



State Level Environment Impact Assessment Authority, Jharkhand

Nursery Complex, Near Dhurwa Bus Stand, P.O+P.S-Dhurwa, Ranchi, Jharkhand-834004

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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: Prescribing of ToR to “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 at Village : Gorabali, Notified Bokaro Industrial Area under JIADA, Balidih Phase – 4, Tehsil : Chas, Dist. : Bokaro, Jharkhand”, (Proposal No. SIA/JH/IND/400155/2022) - regarding.

Ref: Your application no.- Nil, dated – 12.09.2022.

Sir,

The proposal was considered by the committee to determine the “Terms of Reference (TOR)” for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this purpose the Project Proponent has submitted the prescribed Form - I & PFR the proposed project falls in Category “B” under S. No. 3 (Material Production), Project Activity ‘3 (b)’ Cement Plants as per EIA Notification, 2006.

This is a new project which has been taken for appraisal on 17.09.2022.

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.

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- **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)	Details		Total quantity after expansion
		As per EC	Proposed	
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 additional land	15.75
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

Salient Features of the Project:

S. No.	PARTICULARS	DETAILS
A.	Area Details	
	Total Project Area	Plant area- 15.75 Acres (6.374 ha). No additional

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S. No.	PARTICULARS	DETAILS
		Land is required for proposed expansion.
	Greenbelt area	5.2 Acres (33% of total land area)
B.	Environmental Setting Details (with approximate aerial distance & direction from proposed project site)	
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 style="list-style-type: none"> ○ NH - 320 (earlier NH-23) 4 km in South direction ○ NH - 18 (15 km in South-East direction)
5.	Nearest Railway station	<ul style="list-style-type: none"> ○ Bokaro Steel City Railway Station (4.4 km in SSE direction) ○ Tupkadih Railway Station (1.4 km in North direction)
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.	<p>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</p> <ol style="list-style-type: none"> 1. Dakbera Open Jungle- 3.5km W 2. Barwapani Fairly dense jungle-7.5km W 3. PF in North Direction – 6.3 km 4. Chiubera PF -4.7km NE
8.	Water Bodies (within 10 km radius)	<ol style="list-style-type: none"> 1. Damodar River (5.15 km in NE direction) 2. Garga Dam (6.4 km in South direction) 3. KhanjoNadi (5.5 km in West direction)
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.
C.	Basic Requirements for the project	
	Water Requirement	<p>150 KLD</p> <p>Source: JIADA water supply.</p> <p>Rain water harvesting plan will be adopted to reduce fresh water demand.</p>

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S. No.	PARTICULARS	DETAILS
		No additional water for proposed expansion.
	Power Requirement	12 MW <i>Source:</i> 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 (Persons):	
	Construction/Implementation phase (no.)	64
	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)
(6.)	Packer	2 x 240 TPH	3 x 240 TPH
(7.)	Wagon Tippler	1800 TPH	1800 TPH
(8.)	Startup FBC/HAG	25 Mkal/hr	30 Mkal/hr
(9.)	Coal Hopper	-	2X75 Tonnes

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Proposed Storage Capacities

S. No.	Materials detail	Storage Capacity (Tonnes)		Storage Type
		Earlier	After detailed Engineering	
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 material	Quantity (MTPA)*				Source	Mode of Transportation	Distance (Kms.)	
		PSC		PPC	PCC			Earlier	After Expan sion
		Earlier	After Expan sion						
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/TAT A STEEL	Rail/Road	287	287
4.	Fly Ash	0	0	1.09	1.09	BTPS, Vedanta	Road	NA	80-100

STATUTORY CLEARANCES:

1	CO	:	The CO. Chas (Bokaro) vide letter no. 2436, dated 29.11.2021 has mentioned the plot no. of the project is recorded as "Kadim / Dhan / Parti Jadid" in Khatian.
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2	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 2058, dated 28.11.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
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, dated 21/04/2022
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 JIADA dated 13/04/2022

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
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

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S. No.	Khata No.	Survey Plot No.	Area in Sq.ft/Acre
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/Solar	150 nos	Authorised vendor/buy back
4.	Hazardous wastes			
	Used or spent oil (Cat. 5.1)		13	Authorised vendor
	Wastes or residues containing oil (Cat. 5.2)	Plant, Machineries & Vehicles	15	Authorised vendor
	Contaminated cotton rags or other cleaning materials	Plant, Machineries &	0.2	Authorised vendor

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	Name of the waste	Source	Qty (TPA)	Mode of disposal
	(Cat. 33.2)	Vehicles		
	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes (Cat. 33.1)	Plant	2 TPA/100 nos	Authorised vendor
5.	E-waste	Office, machineries	1	Authorised vendor
6.	APCD Dust	All APCEs		Dust collected in air Pollution Control Equipment will be recycled back to process.

The Consultant submitted that baseline data have been generated 03 times between October, 2021 and May, 2022. The Committee have asked to collect the additional baseline data for one month during October, 2022.

The PAs vide letter dated 17.09.2022 requested for waiver of the additional one month baseline data collection.

The Committee did not agree to waive the additional baseline data collection but reduce the period of one month to 02 weeks.

SEAC, Jharkhand has suggested the ToRs in its 97th meeting held on 14th, 15th, 16th, 17th and 18th September, 2022 for undertaking detailed EIA / EMP study and SEIAA, Jharkhand has approved the ToRs in its 98th meeting held on 17th & 18th October, 2022. The SEAC has recommended following project specific conditions:-

A. STANDARD TERMS OF REFERENCE (TOR)

1. Executive Summary of the project.

2. Introduction

- i. Details of the EIA Consultant including NABET accreditation.
- ii. Information about the project proponent.
- iii. Importance and benefits of the project.

3. Specific Conditions

- i. 02 weeks additional monitoring data to be conducted for the month October, 2022 and report to be submitted alongwith EIA/EMP report.
- ii. Solid Waste management plan to be submitted alongwith EIA/EMP report.

4. Project Description

- i. Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.







- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities.
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
- ix. Hazard identification and details of proposed safety systems.
- x. Expansion / modernization proposals:
 - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing existing operation of the project from SPCB shall be attached with the EIA-EMP report.
 - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

5. Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State. Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site.
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

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- viii. Land use break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy.

6. Forest and wildlife related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).
- ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

7. Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro- meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average

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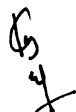
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and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/ MoEF & CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/ MoEF & CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

8. Impact and Environmental Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor- cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E (P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control.
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-



minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

9. Occupational Health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

10. Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

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- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
 - iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.
11. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
12. **Enterprise Social Commitment (ESC)**
- i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
13. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
14. A tabular chart with index for point wise compliance of above TOR.
15. Beside the above, the below mentioned general points should also be followed:
- a) A note confirming compliance of the ToR, with cross referencing of the relevant sections/pages of the EIA report should be provided.
 - b) All documents may be properly referenced with index and continuous page numbering
 - c) Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
 - d) Where the documents provided are in a language other than English, an English translation should be provided.
 - e) The questionnaire for environmental appraisal of LPG Bottling projects as prescribed by the Ministry shall also be filled and submitted.
 - f) All statutory clearances obtained for the project shall be included in the EIA report.
 - g) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.
16. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered.

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17. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M), dated 12.01.2017.

B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR CEMENT PLANTS

1. Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines.
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to:
3. For large Cement Units, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.
4. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. If the raw materials used have trace elements, an environment management plan shall also be included.
6. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
7. Energy consumption per ton of clinker and cement grinding.
8. Provision of waste heat recovery boiler.
9. Arrangement for use of hazardous waste.

Sd/-

Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Memo No : EC/SEIAA/2022-23/2646/2022/ 274

Ranchi, Date : 27/10/2022

Copy to:

1. Member Secretary, Jharkhand State Pollution Control Board, Ranchi for information and necessary action.
2. Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.

Member Secretary

State Level Environment Impact
Assessment Authority, Jharkhand.

27/10/2022

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