

**State Level Environment Impact Assessment Authority, Jharkhand.**

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Letter No.-EC/SEIAA/2016-17/1997/2017/ 295

Ranchi, Date: 08.12.2018

To: **Mr. Mukesh Kr. Garg (Assistant Executive Director)**  
**Dalmia Cement East Limited**  
**(Formerly Known as Bokaro Jaypee Cement Limited)**  
**Plot No.: IV/A-7(P), Bokaro Industrial Area,**  
**Balidih, Bokaro Steel City,**  
**Jharkhand – 827014.**

Sub.: Environmental Clearance for the project “Proposed Capacity increase of the existing Cement Grinding / Blending unit from 2.1 MTPA to 3.0 MTPA of M/s Dalmia Cement East Ltd. at Vill.- Kanari, Bokaro Industrial Area, Chas, Bokaro”.

Sir,

It is in reference to the project “Proposed Capacity increase of the existing Cement Grinding / Blending unit from 2.1 MTPA to 3.0 MTPA of M/s Dalmia Cement East Ltd. at Vill.- Kanari, Bokaro Industrial Area, Chas, Bokaro” submitted by you for seeking prior Environmental Clearances (EC).

The proposal was appraised by State Level Expert Appraisal Committee (SEAC) and recommended for grant of Environmental Clearance in its meeting held on 08<sup>th</sup> & 09<sup>th</sup> October, 2018.

Dalmia Cement East Limited is located at Plot No. IV/A-7 (P), Bokaro Industrial Area, Near IOCL Bottling Plant, P.O.: Balidih, District Bokaro in Jharkhand. Its geographical co-ordinates are Latitude 23°42'1.24"N and Longitude 86° 3'46.69"E with mean sea level (MSL) of 231.6 m (760 ft). The area falls under the belt of several industrial units. The road is hard and at a higher level suitable for heavy vehicular traffic. Transport is available for easy movement of personnel, raw material, machinery and finished goods in the area. There is no difficulty in getting the required power and water at the proposed location. The project site is flanked by Purulia in the east & South of West Bengal and Hazaribag in the West and Giridih in the North of Jharkhand. The total plant area is 28.0 Ha, around 9.24 Ha shall be covered under greenbelt to maintain 33% greenbelt in the project area.

Bokaro district is one of the most industrialized zones in India. It is one of the twenty-four districts of Jharkhand state in India. It was established in 1991 by carving out one subdivision consisting of two blocks from Dhanbad District and six blocks from Giridih District. Bokaro Steel City is the district headquarters.

The project site is located in the industrial area of the Bokaro city under the district of Bokaro. The most important river in the area is River Damodar which is at a distance of around 5.0 in northern side with respect to the project site. Garga Dam is situated at a nearest distance of 7.0 Km towards the south from the project site. Bokaro Steel city is located about 9.0 Km distance in the south-east direction w.r.t. the project site.

The site is well connected by road and railway network of the South-Eastern Railways. Tupkadih

Railway station is located about 1.5 km north from the project site. Bokaro Railway junction is located about 5.0 Km distance towards south-east direction w.r.t. the project site. NH-23 is passing around 4 km from the project site in southern side. The nearest important Airport is Birsa Munda Airport, Ranchi, which is situated at about 87 km distance in South-west direction from the project site. The project site has good connectivity with sea port of Kolkata, Haldia and Paradip.

<b>Latitude &amp; Longitude of four corner of Project Site</b>	A - 23°41'59"N; 86°03'43"E
	B - 23°42'05"N; 86°03'59"E
	C - 23°41'43"N; 86°04'06"E
	D - 23°41'39"N; 86°03'53"E

### Raw Materials

The details relating to major raw materials presently being used and that would be used after capacity expansion from 2.1 MTPA to 3.0 MTPA for this Cement Grinding Plant are presented.

Material	Source	Quantity for 2.1 MTPA (in TPA)	Quantity for 3.0 MTPA (in TPA)	Quantity Stored at Site (Tonnes)	Type of Storage
Clinker	OCL Rajganjpur/Dala Cement Factory	7,66,500	10,95,000	24,000	RCC Silo
Slag	Adjoining Bokaro Steel Plant/ Usha Martin / Electro steel/Giridih	12,60,000	18,00,000	100,000	Covered Shade
Gypsum	Gypsum Mine in Rajasthan Paradeep	73,500	1,05,000	3000	
Coal	Eastern coal field coal mines	42,000	60,000	2000	

### Project Cost

Total cost of the proposed project is Rs. 11.15 crore. The company proposes to invest 27.9 Lakhs on the CSR activities, which is 2.5% of the total project cost (11.15 Crores). This fund shall be utilized over a period of 5 years

### Salient Features of the Cement Grinding Plant

Required quantity of **clinker** is being transported by rail OCL Rajganjpur (Orissa) & Dala Shonbhadra (Uttar Pradesh) & unloaded at site through wagon tippler & transported to Clinker silo through closed conveyor belt. The existing buffer hopper and wagon loading facility shall be utilized for clinker storage and loading for transport to the proposed cement grinding plant.

**Slag** requirement is being met from Bokaro Steel Plant by road. **Gypsum** is being purchased from the mines of Paradeep / Rajasthan through railway wagon / Trucks which has been also unloaded at site through wagon tippler & transported to gypsum storage shed.

### Water Requirement

In the existing plant daily make up water requirement for production of 2.1 MTPA Cement is 270 cu.m/day. As per an initial estimate, water to the tune of 315 cu.m/day will be required for total production of 3.0 MTPA Cement in the proposed expansion project. Thus, additional 45 kld water will be required for the proposed capacity expansion project from 2.1 MTPA to 3.0 MTPA. Water will be sourced from Garga Dam as presently available.

### Power Requirement

The requirement of power for existing plant (2.1 MTPA) is 21 MVA. It will be same for Proposed Plant (3.0 MTPA). The power requirement will be met by Damodar Valley Corporation (DVC).

As per Hon'ble Supreme Court Judgement dated 12.12.1996 in WP(C) no. 202/95, any land recorded as "forest" in govt. record, should be treated as "deemed Forest" for the purpose of Forest (Conservation) Act, for Forest Clearance. Thus, if the proposed land is certified as *jangle-jhari* by the competent authority (i.e. CO), it would be mandatory for PP to seek Forest Clearance simultaneously and submit the said copy of application to the SEIAA.

Its pertinent to mention that the proposed site falls in Bokaro Industrial Area Development Authority (BIADA), which was constituted by Govt. of Bihar in 1972. The concerned proposed expansion site was notified forest land vide Govt. of Bihar notification no. 20.01.1953. The said land was transferred and hand over to Hindustan Steel Ltd. in 28.04.1962 by Govt. of Bihar.

The PP vide his letter dated 24.09.18 submitted that Managing Director, BIADA Sri K. Ravi Kumar, IAS, vide his letter no. 397, dated 13.09.18 has certified that said land was hand over to BIADA which was broken before 15.10.1980. The D.C. Bokaro too has corroborated vide his letter no. 2038, dated 26.06.18 that the land allotted to M/s BPCL in BIADA does not belong to "Jangle Jhari" category.

The PP further submit that his (Damia Cement East Ltd.) site is adjacent to that of M/s BPCL in BIADA. And SEIAA vide its 59<sup>th</sup> meeting minutes dated 09.08.18 granted conditional EC with undertaking that it would abide by the provisions of Forest (Conservation) Act, 1980, if the said land found to be "deemed forest."

The PP's authorised signatory Sri Mukesh Garg submitted "Undertaking" dated 24.09.18 on behalf of Dalmia Cement East Ltd. to abide by and follow the provisions of Forest (Conservation) Act, 1980. The PP accordingly requested to consider his proposal for expansion (which does not involve fresh land but for only capacity enhancement) in the light of the EC granted to M/s. BPCL.

State Level Environment Impact Assessment Authority (SEIAA), Jharkhand in its meeting held on 06<sup>th</sup> November, 2018 discussed the project proposal along with recommendations made by SEAC and decided to grant EC to the project.

Following the decision of SEIAA, as mentioned above, Environmental Clearance is hereby issued to the **"Proposed Capacity increase of the existing Cement Grinding / Blending unit from 2.1 MTPA to 3.0 MTPA of M/s Dalmia Cement East Ltd. at Vill.- Kanari, Bokaro Industrial Area, Chas, Bokaro"** alongwith the following conditions as recommended by SEAC.

**I. Specific Conditions :**

- i. This Environmental Clearance is valid subject to the following condition below –  
That this project has-
  - a. Obtained all legal rights to operate at concerned place.
  - b. Complied with all existing concerned laws of the land and
  - c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.
- ii. The Environmental Clearance is being subject to if proposals attracts the provision of forest conservation Act, the environmental clearance issued will automatically stand revoked and in that case the project proponent will have to abide by the provision of the Forest (Conservation) Act, 1980 and will have to seek permission from the Govt. of India and also will have to follow all the conditions imposed by the MoEF & CC.

- iii. 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.
- iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- v. 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)
- vi. 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.
- vii. 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.
- viii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

## **II. Air quality monitoring and preservation :**

- i. 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 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> 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)
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. 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.

- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- ix. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- x. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
- xi. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- xii. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xiii. 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.
- xiv. Ventilation system shall be designed for adequate air changes as per ACGIH Document for all tunnels, motor houses, cement bagging plants.

### **III. Water quality monitoring and preservation :**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. 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.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water practicing cascade use and by recycling treated water.

### **IV. Noise monitoring and prevention:**

- i. 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.
- ii. 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.

**V. Energy Conservation measures :**

- i. 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.
- ii. Provide the project proponent for LED lights in their offices and residential areas.
- iii. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS Standards.

**VI. Waste management :**

- i. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Trans boundary Movement) Rules, 2016.
- ii. 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)*

**VII. Green Belt and EMP :**

- i. 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.
- ii. 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.

**VIII. Public hearing and Human health issues :**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.


**IX. Corporate Environment Responsibility :**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/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.
- iii. 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.
  - i. 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.
- iv. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- v. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.

**X. Miscellaneous :**

- i. 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.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. 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.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectorial 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.
- v. 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.
- vi. 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.

- vii. 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.
- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
  - ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. 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).
- ix. 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.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act,
- xv. This environmental clearance is valid for seven years from the date of issue..

  
Member Secretary  
State Level Environment Impact  
Assessment Authority, Jharkhand.  
