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# **Government of India** Ministry of Environment, Forest and Climate Change (Issued by the State Environment Impact Assessment **Authority(SEIAA), JHARKHAND)**

To,

The Deputy Executive Director & Unit Head DALMIA CEMENT (BHARAT) LIMITED

Bokaro Cement Manufacturing Works, (A unit of Dalmia Cmeent (Bharat) Ltd.), Plot no (IV)/A-7(P)4, Notified Bokarao Industrial Area under JIADA, Balidih Phase-4, Bokaro, Jharkhand -827014

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/JH/IND1/413722/2023 dated 20 Jan 2023. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.

2. File No.

3. **Project Type** 

4. Category

5. Project/Activity including Schedule No.

6. Name of Project EC23B000JH199098

EC/SEIAA/2022-23/26462023

Expansion

В

N/A

Expansion of cement production capacity of Bokaro Cement Manufacturing Works, a standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/A-7(P)4, Village- Gorabali, Notified Bokaro Industrial Area under JIADA, Balidih Phase-4, Bokaro, Jharkhand.

Name of Company/Organization 7.

DALMIA CEMENT (BHARAT) LIMITED

**Location of Project** 

**JHARKHAND** 

9. **TOR Date** N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 08/02/2023

(e-signed) Ashok Kumar, IFS **Member Secretary** SEIAA - (JHARKHAŃD)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please guote identification number in all future correspondence.

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## State Level Environment Impact Assessment Authority, Jharkhand.

Nursery Complex, Near Dhurwa Bus Stand, Dhurwa, Ranchi. Jharkhand-834 004. E-mail: msseiaa.jhk@gmail.com/chr-seiaajhr@gov.in website: www.jseiaa.org

Letter No.-EC/SEIAA/2022-23/2646/2022/

Ranchi, Date:

To: Shri Priya Ranjan (Deputy Executive Director), Bokaro Cement Manufacturing Works – a unit of Dalmia Cement (Bharat) Ltd. Plot No. IV/A-7(P)4, Village – Gorabali, Notified Bokaro Industrial Area under JIADA, Balidih Phase – 4, Distt. – Bokaro, Jharkhand – 827014.

Sub.: Environmental Clearance for the project "Expansion of cement production capacity of Bokaro Cement manufacturing Works, a standalone Grinding Unit from 2.0 Million TPA to 3.1 Million TPA of M/s Dalmia Cement (Bharat) Limited, Village: Gorabali, Notified Bokaro Industrial Area under JIADA, Balidih Phase – 4, Tehsil: Chas, Dist.: Bokaro, Jharkhand. (Proposal No.: SIA/JH/IND1/413722/2023) regarding.

Ref: Your application no. Nil dated 10.01.2023.

Sir,

It is in reference to the project "Expansion of cement production capacity of Bokaro Cement manufacturing Works, a standalone Grinding Unit from 2.0 Million TPA to 3.1 Million TPA of M/s Dalmia Cement (Bharat) Limited, Village: Gorabali, Notified Bokaro Industrial Area under JIADA, Balidih Phase - 4, Tehsil : Chas, Dist. : Bokaro, **Jharkhand**", Jharkhand submitted by you for seeking prior Environmental Clearances (EC).

This is a new project which has been taken for appraisal on 12.01.2023.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 97<sup>th</sup> meeting held on 14-18.09.2022 and SEIAA, Jharkhand has approved the ToRs in 98th meeting held on 17<sup>th</sup> & 18<sup>th</sup> October, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2646/2022/274, date 27.10.2022. The final EIA / EMP submitted by PP to SEIAA on 10.01.2023 and which was forwarded to SEAC on 10.01.2023.

#### **Brief Summary:**

M/s. Dalmia Cement (Bharat) Limited is Proposing Expansion of Cement Production Capacity of Bokaro Cement Manufacturing Works, A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA,

Balidih Phase-4, Bokaro, Jharkhand. Project lies between Latitude 23.6949533° N to 23.6978843° N and Longitude 86.0628558° E to 86.0661843° E. Falls on SOI Toposheet number F45C2.

- Environmental Clearance of Existing Grinding unit has been obtained from SEIAA, Jharkhand for production of 2.0 MTPA PSC cement vide letter EC/SEIAA/2021-22/2534/2022, EC identification no EC22B009JH152802 dated 21.04.2022. Consent to Establish has been obtained for existing GU from Jharkhand State Pollution Control Board vide letter no JSPCB/HO/RNC/CTE-12699959/2022/195 dated 28.04.2022. Construction of the unit is under progress.
- It is Proposed to manufacture Portland Composite Cement (PCC) / Portland Slag Cement (PSC) / Portland Pozzolana Cement (PPC) using various waste products such as fly ash, slag etc. Expansion is proposed within the same premises with the same equipment mainly by change in product mix and increasing the number of working days & operating hours of the mill.
- No major construction is involved. However, in order to accommodate the additional storage and associated facilities, existing plant layout has been optimized based on detailed engineering.
- As per EIA Notification dated 14th Sept., 2006, as amended from time to time; this project falls in Category "B" under S. No. 3 (Material Production), Project Activity '3 (b)' Cement Plants.
- Baseline data for Ambient Air, Soil, Noise, Ground and Surface water has already been collected for Summer Season (from March, 2022 – May, 2022).

### Plant configuration of existing EC and Proposed expansion

S. No.	Particulars (Units)	De	tails	Total quantity after	
		As per EC	Proposed	expansion	
1	Cement (Million TPA)	2.0	1.1	3.1 (PSC/PCC/PPC)	
2.	DG set (KVA)	2x 500		2x 500 KVA	
3.	Area (Acres)	15.75	No	15.75	
			additional		
			land		
4.	Greenbelt /Plantation	5.2	No Change	5.2 (33% of total land	
				area)	
5.	Water requirement (KLD)	150	No Change	150	
6.	Power requirement (MW)	12	No Change	12	
7.	Project Cost (Rs in Cr)	576	35.5	611.5	
8	EMP (Capital cost)	31.6	0.85	32.45	
9	EMP (Recurring Cost)	1.1	No Change	No Change	

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# Salient Features of the Project:

S. No.	PARTICULARS	DETAILS		
	Area Details			
A.	Total Project Area	Plant area- 15.75 Acres (6.374 ha). No additional Land is required for proposed expansion.		
	Greenbelt area	5.2 Acres (33% of total land area)		
В.	Environmental Setting Deta from proposed project site)	ils (with approximate aerial distance & direction		
1.	Nearest Village	Village Gorabali (0.5 km in SW)		
2.	Nearest Town	Phusro (9.8 km in North-West direction)		
3.	Nearest City	Bokaro (9.9 km in South-East direction)		
4.	Nearest National Highway / State Highway	<ul> <li>NH - 320 (earlier NH-23) 4 km in South direction</li> <li>NH - 18 (15 km in South-East direction)</li> </ul>		
5.	Nearest Railway station	<ul> <li>Bokaro Steel City Railway Station (4.4 km in SSE direction)</li> <li>Tupkadih Railway Station (1.4 km in North direction)</li> </ul>		
6.	Nearest Airport	Ranchi Airport (~86 km in South-West direction)		
7.	National Parks, Wildlife Sanctuaries, Biosphere Reserves, Reserve Forest (RF) / Protected Forest (PF) within 10 km radius.	No National Park, Wildlife Sanctuary, Biosphere Reserve, Reserve Forest (RF) falls within 10 km radius of the project site. However, few patches of PF and open jungle exist within study area. NOC DFO Territorial & DFO Wildlife has been obtained in this regard vide Letter no. 3546 dated 21.12.2021 and 2058 dated 28.11.2021 respectively. These are  1. Dakbera Open Jungle- 3.5km W  2. Barwapani Fairly dense jungle-7.5kmW  3. PF in North Direction – 6.3 km  4. Chiubera PF -4.7km NE		
8.	Water Bodies (within 10 km radius)	<ol> <li>Damodar River (5.15 km in NE direction)</li> <li>Garga Dam (6.4 km in South direction)</li> <li>KhanjoNadi (5.5 km in West direction)</li> </ol>		
9.	Archaeological Sites	No Archaeological Sites Within 10 km radius		
10.	Seismic Zone	The project site lies in Zone – III of Seismic Zoning Map of India, Bureau of Indian Standards.		
G.	Basic Requirements for the	project		

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S. No.	PARTICULARS	DETAILS			
		150 KLD			
		Source: JIADA water supply.			
	Water Requirement	Rain water harvesting plan will be adopted to reduce fresh water demand.			
		No additional water for proposed expansion.			
		12 MW			
	Power Requirement	Source: DVC and D.G. Set for emergency back-			
		up.			
		Roof Top Solar Panels will also be installed within plant premises.			
		No additional power for proposed expansion.			
	Manpower Requirement (P	(Persons):			
	Construction/Implementat ion phase (no.)				
	Operation phase (no.)				
	Regular	39			
	Contractual	250			
	Total	289			
	Total (no.)	353			
	Locals will be given preference in employment as per their eligibility.				
	No additional Manpower for	proposed expansion.			

The details of composition required for the cement manufacturing have been envisaged as below:

# Capacities and sizing of major equipment's proposed

S. No.	Plant/Equipment /Facility	Existing Configuration submitted for 2 MTPA	Total Configuration after 3 MTPA	
(1.)	Truck Loaders	2x120 TPH	9x120 TPH	
(2.)	Truck Tippler & Box Feeder	3x300 TPH	2x300 TPH	
(3.)	Stacker Reclaimer	1800/300 TPH	1800/300 TPH	
(4.)	Cement Mill(VRM)	2 Million TPA	3.1 Million TPA	
(5.)	Coal Crusher (Hammer/Roll Crusher)	50 TPH	Removed (crushed coal will be used)	

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(6.)	Packer	2 x 240 TPH	3 x 240 TPH
(7.)	Wagon Tippler	1800 TPH	1800 TPH
(8.)	Startup FBC/HAG	25 Mkcal/hr	30 Mkcal/hr
(9.)	Coal Hopper	-	2X75 Tonnes

# **Proposed Storage Capacities**

		Storage Cap	pacity (Tonnes)	
S. No.	Materials detail	Earlier	After detailed Engineering	Storage Type
1.	Clinker	1 x 50,000	1 x 30000	RCC Silo
2.	Gypsum	1 x 5000	1 x 5000	Covered Shed
3.	Slag	1 x 25000	1 x 13000	Covered Shed
4	Dry Fly ash	00	1x 3000	RCC Silo
5	Pond Ash	00	1x 3300	Covered Shed
6.	Cement	2 x 5000	2 x 5000	RCC Silo
7.	LSHS/ HSD	1x30 KL	1x30 KL	Container/ Drum
8.	Coal	1 x 4500	0 Utilized for pond ash	Replaced with Coal hopper

# Raw Material Requirement

S. No.	Raw		Quantity (M	(TPA)*		Source	Mode of	Distance	
	material	I	PSC	PPC PCC			Transportation	(Kms.)	
		Earlier	After Expansio n					Earlier	After Expansio n
1.	Clinker	0.66	1.09	1.92	1.02	Unit of DCBL at Rajgangpur, Odisha	Rail/Road	323	323
2.	Gypsum	0.04	0.06	0.09	0.06	Paradip, Odisha	Rail/Road	500	500
3.	Slag	1.30	1.95	0	0.93	BSL /RSP/TATA STEEL	Rail/Road	287	287
4.	Fly Ash	0	0	1.09	1.09	BTPS, Vedanta	Road	NA	80-100

# STATUTORY CLEARANCES:

		:	The CO, Chas (Bokaro) vide letter no. 2436, dated 29.11.2021
1	CO		has mentioned the plot no. of the project is recorded as "Kadim /
			Dhan / Parti Jadid" in Khatiyan.

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2	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 2058, dated 28.11.2021 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.		
3	DFO Forest Distance	:	DFO, Bokaro Forest Division vide letter no. 3546 dated 21.12.2021 certified that the distance of Reserved Forest / Protected Forest from the project site is more than 250 m.		
4	Previous Environmental Clearance		Previous Environmental Clearance granted by SEIAA vide letter no. EC/SEIAA/2021-22/2534/2022/27, dated 16.04.2022.		
5	Consent to Establish		Consent to Establish (CTE) (Earlier) vide Ref. no. JSPCB/HO/RNC /CTE-12699959/2022/195 dated 28/04/2022		
6	Land allotment letter		Land Allotment letter from JIADA vide allotment order No. LA/BO/SW/00771/2021 dated 20/10/2021		
7	Water approval		Water Approval from Sub – Divisional Officer, Drinking Water and Sanitation Sub-Division, Bokaro vide letter no. 36, dated 13.04.2022		
8	Public Hearing		Public Hearing conducted on 29.12.2022.		
9	Site Inspection / Monitoring report		Site inspection / monitoring report issued by MoEF&CC, Integrated Regional Office, Govt. of India, Ranchi vide no. 111-11/ROR-2022/832, dated 12.01.2023.		

# Land Schedule: Details of land/Plot/Plots/Shed to be leased out

S. No.	Khata No.	Survey Plot No.	Area in Sq.ft/Acre
1	134	781P	0.14
2	76	779P	0.26
3	. 134	777F	0.40
4	76	778P	0.07
5	76.00	782P	0.24
6	134.00	784P	0.05
7	76.00	783P	0.02
8	177.00	880P	1.31
9	46.00	850P	0.02
10	45.00	884F	0.04
11	177.00	852P	0.19
12	171.00	776P	0.37
13	76.00	887P	0.06
14	47.00	882F	0.42
15	145.00	881F	0.29
16	145.00	879F	0.74
17	78.00	878F	0.61

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S. No.	Khata No.	Survey Plot No.	Area in Sq.ft/Acre
18	177.00	891F	1.13
19	171.00	883F	0.18
20	47.00	875F	0.09
21	65.00	874F	0.16
22	65.00	863F	0.48
23	135.00	861F	0.15
24	47.00	862F	0.44
25	160.00	960P	0.31
26	65.00	866F	0.90
27	72.00	867P	0.48
28	46.00	893P	0.52
29	76.00	890F	0.47
30	134.00	892F	0.50
31	45.00	885F	0.13
32	45.00	886F	0.04
33	65.00	873F	0.77
34	65.00	864F	0.47
35	72.00	865F	0.14
36	45.00	851P	0.19
37	76.00	888P	0.12
38	65.00	868P	0.13
39	46.00	858P	0.27
40	47.00	876F	0.22
41	46.00	871F	0.14
42	46.00	957P	0.55
43	46.00	870P	0.65
44	46.00	958F	0.89
	Total		15.75

# Production of wastes during construction or operation or decommissioning

	Name of the waste	Source	Qty (TPA)	Mode of disposal
1.	Municipal Solid Waste	Plant office, canteen etc.	20	Biodegradable waste will be composted and non-degradable wastes shall be disposed off suitably
2.	Plastic bags & other packing material	Plant & other	690	To authorized vendor
3.	Used lead acid batteries	Plant/vehicles/S	150	Authorised vendor/buy back
		olar	nos	
4.	Hazardous wastes			
	Used or spent oil (Cat.		13	Authorised vendor

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	Name of the waste	Source	Qty (TPA)	Mode of disposal
	5.1)			
	Wastes or residues containing oil (Cat. 5.2)	Plant, Machineries & Vehicles	15	Authorised vendor
	Contaminated cotton rags or other cleaning materials (Cat. 33.2)	Plant, Machineries & Vehicles	0.2	Authorised vendor
	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes (Cat. 33.1)	Plant	2 TPA/I 00 nos	Authorised vendor
5.	E-waste	Office, machineries	[	Authorised vendor
6.	APCD Dust	All APCEs	-	Dust collected in air Pollution Control Equipment will be recycled back to process.

### During the presentation the following documents were sought:

- 1. A revised material balance flow diagram to be provided.
- II. A list of authorized vendors identified for hazardous waste handling and disposal to be provided.

# The PAs have submitted the above required documents.

The proposal was appraised by State Level Expert Appraisal Committee (SEAC) and recommended for grant of Environmental Clearance in its 100<sup>th</sup> meeting held on 09<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup> and 14<sup>th</sup> January, 2023.

State Level Environment Impact Assessment Authority (SEIAA), Jharkhand in its 101<sup>st</sup> meeting held on 23<sup>rd</sup> & 24<sup>th</sup> January, 2023 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 "Expansion of cement production capacity of Bokaro Cement manufacturing Works, a standalone Grinding Unit from 2.0 Million TPA to 3.1 Million TPA of M/s Dalmia Cement (Bharat) Limited, Village: Gorabali, Notified Bokaro Industrial Area under JIADA, Balidih Phase – 4, Tehsil: Chas, Dist.: Bokaro, Jharkhand" alongwith the following specific conditions as recommended by SEAC.

#### I. Specific Conditions:

- 1. 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.

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M/2022-23/26462023 Date of Issue EC - 08/02/202

### 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.
- 2. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- 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)
- 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.
- 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.
- 6. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- 7. No mining/activity shall be undertake in the forest land or deemed forest without obtaining requisite prior forestry clearance.
- 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.
- 9. Environmental clearance is subject to obtaining 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 or located with in 10 km. of protected area).
- 10. The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue delay, which till process on their respective merits, no rights will vest in or accrue to them unless all clearance are obtained.

### III. 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

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- (Cement) and subsequent amendment dated 9<sup>th</sup> May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- 2. 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.
- 3. The project proponent shall install system carryout to Ambient Air Quality monitoring for common / criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx 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)
- 4. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six- monthly monitoring report.
- 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.
- 6. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- 7. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- 8. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- 9. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
- 10. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- 11. Have separate truck parking area and monitor vehicular emissions at regular interval.
- 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
- 13. Ventilation system shall be designed for adequate air changes as per ACGIH Document for all tunnels, motor houses, cement bagging plants

# IV. Water quality monitoring and preservation:

1. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated

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- 25<sup>th</sup> August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous).
- 2. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- 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.
- 4. Adhere to 'Zero Liquid Discharge'.
- 5. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- 6. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- 7. The project proponent shall practice rainwater harvesting to maximum possible extent.
- 8. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- 9. The project proponent shall make efforts to minimise water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water

## V. Noise monitoring and prevention:

- 1. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of sixmonthly compliance report.
- 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.

### VI. Energy Conservations measures:

- 1. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- 2. Provide the project proponent for LED lights in their offices and residential areas.
- 3. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS Standards.

### VII. Waste Management:

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



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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).

#### 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.
- 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.

### 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.
- 2. The PP shall provide Personal Protection Equipment (PPE) as per the norms of factory Act.
- 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.
- 4. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories 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 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
- 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.
- 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.
- 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.

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- Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- 5. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- 6. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.

#### XI. Miscellaneous:

- 1. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local 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.
- 2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- 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.
- 4. The project proponent shall monitor the criteria pollutants level namely;  $PM_{IO}$ ,  $S0_2$ ,  $NO_x$  (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.
- 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.
- 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.
- 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.
  - 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.
- 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,

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- Regional Office of MoEF & CC at Ranchi, Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi, and Central Pollution Control Board (CPCB).
- 9. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 10. The SEIAA, Jharkhand or any other competent Authority may alter modify the above conditions or stipulate any further condition in the interest of Environment Protection.
- 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).
- 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.
- 13. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 14. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 15. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- 16. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- 17. Any appeal against this EC shall lie with the National Green Tribunal, if preferred. within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010
- 18. This environmental clearance is valid for seven years from the date of issue.

Sd/-

Dated: 30/01/202?

Member Secretary State Level Environment Impact Assessment Authority, Jharkhand.

Memo No.-EC/SEIAA/2022-23/26462022/ 3 66

Copy to:

- 1. Additional Chief Secretary, Department of Forests, Environment & Climate Change, Govt. of Jharkhand.
- 2. Deputy Commissioner, District- Bokaro, Jharkhand.
- 3. Divisional Forest Officer, Bokaro Division, Bokaro Jharkhand.
- 4. Divisional Forest Officer, Wildlife Division, Hazaribagh Jharkhand

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- 5. Director IA Division, Monitoring Cell, MoEF and Climate Change, Indira Paryavaran Bhavan, Jorbag Road, Aliganj, New Delhi 110003.
- 6. Integrated Regional Office, Ranchi, Ministry of Environment, Forest and Climate Change, 2<sup>nd</sup> Floor, Jharkhand State Housing Board (HQ), Harmu Chowk, Ranchi, Jharkhand 834002.
- 7. Member Secretary, Jharkhand State Pollution Control Board, Ranchi.
- 8. Secretary, Jharkhand State Expert Appraisal Committee, Ranchi.
- 9. Website.

10. Guard file.

Member-Secretary\
State Level Environment Impact
Assessment Authority, Jharkhand

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