA I.O. 3.2	ng/m³		BDL (MDL-2)
8.	Lead (as Pb)	IS 5182 Part 22	µg/m³	1.0	0.04
9.	Nickel (as Ni)	IS 5182 Part 26	ng/m³		BDL (MDL-4)

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

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

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes 
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# Test Report

Discipline: Chemical	Group: Atmo	ospheric Pollution	Sub-Grou	p: Ambient Air	
Report Issue Date: 27-09-2024		Test Report No.: RN-230308001A02			
Sample ID: 240924AP01002		Sample Des	cription: Ambient Ai		
Challan No./P.O. No.: 4548032071/	237	Challan No.,	P.No. Date: 26-08-2	023	
Plot No IV/A-7(P), Bokar	o industrial Area Bi	alidih			
Bokaro Steel City, Bokar	ro-827014 Jharkhar	-	langanantathya, Faul	A SU Mayere	
Type of Industry: Cement	ro-827014 Jharkhar	Customer F	Representative: Sanj		
Type of Industry: Cement Sample Drawn by: IEM Team		Customer F Sampling Da	ate: 23-09-2024 to 24		
Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline(NAAQMS)	/36/2012-13) & IS M	Customer F Sampling Da	ate: 23-09-2024 to 24		
Type of Industry: Cement Sample Drawn by: IEM Team	/36/2012-13) & IS M	Customer F Sampling Da ethod 5182 Serie	ate: 23-09-2024 to 24		

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

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
13	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m³		BDL (MDL-0.18)
2	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m³	75	BDL(MDL-1.8)
3.	Benzene (C <sub>6</sub> H <sub>6</sub> )	IS 5182 Part 11	µg/m³	100	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:Rajiv Kumar Singh & Team

Reviewed by Authorized Signatory
T. Mhmad
(Taugeer Ahmad) (Dr./S. C. Jain)
Technical Manager 1000 Director

Page 2 of 2





# **Test Report**

ULR No.:	T	C	1	1	5	1 5	2	4	0	0	0	0	0	1	4	3	9
Discipline: C	nemical	1	-			Group: At	nosph	eric Pol	lution	n	S	ub-Gr	oup:	Ambi	ent Air		
Report Issue	Date: 2	7-09-2	024			- 00		Test Re	eport	No.: 1	RN-230	30806	01A0	3			
Sample ID: 2	40924AP	01003						Sample	e Des	criptic	on: Am	bient	Air				
Challan No./	P.O. No.	: 4548	803207	1/237				Challa	n No.,	P.No	Date:	: 26-0	8-202	23			
Plo	t No IV	A-7(P	), Bok	aro In	dus	l. (Jharkh trial Area	Balidi	1	Work	s)							
Ple Bo	t No IV/ karo Ste	A-7(P	), Bok	aro In	dus		Balidil and In	n dia	Internace	(1 <b>1</b> )	sentati	va: 5:	aniee	v Verr	ma		
Plo	t No IV/ karo Ste stry: Cer	A-7(P el Cit nent	), Boki ty, Bok	aro In	dus	trial Area	Balidii and In	n dia Custoi	mer F	Repres	sentati		-	-	-		
Ple Bo Type of Indu Sample Drav	t No IV/ karo Ste stry: Cer vn by: II	A-7(P el Cit nent EM Te	), Boka ty, Bok earn	aro In	dus 270	trial Area 14 Jharkh	Balidii and In	n dia Custoi Sampli	mer F	Repres	s <b>entati</b> 3-09-20		-	-	-		
Pic Bo Type of Indu	t No IV/ karo Ste stry: Cer vn by: II	A-7(P el Cit ment EM Te eline(N	), Bok ty, Bok earn NAAQN	aro In	dus 270	trial Area 14 Jharkh	Balidii and In	n dia Custoi Sampli	mer F	Repres			-	-	-		
Pic Bo Type of Indu Sample Drav Protocol: CP	karo Ste stry: Cer vn by: II CB Guide ation: N	A-7(P el Cit ment EM Te line(N lear C	), Boka ty, Bok earn NAAQN olony	aro In aro-8	/270 /201	trial Area 14 Jharkh	Balidi and In Metho	n dia Custor Sampli d 5182	mer F ing Da	Repres ste: 2:		)24 to	24-0	9-202	-	o SW	

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

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006	µg/m³	100	38.4
2.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 Part 24:2019	µg/m³	60	26.8
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part-02	µg/m³	80	11.7
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part-06	µg/m³	80	26.5
5.	Ammonia (NH <sub>3</sub> )	IS 5182 Part 25	µg/m³	400	43.0
6.	Ozone (O <sub>3</sub> )	IS 5182 Part 09	µg/m³	100	17.9
7.	Arsenic (as As)	USEPA I.O. 3.2	ng/m³		BDL (MDL-2)
8.	Lead (as Pb)	IS 5182 Part 22	µg/m³	1.0	0.03
9.	Nickel (as Ni)	IS 5182 Part 26	ng/m³		BDL (MDL-4)

----End of Report----

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

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Reviewed by	Authorized Signatory
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In case of feedback/ complaints, please send an email at gm iemeco@complaints on	(Taugeer Ahma)	(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

Page 1of 2





### Test Report

Discipline: Chemical	ospheric Pollutio	n Sub-Grou	p: Ambient Air	
Report Issue Date: 27-09-2024	Test Report	No.: RN-230308001/	NO3	
Sample ID: 240924AP01003		Sample Des	cription: Ambient Ai	
Challan No./P.O. No.: 4548032071/	237	Challan No.	/ P.No. Date: 26-08-2	:023
Plot No IV/A-7(P) Bokar	o Industrial Area Ba	alidih		
Plot No IV/A-7(P), Bokan Bokaro Steel City, Bokan Type of Industry: Cement		d India	Representative: Sani	eev Verma
		d India Customer I	Representative: Sanj ate: 23-09-2024 to 24	
Bokaro Steel City, Bokar Type of Industry: Cement Sample Drawn by: IEM Team	ro-827014 Jharkhan	Customer I Sampling D	ate: 23-09-2024 to 24	
Bokaro Steel City, Bokar Type of Industry: Cement	ro-827014 Jharkhan	Customer I Sampling D	ate: 23-09-2024 to 24	
Bokaro Steel Čity, Bokar Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline(NAAQMS,	ro-827014 Jharkhan	Customer I Sampling D	ate: 23-09-2024 to 24	

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

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Benzo (a) Pyrene (BaP) Particulate phase only	IS 5182 Part 12	ng/m³		BDL (MDL-0.18)
2.	Carbon Monoxide (CO)	IEM/SOP/Air-01:2022	mg/m <sup>3</sup>		BDL(MDL-1.8)
3.	Benzene (C <sub>6</sub> H <sub>6</sub> )	IS 5182 Part 11	µg/m³	<u> </u>	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:Rajiv Kumar Singh & Team

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6 In case of feedback/ complaints, please send an email at gm jemeso@gmail.com	(Taugeer Ahmad): \ (Ør. Ş. 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

Page 2 of 2





### **Test Report**

ULR No.:	T	C	1	1	5	1 5	2	4	0	0	0	0	0	1	4	4	0
Discipline: Chemical Group: Atmosp						ospheri	spheric Pollution Sub-Group: Ambient Air										
Report Issue	Date: 27	09-202	4				Te	st Rep	ort N	lo.: RI	V-230	30800	1A04				
Sample ID: 24	0924AP0	1004					Sa	mple l	Descr	iption	: Ami	oient /	Air				
Challan No./	.O. No.:	454803	32071	/237	Y.		C	allan I	No./	P.No.	Date:	26-08	-2023	3			
Plo	No IVIA	-7(P), I	Boka	ro Inc	dustria	Jharkhan al Area B	alidih		orks)								
Plo Bol	t No IV/A	-7(P), I	Boka	ro Inc	dustria		alidih nd Indi:	ı			entativ	/e: 5a	nieev	Verm	a		
Plo	t No IV/A aro Stee try: Cem	-7(P), I ol City, ent	Boka Boka	ro Inc	dustria	al Area B	alidih nd India C	a ustom	er Re	prese		20000					
Plo Bol Type of Indus	t No IV/A caro Stee stry: Cem in by: IE	-7(P), I of City, ent M Tean	Boka Boka n	ro Inc	dustria 27014	al Area B Jharkhar	alidih nd India Ca Sa	ustom	er Re	prese e: 23-		20000					
Plo Boi Type of Indu: Sample Drav	t No IV/A caro Stee stry: Cem in by: IE B Guidel	-7(P), I of City, ent M Tean ine(NA/	Boka Boka n AQM:	ro Inc 10-82 5/36/	27014 27012-1	al Area B Jharkhar	alidih nd India Ca Sa	ustom	er Re	prese e: 23-		20000					
Pio Boi Type of Indus Sample Drav Protocol: CPO	t No IV/A caro Stee stry: Cem in by: IE B Guidel ation: No	i-7(P), I ol City, ent M Team ine(NA/ ear Wag	Boka Boka n AQMS	ro Inc iro-82 5/36/ ippler	27014 27014	al Area B Jharkhar	alidih nd India Ca Sa lethod	ustom	er Re g Dat eries	prese e: 23-		24 to	24-09	-2024		w	

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

SI. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006	µg/m³	100	65.1
2.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 Part 24:2019	µg/m³	60	27.9
3.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part-02	µg/m³	80	14.6
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part-06	µg/m³	80	28.8
5.	Ammonia (NH <sub>3</sub> )	IS 5182 Part 25	µg/m³	400	34.2
6.	Ozone (O <sub>3</sub> )	IS 5182 Part 09	µg/m³	100	29.1
7.	Arsenic (as As)	USEPA I.O. 3.2	ng/m³		BDL (MDL-2)
8.	Lead (as Pb)	IS 5182 Part 22	µg/m³	1.0	0.03
9.	Nickel (as Ni)	IS 5182 Part 26	ng/m³		BDL (MDL-4)

----End of Report----

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

Tested By: Akanksha Sourabh

Sample Drawn By: Rajiv Kumar Singh & Team

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Technical Manager.

Page 1of 2





### Test Report

Discipline: Chemical	spheric Polluti	ion Sub-Group	: Ambient Air		
Report Issue Date: 27-09-2024	Test Report No.: RN-230308001A04				
Sample ID: 240924AP01004		Sample D	escription: Ambient Air		
Challan No./P.O. No.: 4548032071/	237	Challan N	o./ P.No. Date: 26-08-20	)23	
Plot No IV/A-7(P), Bokar Bokaro Steel City, Bokar Type of Industry: Cement		d India	r Representative: Sanje	ev Verma	
Sample Drawn by: IEM Team		Sampling Date: 23-09-2024 to 24-09-2024			
Protocol: CPCB Guideline(NAAQMS	/36/2012-13) & IS M	The second second second second second			
Sampling Location: Near Wagon Tip	pler				
Field Meteorological Information	A. Temp. (°C): 26	R.H. (%): 68	W.C.: Semi Cloudy	MAN ME - CIA	
rield Meteorological Information	Hi remp.   Ch. Lo	1411 11 Cal- OO	Taren semi cloudy	W.D.: NE to SW	

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

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

----End of Report----

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

Tested By: Akanksha Sourabh

Sample Drawn By:Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Reviewed by Authorized Signatory
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In case of feedback/ complaints, please send an email at cm_iemeco@gmail.com	(Taugeer Ahmata) (De 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

Page 2 of 2

Annrexure-8

# List of air pollution control device installed in plant

	Dalmia Cemen	t (Bharat) Limit	ed, Bokaro		
Sl. No.	Location	Equipment No.	Capacity in m <sup>3</sup> /hr	No. of Bags	Standard
1	Cement Sillo Top	591 BF1	7500	64	
2	Cement Sillo Top	591 BF2	7500	64	]
3	Cement Sillo Top	591 BF3	7500	64	]
4	C.S.Bin Dedusting	611BF1	3664	25	]
5	C.S.Bin Dedusting	611BF2	3664	25	
6	C.S.Bin Dedusting	611BF3	3664	25	
7	Nuisance Dedusting	611BF4	18000	144	]
8	Packing Plant	641BF1	34000	256	]
9	Packing Plant	641BF2	16000	121	]
10	Packing Plant	642BF1	34000	256	
11	Packing Plant	642BF2	16000	121	]
12	Reclaiming Tunnel For Slag & Gypsum Conv.	K91 BF1	12500	100	30 mg/Nm³ ( New CPCB norms for Stack emission)
13	Clinker Silo Bottom	511BF2	9000	72	k e
14	Clinker Silo Bottom	511 BF1	9000	72	[ac]
15	Cement Mill Hopper	K91 BF2	12500	100	. S
16	Coal Crusher	L31 BF1	5000	60	]
17	FBC	L32 BF1	5000	60	] E
18	Bag House-1	521BF7	16000	121	]   Jor
19	Bag House-2	522 BF7	3664	25	$\frac{1}{8}$
20	Bag House - 1	521 BF6	714240	5632	
21	Bag House - 2	522 BF6	714240	5632	$^{\prime}$ C
22	C. Mill Hopper Top	511 BF3	9000	72	] e
23	C. Mill Hopper Bottom	521 BF1	14880	100	
24	C. Mill Hopper Bottom	521 BF2	13680	100	m <sub>3</sub>
25	Cement Mill - 1	521 BF4	15540	121	
26	Reject Building	521 BF5	7500	64	] <b>i</b> i
27	Cement Mill - 2	522 BF4	15540	121	30
28	Reject Building	522 BF5	7500	64	
29	Transfer Point Dedusting In Hopper Building	522 BF1	14880	100	
30	Transfer Point Dedusting In Hopper Building	522 BF2	13680	100	
31	Transfer Tower-1	491 BF1	9000	72	1
32	Clinker Sillo Top	491 BF2	9000	72	_
33	Packing Plant	643 BF-1	40000	308	_
34	Packing Plant	643 BF-2	20000	154	1
35	Outside Cement Silo	643 BF-3	7500	57	

# **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. Dalmia cement (Bharat) Limited will comply with all the Stipulated standards given by MoEF&CC/JSPCB. Company has ensured installation 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 dedusting/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/Nm <sub>3</sub> .	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 clinckerisation. Hence, this condition is not applicable.
5	CPCB and NCBM will evolve SO <sub>2</sub> 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; this condition is not applicable.

7	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/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.  Not Applicable
,	jointly prepare the policy on use of petroleum coke as fuel in cement kiln by July 2003.	
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 are being regularly 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; Stand-alone Grinding Unit. high efficiency Bag House provided in Cement Mill
10	Industries will submit the target date to enhance the utilization of waste material by April 2003.	After expansion, our GU 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-10**

All Plant Internal roads are concreted and cleaned by vacuum road swapping machine













# Log book of running hours of road swapping machine

### 24 9124 23 9124 23/5/24 Date From (Hours) (3) € ( Period of use िमत व 19145 F 0 89 13 17114 C.C. K (Hours) 132 70 पेकिन ट्लान्ट while it mencement of the trip 1311-5 19145 0 At the com-ROOU 158 Reading of Meter भोषील चार्ज D'E At the conclision of the trip 180 C 1913.2 427 -3 -2 1994 hoten 4.1 Distance covered me

# DALMIA CEMENT

Plot No. IV/A-7(P), Bokaro Industrial
FORM No. B
REGISTER IN RESPECT OF MOTOR CAR
PURPOSE OF THE

# (BHARAT) LIMITED

Area, Balidih, B. S. City - 14 (Jharkhand)

(See Rule 6 D)
OR OTHER CONVEYANCE USED FOR THE
BUSINESS OR PROFESSION

	27/9 PM B		2619124 (1)		25/9124 (9)	Name and designation of the person using the conveyance
	194.8	P&0 वे केड केनरीन वे डीज	19159	वर्ष हुआ	85161	Place visited and purpose of visit
वभी कुई	1917-3	या । ल पम्प रो	89161	(41)	12153	Signature of the person using the conveyance
(%)	20.5	6	1		3	Z.

# Log book of running hours of road swapping machine

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Distance covered

Period of use

Reading of Meter

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Party.

# DALMIA CEMENT

REGISTER IN RESPECT OF MOTOR CAR PURPOSE OF THE

# Plot No. IV/A-7(P), Bokaro industrial

		å	Plaholusto	-	RESET NO S			30/9/24 @			1919124 जि	Name and designation of the person using the conveyance
		14	36/9.20	(la	3672219	C.C. A Koul	080 Kone	1924.5	<u>4</u> ,9	THAT OF COURT	19213	Place visited and purpose of visit
3	/w/k	13	1	Reading - 1	+CSH	College Co		1.325.1		100	19243	Signature of the person using the conveyance
2000	7000	2.451	16.3 H	1925	40	6	ST.	9.0	95/		ü	Rem

# (BHARAT) LIMITED

Aroa, Balldih, B. S. City - 14 (Jharkhand)

**BUSINESS OR PROFESSION** OR OTHER CONVEYANCE USED FOR THE (See Rule 6 D)

Annexure-11
GROUND WATER LEVEL REPORT OF SURROUNDING VILLAGES FROM APRIL 2024 TO SEPTEMBER 2024

	Coordinate of							
Location	Site						_	Septem
		Mont	April-	May-	June-	July-	August-	ber-
		h	2024.	2024.	2024.	2024.	2024	2024.
Pakhriatand								
(Near	23070'5590"N							7.2
Anganwadi)	86006'2678" E	1	23.9	25.7	24.9	23.4	12.3	
Tupkadi (Near	23071'3362"N							7.5
Electric Pole)	86006'1573" E	1	12.8	23.9	22.8	21.2	11.8	
Godawali	23068'7751"N							1.6
(Near Temple)	86006'0031" E	1	12.3	14.7	14.3	12.3	2.9	
Bhutkuru			•					
(Near primary	23070'4642"N							
School)	86005'1418" E	1	20.2	22.6	21.8	20.5	13.6	9.0





# Test Report

ULR No.:	T	C	1	1	5	1 5	2	4	0	0	0	0	0	1	4	5	2
Discipline: Chemical Group: Water									Sub-Group: Ground Water								
Report Issue Date: 27-09-2024									Test Report No.: RN-230308001GW1								
Sample ID: 2	0924W	A020	01					Sai	mple	Descr	riptio	n: Gro	und V	Vater	(Dug v	well)	
Challan No./	O. No	: 454	80320	1/23	7			Ch	allan	No./	P.No.	Date:	26-08	3-2023	3		
PI	ot No IV	/A-7(	P), Bo	karo	Indus	d. (Jhark trial Are	Balidi	h	Wor	ks)							
Ple Bo	ot No IV karo St	/A-7( eel C	P), Bo	karo	Indus		Balidi	h dia			nros	ontatio	va: Sa	niesv	Verm	•	
Ple Bo Type of Indus	ot No IV karo St try: Cer	/A-7( eel C nent	P), Bo Ity, Bo	karo	Indus	trial Are	Balidi	h dia Cu	ston	ner Re	***	entati	200000000000000000000000000000000000000	njeev	Verm	a	
Ple Bo	ot No IV karo St stry: Cer in by: I	/A-7( eel C nent EM Te	P), Bo Ity, Bo eam	karo karo	Indus -8270	trial Are 14 Jhark	Balidi	h dia Cu	ston	ner Re	***	entati -09-20	200000000000000000000000000000000000000	njeev	Verm	a	
Ple Bo Type of Indus Sample Draw Protocol: CPC	karo St karo St try: Cer in by: I B Guide	IA-7( eel C nent EM Te line8	P), Bo ity, Bo sam als Me	karo karo	Indus -8270	trial Are 14 Jhark	Balidi	h dia Cu	ston	ner Re	***		200000000000000000000000000000000000000	njeev	Verm	a	
Ple Bo Type of Indus Sample Drav	ot No IV karo St stry: Cer vn by: II B Guide ation: B	IA-7( eel C nent EM Te line8 hutki	P), Bo Ity, Bo eam a IS Me	karo karo thod	1ndus -8270 3025	trial Are 14 Jhark	a Balidi hand In	h dia Cu	ston	ner Re	e: 24	-09-20	24		Verm		

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

SI.	Touted December	Unit	Mathed No.	Li	mit	Results
No.	Tested Parameter	Unit	Method No.	Acceptable	Permissible	Results
1.	pH value at 25°C		IS 3025 (Part-11)	6.5 - 8.5	No Relaxation	7.1
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	198
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	72
8.	Total Hardness (as CaCO3)	mg/l	IS 3025 (Part-21)	200	600	144
9.	Chloride (as Cl)	mg/l	IS 3025 (Part-32)	250	1000	23
10.	Free Residual Chlorine	mg/l	IS 3025 (Part-26)	0.2	1.0	BDL(MDL-0.07)
11.	Sulphate (as SO <sub>4</sub> <sup>-2</sup> )	mg/l	IS 3025 (Part-24)	200	400	24
12.	Magnesium (as Mg+2)	mg/l	IS 3025 (Part-46)	30	100	17

----END Report----

No. of the second	Lito Report
Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2021
Remark	Sample Comply with prescribed specification.

Tested By: Mahendranath Mahto

Sample Drawn By: Rajiv Kumar Singh & Team

	The state of the s
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In case of feedback/ complaints, please send an email at gm.jemeco@gmail.com	(Taugeer Ahmad) (Dr. S. C. Jain)
On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report	Technical Manager * Par Director

Page 1 of 2

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

Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India
Ph - 8407804253, 8407804251, Email - icm2012@rediffmail.com





# Test Report

Discipline: Chemical	Group: V	Vater	Sub-Grou	ip: Ground Water			
Report Issue Date: 27-09-2024	A.11.00.00.00.00.00	Test	Test Report No.: RN-230308001GW1				
Sample ID: 240924RC02001 & 240	924M802001	Samp	Sample Description: Ground Water (Dug well)				
Challan No./P.O. No.: 4548032071	/237	Chall	an No./ P.No. Date:	26-08-2023			
Dalmia Cement (Bhara			OIKS)				
Plot No IV/A-7(P), Boka Bokaro Steel City, Boka		and India	omer Benresentativ	e: Sanjeev Verma			
Bokaro Steel City, Bok Type of Industry: Cement		and India Cust	omer Representativ				
Bokaro Steel City, Bok Type of Industry: Cement Sample Drawn by: IEM Team	aro-827014 Jharkh	and India Cust	omer Representativ				
Bokaro Steel City, Bok	aro-827014 Jharkh	and India Cust	Manager and Appendix at 10 th at the Control				
Bokaro Steel City, Bok Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline& IS Meth	aro- <b>827014 Jharkh</b> nod 3025 Series	and India Cust Samp	Manager and Appendix at 10 th at the Control	24			

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

SI. No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Copper	mg/l	APHA 3111 B.2017	0.5-1.5	BDL (MDL - 0.02)
2.	Chromium	mg/l	APHA 3111 B.2017	0.05 - No Relaxation	BDL (MDL ~ 0.02)
3.	Lead (Pb)	mg/l	APHA 3111 B.2017	0.01 - No Relaxation	BDL (MDL - 0.02)
4.	Manganese (Mn)	mg/l	APHA 3111 B.2017	0.1 - 0.3	BDL (MDL - 0.02)
5.	Total Coliform	MPN/100 mL	IS 1622: 1981	Shall not be	BDL (MDL-1.8)
6.	E. Coli	MPN/100 mL	IS 1622: 1981	detectable in any 100 - ml sample	BDL (MDL-1.8)

----End Report----

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

Tested By: Mahendranath Mahto

Sample Drawn By: Rajiv Kumar Singh & Team

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In case of feedback/ compleints, please send an email at <u>gm ismeco@gmail.com</u> The basis of Quelly Checked and Technical data verified by the Authorized signalory, the report.	(Tauqeer Ahmad) * (Dr. S. C. Jain)
is issued by the Director of the Organization.	Technical Manager Director

Page 2 of 2





# **Test Report**

ULR No.:	T	C	1	1	5	1 5	2	4	0	0	0	0	0	1	4	5	3
Discipline: C	hemical	MI-AI		-		Group:	Water	1,,,		12.5	Sub	-Gro	up: G	round	Wate	r	
Report Issue	Date: 2	7-09-2	2024					Te	st Re	port N	o.: RN	-2303	30800	1GW	2		
Sample ID: 2	40924W	A020	02					Sar	mple	Descr	iption:	Gro	und W	Vater	(Dug v	vell)	
Challan No./	P.O. No	: 454	803207	/237				Ch	allan	No./	P.No. D	ate:	26-08	3-2023	3		
Type of Indu	www.combonsen.com	- Contract of the local division in the loca	ity, Bol	aro-8	270	14 Jharki	and Ir	-	ston	ner Re	prese	ntativ	ve: Sa	njeev	Verm	a	
NAME OF TAXABLE PARTY.	www.combonsen.com	- Contract of the local division in the loca						-	ston	ner Re	prese	ntativ	ve: Sa	njeev	Verm	a	
Sample Drav	wn by:∣	EM Te	eam					Sar	mpli	ng Dat	e: 24-0	9-20	24				
The state of the s	CD Could	line &	IS Met	nod 3	25	Series											
	CB Guide	-111100		F-100 ALICE ST.													
Protocol: CP		-					also below										
Protocol: CP	cation: P	akhari	iya Tand	A. 1	em	p. (°C): 28	R.H.	(%): 6	9	W.C.: 1	Partly 9	unny	/ V	v.D.:	SE to I	w	
Protocol: CP Sampling Loc	cation: P rological	akhari Infor	iya Tand mation	-	_					_	-		-	-	SE to 1		

SI.	Tested Parameter	Unit	Method No.	Li	mit	Results
No.	rested Parameter	Onit	Method No.	Acceptable	Permissible	Keanita
1.	pH value at 25°C		IS 3025 (Part-11)	6.5 - 8.5	No Relaxation	6.9
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	188
6	Calcium (as Ca+2)	mg/l	IS 3025 (Part-40)	75	200	21.6
7.	Total Alkalinity (as CaCO3)	mg/l	IS 3025 (Part-23)	200	600	80
8.	Total Hardness (as CaCO3)	mg/l	IS 3025 (Part-21)	200	600	118
9.	Chloride (as Cl)	mg/l	IS 3025 (Part-32)	250	1000	15
10.	Free Residual Chlorine	mg/l	IS 3025 (Part-26)	0.2	1.0	BDL(MDL 0.07)
11.	Sulphate (as SO <sub>4</sub> <sup>2</sup> )	mg/l	IS 3025 (Part-24)	200	400	14
12.	Magnesium (as Mg+2)	mg/l	IS 3025 (Part-46)	30	100	15.6

---END Report----

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

Tested By: Mahendranath Mahto

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Reviewed by	Authorized Signatory
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In case of feedback/ complaints, please send an email at gm/emeco@gmail.com     On the basis of Quality Checked and Technical data verified by the Authorized signatury, the report	11.01	1311
is issued by the Director of the Organization.	Technical Manager	Director
Page 1 of 3	Manc	n //

Page 1 of 2





### **Test Report**

Discipline: Chemical	Group: V	Vater	Sub-Group	: Ground Water
Report Issue Date: 27-09-2024		Test	Report No.: RN-23030	8001GW2
Sample ID: 240924RC02002 & 244	0924MB02002	Samp	le Description: Groun	d Water (Dug well)
Challan No./P.O. No.: 454803207	1/237	Chall	an No./ P.No. Date: 20	5-08-2023
Plot No IV/A-7/P) Bol	aro Industrial Area	Ralidih	orks)	
Plot No IV/A-7(P), Bol Bokaro Steel City, Bo			#190007 <b>5</b> 11	
Bokaro Steel City, Bo Type of Industry: Cement		and India	omer Representative	: Sanjeev Verma
Bokaro Steel City, Bo		and India Custo	N. S. C.	
Bokaro Steel City, Bo Type of Industry: Cement	karo-827014 Jharkh	and India Custo	omer Representative	
Bokaro Steel City, Bo Type of Industry: Cement Sample Drawn by: IEM Team	karo-827014 Jharkh thod 3025 Series	and India Custo	omer Representative	
Bokaro Steel City, Bo Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline& IS Met	karo-827014 Jharkh thod 3025 Series	and India Custo Samp	omer Representative ling Date: 24-09-2024	

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

SI. No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Copper	mg/l	APHA 3111 B.2017	0.5-1.5	BDL (MDL - 0.02)
2.	Chromium	mg/l	APHA 3111 B.2017	0.05 - No Relaxation	BDL (MDL - 0.02)
3.	Lead (Pb)	mg/l	APHA 3111 B.2017	0.01 - No Relaxation	BDL (MDL - 0.02)
4.	Manganese (Mn)	mg/l	APHA 3111 B.2017	0.1 - 0.3	BDL (MDL - 0.02)
5.	Total Coliform	MPN/100 mL	// IS 1622: 1981	Shall not be	BDL (MDL-1.8)
6.	E. Coli	MPN/100 mL	IS 1622; 1981	ml sample	BDL (MDL-1.8)

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

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

Tested By: Mahendranath Mahto

Sample Drawn By: Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Reviewed by Authorized Signatory
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Total liability of Institute for Environmental Management will be limited to invoiced amount only.     In case of feedback/ complaints, please send an email at gm iemeco@gmail.com	(Taugeer Ahmas) / (Dr. S. C. Jain)
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Page 2 of 2

# STP Inlet water quality analysis report



# Institute for Environmental Management



### Test Report

ULR No.:	T	C	1	1	5	1	5	2	4	0	0	0	0	0	1	4	3	- 5
Discipline: Ch	emical			G	roup:	Pollut	ion &	Envir	onme	nt	-0.010	5u	b-Gro	up: V	Vaste	Water		
Report Issue	Date: 27	-09-2	024	2.206-2	1 25 Mily 2		20-25-0	-28-00	Tes	t Rep	ort No	.: RN	2303	08001	wwo	1		
Sample ID: 24	10924PE	0100	1						San	nple I	Descri	ption:	Wast	e Wat	ter (S	TP)		
Challan No./I	.O. No.:	4548	03207	1/237	9)				Cha	allan I	No./P	No. E	ate:	26-08-	2023	VC -070		
	itmia Ce okaro St									aro in	dustr	ial Ar	ea Ba	lidih				
В	okaro St	eel C						nd in	iia						v Var	ma		
Type of Indus	okaro St stry: Cen	eel Ci ent	ty, Bo					nd in	dia Custo	mer F	tepre	sentat	ive: S		v Verr	na		
Type of Indus Sample Draw	okaro St stry: Cen n by: IEI	eel Ci ent Vi Tea	ity, Bo	karo-	8270	14 Jh.	arkha	nd in	dia Custo	mer F	tepre		ive: S		v Veri	ma		
В	okaro St stry: Cen in by: IEI :B Guide	eel Ci ent Vi Tea line &	m IS Me	thod	8270 3025	14 Jh. Part-0	arkha	nd in	dia Custo	mer F	tepre	sentat	ive: S		v Veri	na		
Type of Indus Sample Draw Protocol: CPC	okaro St stry: Cen on by: IEI S Guide ation: N	eel Ci nent M Tes line & EAR S	m IS Me	thod	8270 3025 NLET)	14 Jh	arkha 1	nd ind	dia Custo	mer F	tepre	sentat 1-09-2	ive: 5 024	anjee		na -2024		

SI. No.	Tested Parameters	Unit	Method No.	Norms**	Results
1.	pH value at 25°C	1940	IS 3025 (Part-11)	5.5 to 9.0	6.6
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	134
3.	Biochemical Oxygen Demand (BOD)	mg/l	IS 3025 (Part-44)	30	42
4.	Chemical Oxygen Demand (COD)	mg/l	IS 3025 (Part-58)	250	256

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	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Mahendranath Mahto

Sample Drawn By: Shashi Singh & team

Specific Contractual Notes: -	Reviewed by Authorized Signatory
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# **Test Report**

Discipline: Chemical	Gr	oup: Pollution & Environment	Sub-Group: Waste Wate			
Report Issue Date: 27-09-202	24	Test Re	Test Report No.; RN-230308001WW01			
Sample ID: 240924PE01001		Sample	Description: Waste Water (STP)			
Challan No./P.O. No.: 454803	32071/237	Challar	No./ P.No. Date: 26-08-2023			
		ited, Plot No IV/A-7(P), Bokaro				
		827014 Jharkhand India				
Type of Industry: Cement	, Bokaro-	827014 Jharkhand India Customer	Representative: Sanjeev Verma			
Type of Industry: Cement Sample Drawn by: IEM Team	, Bokaro-I	827014 Jharkhand India  Customer  Sampling				
Type of Industry: Cement	, Bokaro-l i 5 Method 3	827014 Jharkhand India Customer Sampling 1	Representative: Sanjeev Verma			
Type of Industry: Cement Sample Drawn by: IEM Team Protocol: CPCB Guideline & IS	, Bokaro-i i 5 Method 3 P PLANT (II	827014 Jharkhand India Customer Sampling 1	Representative: Sanjeev Verma Date: 24-09-2024			

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

Abbreviation MDL: Minimum Detection Limit, BDL: Below Detection Limit	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).
Norms** is Specified	Abbreviation	
	Norms** is Specified	**
Remark	Remark	H-1

Tested By: Mahendranath Mahto

Sample Drawn By: Shashi Singh & team

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Page 2 of 2

# STP Outlet water quality analysis report



# Institute for Environmental Management



### **Test Report**

ULR No.:	T	C	1	1 5	1	5	2	4	0	0	0	0	0	1	4	3	6
Discipline: Ch	emical			Grou	p: Poll	ution 8	Envir	onme	nt		St	ıb-Gro	up: V	Vaste	Wate	r	1.5
Report Issue Date: 27-09-2024						Tes	st Rep	ort N	lo.: RN	1-2303	0800	LWWC	)2				
Sample ID: 24	10924PE	0100	2					Sar	mple I	Descr	iption	: Was	te Wa	ter (S	TP)		
Challan No./	.O. No.:	4548	032071	/237				Ch	allan I	No./	P.No.	Date:	26-08	-2023	0		
Type of Indus	karo St		ity, Box	caro-82	/014 JI	narkha			mer F	Repre	senta	tive:	Saniee	v Ver	ma	-	_
CONTRACTOR OF STREET							Customer Representative: Sanjeev Verma Sampling Date: 15-06-2024										
Protocol: CPC	B Gulde	line &	IS Met	hod 302	5 Part-	01		-									
Sampling Loc	ation: N	EAR S	TP PLA	NT (OU	TLET)												
Sample Recei	ulan dat	a. 24	00.202	4	Tooti	ng Sta	about a f	4.00	2024		T	ting E		27 00	2024		

-—Test Result								
SI. No.	Tested Parameters	Unit	Method No.	Norms**	Results			
1.	pH value at 25°C		IS 3025 (Part-11)	5.5 to 9.0	7.8			
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	31			
3.	Biochemical Oxygen Demand (BOD)	mg/l	IS 3025 (Part-44)	30	12			
- 4	Chemical Owner Demand (COD)	mall	IS 2025 (Bart 59)	350	63			

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

Tested By: Mahendranath Mahto

Sample Drawn By: Shashi Singh & team

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Page 1 of 2





# **Test Report**

Discipline: Chemical	Gr	oup: Pollution & Environmen	nt	Sub-Group: Waste Water		
Report Issue Date: 27-09-2024	4	Tes	Test Report No.: RN-230308001WW02			
Sample ID: 240924PE01002		Sar	nple Descr	ription: Waste Water (STP)		
Challan No./P.O. No.: 454803	2071/237	Cha	ilan No./	P.No. Date: 26-08-2023		
		ited, Plot No IV/A-7(P), Bok 827014 Jharkhand India	aro Indust	trial Area Balidih		
Bokaro Steel City,		827014 Jharkhand India				
Bokaro Steel City, Type of Industry: Cement	, Bokaro-l	827014 Jharkhand India Custo	mer Repre	esentative: Sanjeev Verma		
Bokaro Steel City, Type of Industry: Cement Sample Drawn by: IEM Team	, Bokaro-l	827014 Jharkhand India Custo Sampli	mer Repre			
Bokaro Steel City, Type of Industry: Cement	, Bokaro-i	827014 Jharkhand India Custor Sampli 8025 Part-01	mer Repre	esentative: Sanjeev Verma		

		- I dat i	/astili		
SI. No.	Tested Parameters	Unit	Method No.	Norms**	Results
5.	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(C).
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: Mahendranath Mahto

Sample Drawn By: Shashi Singh & team

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# DALMIA CEMENT BHARAT LIMITED, BOKARO

### RAIN WATER HARVESTING SYSTEM

Roof top Rain Water Harvesting System have installed in CCR, Raw Material Hopper Building, Cement Mill, Bag House & Packing Plant Building in our plant area. Rain water collected from roof top through gutter and carrying by pipe lines in recharge tranches. Recharge Pits are also connected with recharge trench. 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. Rain water easily percolated and recharges ground water level. Inspection of Rain water Harvesting System has done by Regional Officer, JSPCB, and Ranchi on 30.05.2013 and approved from Ground Water Board, Ranchi vide latter no. GWD 320/ Ranchi Dated:06.09.2013



RAINWATER HARVESTING SYSTEM DISPLAY INSIDE THE PLANT



Rain water harvesting recharge pit constructed in railway siding & Cement mill area



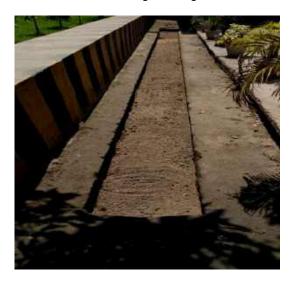


Rain water harvesting recharge pit near FH3 Hostel & Rain water recharge trench In-front of CCR main building





Rainwater harvesting recharge trench near bag house and near cement mill 2 area





Rainwater harvesting recharge trench near CCR building & near E type quarter

Wells renovation done by Dalmia Cement (Bharat) Limited near surrounding village area







Pond renovation near surrounding village area by DCBL Bokaro to conserve the rain water

# Annerxure-14

# DALMIA CEMENT BHARAT LIMITED, BOKARO

Water Flow meter installed at the main gate of the factory



# **Annexure-15**

# DALMIA CEMENT BHARAT LIMITED, BOKARO NOISE LEVEL REPORT FROM APRIL 2024 TO SEPTEMBER 2024

Near Time office									
	Day Time dB(A)				Night Time dB(A)				
	Min.	Max.	Avg.		Min.	Max.	Avg.		
Apri-2024	60.9	65.5	63.2		57.1	61.5	59.3		
May-2024	58.5	64.3	61.4		54.3	63.3	58.8		
Jun-2024	61.4	66.1	63.7		55.6	59.5	57.6		
July-2024	60.2	63.7	61.9		52.9	58.7	55.8		
Aug-2024	52.6	60.1	56.4		45.3	51.7	48.5		
Sep-2024	47.8	55.3	51.6		37.6	45.8	41.7		

Near FH-3 Building								
	Day Time dB(A)				Night Time dB(A)			
	Min.	Max.	Avg.		Min.	Max.	Avg.	
Apri-2024	39.6	44.3	41.9		38.7	43.2	41.0	
May-2024	40.9	45.4	43.15		48.6	44.3	46.5	
Jun-2024	42.2	48.9	45.55		37.5	41.4	39.4	
July-2024	40.3	45.6	42.95		32.3	38.7	35.5	
Aug-2024	38.4	42.8	40.6		35.6	39.5	37.6	
Sep-2024	45.2	51.2	48.2		36.7	46.7	41.7	

# DALMIA CEMENT BHARAT LIMITED, BOKARO

# NOISE LEVEL REPORT FROM APRIL 2024 TO SEPTEMBER 2024

Wagon Tippler								
	Day Time dB(A)				Night Time dB(A)			
	Min.	Max.	Avg.		Min.	Max.	Avg.	
Apri-2024	61.4	68.7	65.1		54.3	61.5	57.9	
May-2024	63.2	66.7	64.9		56.4	63.2	59.8	
Jun-2024	59.6	67.8	63.7		53.5	62.9	58.2	
July-2024	60.9	65.2	62.8		50.3	60.4	55.4	
Aug-2024	54.7	58.9	56.8		44.1	52.9	48.5	
Sep-2024	47.5	54.2	50.9		40.1	48.7	44.4	

Near Fabrication yard									
	Day Time dB(A)				Night Time dB(A)				
	Min.	Max.	Avg.		Min.	Max.	Avg.		
Apri-2024	59.1	64.5	61.8		42.1	61.3	51.7		
May-2024	56.3	63.5	59.9		51.4	58.5	55.0		
Jun-2024	60.5	65.7	63.1		54.5	59.3	56.9		
July-2024	58.8	64.9	61.9		50.6	56.9	53.8		
Aug-2024	47.5	57.2	52.3		41.5	45.7	43.6		
Sep-2024	48.2	59.1	53.7		46.2	49.6	47.9		





#### **Test Report**

ULR No.:	T	C 1	1	5	1	5	2	4	0	0	0	0	0	1	4	4	1
Discipline: C	hemical		Group:	Atm	ospheric	Pollu	tion	Sub	Grou	up: Am	bient	Noise	Level	s (Exc	luding	Vibra	tion)
Report Issue	Date: 2	7-09-202	24					Test	Rep	ort No	.: RN-	23030	8001	N1			
Sample ID: 2	40924A	203001						Sam	ple [	Descri	otion:	Ambie	ent No	oise			
Challan No./	P.O. No.	: 454803	2071/2	237				Cha	lan f	No./ P	No. D	ate: 2	6-08-2	2023			
Bo	STATE OF THE PARTY	el City,	Bokar	o-827	014 Jha	ırkhai	nd Inc	1	tome	er Rep	resen	tative	: Sanj	eev V	erma		
Type of Industry: Cement								Customer Representative: Sanjeev Verma Sampling Date:23-09-2024 to 24-09-2024									
and the second second second second		all the first of the last of t		_				£	-11		22 00	2024	4- 74	00 3	200		_
Sample Dra	wn by: I	EM Team						Sam	pling	Date	:23-09	-2024	to 24	-09-2	024		
and the second second second second second	wn by: I	EM Team		od 99	89:1981			Sam	pling	Date	:23-09	-2024	to 24	-09-2	024		
Sample Dra	wn by: II CB Guide	EM Team eline & IS	Meth		89:1981			Sam	pling	Date	:23-09	-2024	to 24	-09-2	024	_	
Sample Draw Protocol: CP	wn by: II CB Guide cation: N	EM Team eline & IS lear Mair	Meth Gate		89:1981 emp. (°C		R.H	Sam			:23-09 :Semi				024 : NE to	sw	_
Sample Dra Protocol: CP Sampling Lo	wn by: II CB Guide cation: N rological	EM Team eline & IS lear Mair Informa	Metho Gate tion			): 26	-	L (%): 6	8		Semi		у	W.D.	: NE to	SW	

SI. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	67.8	55.4	D-75 N-70

#### 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) Leg denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

  5.4 "decibel" is a unit in which noise is measured. "A", in dB(A) Leg, 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 15 196:1966(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: Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Reviewed by Authorized Signatory
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Dans 1 of 1	Contract of the second

Page 1 of 1





#### **Test Report**

ULR No.:	T	C	1	1	5	1	5	2	4	0	0	0	0	0	1	4	4	2
Discipline: Ch	emical		Grou	p: At	mosp	heric Po	olluti	on	Sub-	Grou	p: Am	bient h	Voise	Levels	(Exc	ludir	g Vibr	ation)
Report Issue	Date: 27	-09-20	24						Test Report No.: RN-230308001N2									
Sample ID: 24	0924AP	03002							Samp	le D	escrip	tion: A	mbie	nt No	ise			
Challan No./	.O. No.:	45480	3207	1/237					Chall	an N	o./ P.	No. Da	te: 26	-08-2	023			
Plo	mia Cen l No IV/A	1-7(P),	Boka	ro In	dustr	ial Are	a Ba	lidih		Vorks	3)							
Plo Bol	No IV/A	1-7(P), el City,	Boka	ro In	dustr	ial Are	a Ba	lidih	ia		75	resent	ative:	Sania	aav V	erma	¥.	
Plo Boi Type of Indus	No IV/A caro Stee try: Cem	A-7(P), el City, ent	Boka Bok	ro In	dustr	ial Are	a Ba	lidih	Cust	ome	r Rep	resent		- 4			1	
Plo Boi Type of Indus Sample Draw	t No IV/A caro Stee try: Cem in by: IE	A-7(P), el City, ent M Tear	Boka Boka m	iro In aro-8	dustr 2701	ial Are 4 Jhark	a Ba	lidih	Cust	ome	r Rep	resent 23-09-		- 4			1	
Plo Boi Type of Indus	t No IV/A caro Stee try: Cem in by: IE B Guidel	A-7(P), el City, ent M Tear ine & I	Boka Boka m S Met	aro-8	dustr 27014 9989:	ial Are 4 Jhark	a Ba	lidih	Cust	ome	r Rep			- 4			1	
Plo Boi Type of Indus Sample Draw Protocol: CPC	t No IVIA caro Stee try: Cem in by: IE B Guidel ation: No	A-7(P), el City, ent M Tear ine & IS ear Fab	Boka Boka m S Met	thod 9	9989:	ial Are 4 Jhark	a Ba	lidih d Ind	Cust	ome	Rep Date:		2024	to 24-	09-2	024	o SW	

SI. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1,	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	69.3	53.3	D-75 N-70

---End of Reports-

- 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) Leg 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) Leg, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

  6. Leg: 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 15 196:1966(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: Rajiv Kumar Singh & Team

Specific Contractual Notes -	Reviewed by Authorized Signatory
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In case of feedback/ complaints, please send an email at gm.ismeco@gmail.com	(Taugeer Ahmad) (Eg. \$. C. Jain)
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#### Test Report

ULR No.:	T	C	1	1	5	1 5	2	4	0	0	0	0	0	1	4	4	3
Discipline: Ch	emical		Group	: Atr	nosph	eric Pollu	tion	Sub-	Group	o: Ami	bient f	Noise I	Levels	(Exclu	uding	Vibrat	ion)
Report Issue Date: 27-09-2024								Test	Repo	rt No.	: RN-2	30308	001N	3			
Sample ID: 24	0924API	03003						Sami	ole De	escrip	tion: A	mbie	nt No	se			
Challan No./P	.O. No.:	454803	32071	237				Chall	an No	o./ P.1	Vo. Da	te: 26	-08-20	023			
Plot	No IVIA	4-7(P), E	Bokar	o Inc	dustri	Jharkha al Area E	alidih	K.,	Vorks	•)							
Plot Bok	No IV/A	4-7(P), E el City,	Bokar	o Inc	dustri		alidih	l lia				- 41	<b>C</b> arolin				
Plot Bok Type of Indus	No IVIA aro Stee try: Cem	4-7(P), E el City, ent	Bokar Boka	o Inc	dustri	al Area E	alidih	dia Cust	omer	Repr	esent	-	-	Carried Inc.	7.7.2.2.174		
Plot Bok Type of Indus Sample Draw	No IV/A aro Ster try: Cem n by: IE	A-7(P), E el City, ent M Tean	Bokar Boka	ro-82	Justri 27014	al Area E Jharkha	alidih	dia Cust	omer	Repr	esent 23-09-	-	-	Carried Inc.	7.7.2.2.174		
Plot Bok Type of Indus Sample Draw Protocol: CPC	No IV/A aro Ster try: Cem n by: IE B Guidel	A-7(P), E el City, ent M Tean line & IS	Bokar Boka n Meti	ro-82	Justri 27014	al Area E Jharkha	alidih	dia Cust	omer	Repr	Section 2.	-	-	Carried Inc.	7.7.2.2.174		
Plot Bok Type of Indus Sample Draw	No IV/A aro Ster try: Cem n by: IE B Guidel	A-7(P), E el City, ent M Tean line & IS	Bokar Boka n Meti	ro-82	dustri 27014 1989:1	al Area B Jharkha	alidih nd Ind	dia Cust Samp	omer	Repr Date:	23-09-	2024 1	to 24-	09-20	24		
Plot Bok Type of Indus Sample Draw Protocol: CPC	No IV/A aro Stee try: Cem in by: IE B Guidel ation: No	A-7(P), E el City, nent M Team line & IS ear Colo	Bokar Boka n Meti	ro-82	dustri 27014 1989:1	al Area E Jharkha	alidih nd Ind	dia Cust	omer	Repr Date:	Section 2.	2024 1	to 24-	09-20	7.7.2.2.174	SW	

SI. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	51.4	42.1	D-55 N-45

#### ---End of Reports--

- 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. dR/Al Leg 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) Leg, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
  6. Leg: 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: Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Reviewed by	Authorized Signatory
1. The laboratory accepts responsibility for content of this report. 2. This report shall not be reproduced except in full, without written approval of the MD. 3. This report is intended for only guidance and not for legal purpose or for advertisement. 4. Any complaint about this report should be communicated in writing within 7 days of its issue 5. Total slability of institute for Environmental Management will be limited to involced amount only.  6. In case of feedbook? complaints, please send an armal at gm.iemepo@gmail.com	T. 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

Page 1 of 1





#### **Test Report**

ULR No.:	T	C	1	1	5	1 5	2	4	0	0	0	0	0	1	4	4	4
Discipline: Ch	emical	-	Group	o: Atr	nospi	heric Poll	ution	Sub-	Group	e: Amb	ient f	Noise	Levels	(Excl	uding '	Vibrat	ion)
Report Issue	Date: 27	-09-202	24					Test	Repo	rt No.:	RN-2	30308	3001N	4			
Sample ID: 24	0924AP0	03004						Samp	le De	escript	ion: A	mbie	nt Noi	lse			
Challan No./F	.O. No.:	454803	32071	/237				Chall	an No	o./ P.N	lo. Da	te: 26	-08-20	023			
Plo	No IVIA	-7(P), E	Bokar	ro Inc	dustr	(Jharkha	Balidit		/orks	3)							
Plo Bol	No IVIA	-7(P), E	Bokar	ro Inc	dustr		Balidit	dia			esent	ative:	Sanie	ev Ve	rma		
Plo Boil Type of Indus	No IV/A aro Stee try: Cem	-7(P), E ol City, ent	Boka Boka	ro Inc	dustr	ial Area l	Balidit	dia Cust	omer	Repr		-	_	-			
Plo Bol	t No IV/A aro Stee try: Cem n by: IE	-7(P), E el City, ent M Team	Boka Boka n	ro Inc iro-8:	dustr 27014	ial Area l I Jharkh	Balidit	dia Cust	omer			-	_	-			
Plo Bol Type of Indus Sample Draw	t No IVIA caro Stee try: Cem n by: IEI B Guidel	i-7(P), E of City, ent M Team ine & IS	Boka Boka n Met	ro Inc ro-8:	989:	ial Area l I Jharkh	Balidit	dia Cust	omer	Repr		-	_	-			
Pio Bol Type of Indus Sample Draw Protocol: CPC	t No IVIA caro Stee try: Cem in by: IEI B Guidel ation: Ne	A-7(P), E al City, ent M Team ine & IS ear Wag	Boka Boka n Meti gon Ti	no Inc ro-82 had 9 ppler	9989:	ial Area l I Jharkh	Balidit and Ind	dia Cust	omer	Repr	3-09-	2024	to 24-	09-20		SW	

SI. No	Parameter	Method	Unit	Day Time	Night Time	Limits
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	62.4	57.4	D-75 N-70

#### --End of Reports--

#### Note: -

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

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

  4. d8(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 d8(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: Rajiv Kumar Singh & Team

Specific Contractual Notes: -	Reviewed by	Authorized Signatory
1. The laboratory accepts responsibility for content of this report. 2. This report shall not be reproduced except in full, without written approval of the MD. 3. This report is intended for only guidence 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 Measagement will be limited to invoiced amount only. 5. In case of feedback complaints, please send an armal lat gm_isenso@gmail.com	(Taugeer Ahrtia)	(br. S. C. Jain)
on the basis of Quality Checked and Technical data verified by the Authorized signatory, the report	Technical Manager	Director
is assued by the Director of the Organization.	Technical Manager	Director

Page 1 of 1

## **Annexure-16**

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

Solar lights installed at different location of the plant





**CCR BUILDING** 

**ADMIN BUILDING** 







**CIVIL OFFICE** 

**ENVIRONMENT OFFICE** 

**NEAR TOILET** 

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

#### TREE PLANTATION DETAILS

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

#### YEAR WISE TREE PLANTATION DETAILS GIVEN AS FOLLOWS

SL. No	Year	Number of plants	Area (in Acres)
1	1st (2011-2012)	5000	5
2	2nd (2012-2013)	2030	4
3	3rd (2013-2014)	2820	3
4	4th (2014-2015)	7620	5
5	5th (2015-2016)	5100	4
6	6th (2016-2017)	1500	1
7	7th (2017-2018)	500	0.55
8	8th (2018-2019)	69	0.3
9	9th (2019-2020)	100	0.4
10	10th (2020-2021)	150	
11	11 <sup>th</sup> (2021-2022)	500	Plantation done in
12	12 <sup>th</sup> (2022-2023)	350	the place of dead tree
13	12 <sup>th</sup> (2023-2024)	400	
14	13 <sup>th</sup> (2024-2025)	225	1
	Total	26364	23.25

S.N	Year	Name of Species tree planted
1	2011-2012	Gulmohar,Amaltash,Neem,Mihigini,shisham,Ashoka,Teak,
		Mango,Amala, Shiv Babool, Chatni
2	2012-2013	Gulmohar, Amaltash, Neem, Mihigini, shisham, Ashoka, Teak, Mango, Amala
3	2013-2014	Ashoka,Chatni,Gulmohar,Amaltash,Neem,Mihigini, Shisham
4	2014-2015	Ashoka,Chatni,Gulmohar,Amaltash,Neem,Mihigini, Shisham
5	2015-2016	Chatni,Gulmohar,Neem,Mehegani,Shisham,Pipal,Teak,
6	2016-2017	Gulmohar,Chatni,Neem,Guava,Shiv Baboo,Mango,Jamun
7	2017-2018	Chatni,Gulmoha,Amaltash,Neem,shisham,Guava,Pipal
8	2018-2019	Chatni,Gulmohar,Neem,Mihigini,Guava,Mango,Amala,Neem
9	2019-2020	Chatni,Mihigini,Botal Pam,Mango,Amala,Lemon,Jamu
10	2020-2021	Chatni,Mihigini,,Mango,Kaaju.
11	2021-2022	Chatni, Mihigini, Mango, Kaaju, Amala, Neem, Gulmohar
12	2022-2023	Chatni,Mihigini,,Mango, Neem, Gulmohar
13	2023-2024	Chatni,Mihigini,,Mango, Neem, Gulmohar
14	2024-2025	Chatni,Gulmohar,Neem,Mihigini,Guava,Mango,Amala,Neem



## **Greenbelt pics at DCBL Bokaro**











Tree plantation done railway siding



#### 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	2020-21	2021-22	2022-23	2023-24
Scope-1  Emissions from Coal & Diesel consumption for the process of Cement Manufacturing.	Cementitious	41	43	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	2020-21	2021-22	2022-23	2022-23
Scope-2 Emissions from Electricity consumption	Kg CO2 /Tone of Cementitious material	44	46	42	41

#### Summary report of GHG emission last five years in below table

		2017	2018	2019	2020	2021	2022	2023
Categories	UoM	-18	-19	-20	-21	-22	-23	-24
Scope-1 Emissions from Coal & Diesel consumption for the process of Cement Manufacturing.	Kg CO2 /Tone of Cementitious material	53	58	52	41	43	48	47
Scope-2 Emissions from Electricity consumption	Kg CO2 /Tone of Cementitious material	59	61	42	44	46	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 drive innovation resources are involved from various departments to reduce the emission. This will bring buy-in from all the stockholders involved and help in driving innovation to reduce the GHG emission.
- (b) To improve cost efficiency: cost saving can be made by identifying opportunities to increase resources and energy efficiency. This may help to improve our competitive advantage
- (c) Organization will setup ambitious targets, measuring managing, reporting and reducing GHG emissions.
- (d) Organization will be conduct internal as well external energy audit reduction of GHG emission
- (e) It will help in raising awareness among consumers and employees on what role they can play in reducing impact of GHG emission
- (f) Dalmia Cement (Bharat) Limited Bokaro unit will continually analysis the GHG Reduction potential opportunities identified, priorities and implement them to achieve GHG emission reduction target as well as associated cost benefit.

## **Annexure-19**

# Corporate Environment Responsibility & CSR report for the period of April 2024 to September 2024

SI. No	Name Of Activity	Place of Activity/ Village	Expense (in Rs.)
1	Broom Making Training	Manjhaladih	45000
2	Broom Making Training	Bhutkuru	40000.00
3	Tailoring Training	Bishunpur, Gorabali south	50000.00
4	General Medicine and Gynecology Camp	Bishunpur, Gorabali south	25000.00
5	General Medicine and Gynecology Camp	Kanari	25000.00
6	Distribution of Assets to Support microenterprise activity	··   (anrahali Bhiifkiirii	
7	Distribution of Goats	ibution of Goats  Gorabali (N), Gorabali (S), Kanari, Khuntri Panchayat	
8	Deworming and Vaccination Camp	Gorabali, Bhutkuru, Tupkadih, Bishunpur	8000.00
9	Plantation	Gorabali, Bhutkuru, Tupkadih, Bishunpur	50000.00
10	Support to District Administration	Bokaro	190000.00
11	International Yoga Day	Govind Madhyamik Vidyalaya and Bokaro DikshA	30000.00
12	Independence Day	Bokaro DikshA	25000.00
13	Skill training to local youths at Bokaro Diskha	Bokaro	1000000.00
14	Digital Literacy through WoW Bus	Jaridih, Bhutkuru	Ongoing
15	Goat Distribution	Gorabali, Khutri, Kanari, Tupkadih	150000.00
Total			2158000.00





Renovation of Aganwadi

Tree plant distributed in village for plantation



Distribution of Goats in nearby village



Promotion of micro enterprise



**Broom Making Training** 



Tailoring Training





Skill training to local youths at Bokaro Diksha





Skill training to local youths at Bokaro Diksha

#### CORPORATE ENVIRONMENT POLICY

#### DALMIA BHARAT LIMITED

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

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

#### **BUSINESS RESPONSIBILITY POLICY**

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

#### Preface

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

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

#### Stakeholders

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

#### Principle 1 - Ethics, Transparency and Accountability

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

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

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

#### Frinciple 2 - Sustainability

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

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

#### Frinciple 3 - Wellbeing of Employees

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

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

#### Independent Audit / Evaluation of working of the Policy

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

#### Conclusion

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

## BUSINESS RESPONSIBILITY MATRIX The hierarchical system or administrative order of the Company to address the nine panciples prescribed by SEBI and other compliances including regulatory approvals viz Environmental Clearance, Consent to Operate etc. BOARD OF DIRECTORS CFO CEO/MD CORPORATE LEVEL COMPANY SECRETARY RISK MANAGEMENT COMMITTEE CORPORATE ENVIRONMENTAL COMPLIANCE OFFICER UNIT HEAD EHS HEAD UNIT LEVEL ENVIRONMENTAL MANAGER **HEALTH & SAFETY OFFICER**

## Annexure:21

# CAPITAL COST INVESTMENT ON ENVIRONMENT PROTECTION AT DCBL BOKARO UP TO SEPTEMBER 2024

	M/S DALMIA CEMENT (BHARA	T) LIMITED, E	BOKARO					
	Plot No. IV/A-7(P), Bokaro Industrial Area, Balidih,	Bokaro Steel City,	Jharkhand -8270	14				
CAPITAL COST INVESTMENT ON ENVIRONMENT PROTECTION AT DCBL BOKARO UP TO SEPTEMBER 2024								
S.N	PARTICULARS	Asset no	Investment in Rs.	Investment in Crores				
1	INVESTMENT ON AIR POLLUTION CONTROL MEASURES	5	_					
а	Bag House cement mill	5500000007	193983042.2					
b	Bag house fan	5500000014	13972406.4					
С	Bag house for cement mill	5500000037	9901023.02	_				
d	Bag house fan	5500000046	185484.52					
е	Sprs Bag house fan -mill -1	5500000016	6300867.1					
f	Sprs Bag house fan -mill -2	5500000017	6300867.53					
g	Bag filter from silo to packing plant EEL India limited		21000000	29.05				
h	Bag filter clair Packing plant area		4800000					
i	Bag filter at Wagon Tippler		28150000					
j	Bag filter Dry fly ash silo Top storage bin		900000					
h	Bag filter Dry fly ash silo Top storage bin Sep-		1300000					
i	Packer 4 Bag filter		3700000					
			290493690.8					
2	INVESTMENT ON FUGITIVE DUST EMISSION CONTROL							
а	Construction of Tarpaulin shed near packing plant	5200000052	1741749.73					
f	Road Swapping machine	5900000085	128981					
g	Water spray tanker	5060000016	100000	8.64				
h	Delexo Road Swapping Machine	5500000172	2452009.2	0.04				
i	Steel Silo for storage of PCC	5500000185	28115894.14					
J	Plant Roads construction	520000010	53848342.83					
			86386976.9					
3	INVESTMENT IN WATER POLLUTION CONTROL MEASU	RES						
a	Rain water Harvesting system implemented	5200000034	56547.38					
b	Sewer line connected to plant toilet to STP	5200000054	958795.98	]				
С	Bio Toilet at Wagon Tippler & Railway penal Yard	5200000055	99308.58					
d	Construction of Sewage treatment Plant	5200000067	4772895.03					
е	Water treatment plant	5040000011	133559.51	] _				
f	Toilets & Bathroom for Labour Camp	520000056	1074911.5	0.78				
g	Water treatment plant	5040000013	682090.06					
			7778108.04	1				

4	ENVIRONMENT POLLUTION MONITORING EQUIPMEN	IT				
1	CAAQM -S02 & NOx Analyzer	5500000068	1308596			
2	Laboratory balance	5500000074	19244			
3	Opacity meter From Chemtrols industries LTD	5900000033	88889.55			
4	Opacity meter From Chemtrols industries LTD	5900000034	88889.55			
5	Data connectivity to CPCB Server	580000003	188100			
6	Stack monitoring kit from form forebes marshal	5010000067	10596.16			
7	Incubator	5500000029	13000.32			
8	On line CAAQM station Environment SA	5500000066	2522852.76			
9	Up gradation Software of CAAQMS	5800000003	490800			
10	Construction of 2.no CAAQMS Room	5200000035	454879	0.61		
11	Respirable Dust Sampler 460 BL PM -10 ,4no	Environment Lab	280000			
12	Respirable Dust Sampler 460 BL PM- 2.5 ,4no	Environment Lab	300000			
13	Vayubodhan Stack monitoring Kit VSS1	Environment Lab	75000			
14	Spectrophotomer	Environment Lab	280000			
			6120847.34			
	Capital cost Investment from April 2024 to September 2024			Nil		
	Total Capital Cost Investment on Environment measures up to September 2024					

## DALMIA CEMENT (BHARAT) LIMITED, BOKARO

RECURRING COST EXPENDITURE ON VARIOUS ENVIRONMENTAL PROTECTION ACTIVITIES

1	Cost on Schedule maintenance	Rs. Lacs
	Bags replacement with new bags, Bags cleaning, De dusting line checking, cleaning and repairing work. Bag filters fan maintenance etc)	7.14
2	Power consumption in Pollution control equipment (Bag House & Bag Filter) 8862359 KWH X 5.72	506.9
2	Third Party Environmental Monitoring & Analysis	1.15
3	AMC of CEMS Data transmission to JSPCB& CPCB	0.17
4	AMC of CAAQMS Maintenance, Servicing and Calibration,	0.75
5	AMC of CAAQMS Data transmission to JSPCB & CPCB	0.5
6	Calibration of Pollution Monitoring Equipment's (CEMS)	1.5
7	Calibration of Pollution monitoring instrument (RDS &Stack VSSI,Noise level meter)	0.15
8	Air Pollution Monitoring Accessories'  Pump maintenance kit & PM-10 & 2.5 Filter paper NOx Analyzer ARM-7 Card replacement	2.00
9	Water Pollution Management (AMC of STP, R.O Plant, & Softener Plant), Cleaning of Nala,	0.23
10	STP Operation & Maintenance	2.9
11	Road Sweeping Machine Operation & Maintenance	2.3
12	Disposal of Bio medical waste	0.18
13	Fuel consumption in water sprinkling tanker of water on dusty area	0.11
14	Green Belt Development	8.0
TOTAL F SEPTEM	533.98	

## **Environment Internal audit report**

## April 2024-September-2024

Date: 16.07.2024

Following below members present in Environment Audit: 1. Arvind Kumar: (Head Mechanical)

2. LR Patel: (Head E&I)

3. Rajan Singh: (Head Production)

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 in 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

## Advertisement in newspaper for receiving of EC from SEIAA



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





newthink! cement! sugar! refractories! power!

To,

Date: 03.10.2019

次の47 wifegional Director

3 Tharkhand Industrial Area Development Authority (JIADA)

3.10 Bokaro Industrial Area

**Bokaro Steel City** Bokaro - 827014

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

Dear Sir,

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

This is submitted for your kind information & record please

Thanks & Regards

Yours Sincerely

For Dalmia Cement (Bharat) Limited

Mulentry Mukesh Kumar Garg

(Unit Head & Assistant Executive Director)

X

Encl A/a

Dalmia Cement (Bharat) Limited

brocks: Plot No. - IVA-2(P) bloken Industrial Area, Bulath, Bokur Soci City-- 822014. Bookhand, India
CNI - U651011N 1996PLC25964

Beythered Office: Delengaring, Dist. Prachingtalli, Tam's Nath 621651, India
A Dalmid Morw Grupe company

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