



Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The Deputy Executive Director
DALMIA CEMENT BHARAT LIMITED

Registered address: Dalmia Cement (Bharat) Ltd., Dalmiapuram, P.O. Kallakudi, Dist.-Tiruchirappalli (Tamil Nadu) - 621 651, Correspondence Address: 11th & 12th Floor, Hansalaya Building, 15, Barakhamba Road,,New Delhi,Delhi-110001

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 Ministry vide proposal number IA/CG/IND1/413879/2023 dated 23 Jan 2023. The particulars of the environmental clearance granted to the project are as below.

- | | |
|--|---|
| 1. EC Identification No. | EC23A009CG198000 |
| 2. File No. | IA-J-11011/163/2019-IA-II(IND-I) |
| 3. Project Type | New |
| 4. Category | A |
| 5. Project/Activity including Schedule No. | 3(b) Cement plants |
| 6. Name of Project | Proposed Integrated Cement Plant - Clinker (3.25 MTPA), Cement (2.5 MTPA), WHRS (15 MW) and D.G. Set (1000 KVA) at Kharora, Tehsil: Kharora (Earlier Tilda), District: Raipur, Chhattisgarh by M/s. Dalmia Cement (Bharat) Ltd. |
| 7. Name of Company/Organization | DALMIA CEMENT BHARAT LIMITED |
| 8. Location of Project | Chhattisgarh |
| 9. TOR Date | N/A |

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

Date: 16/03/2023

(e-signed)
Dr. R. B. Lal
Scientist F
IA - (Industrial Projects - 1 sector)

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

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F. No. IA-J-11011/163/2019-IA.II(IND-I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division – Industry I sector)

Indira Paryavaran Bhawan
Vayu Wing, 3rd Floor,
Jor Bagh Road, Aliganj,
New Delhi – 110003

Dated: 16th March, 2023

To,

M/s Dalmia Cement (Bharat) Ltd.
Dalmiapuram, P.O. Kallakudi,
Dist.-Tiruchirappalli, Tamil Nadu- 621 651
Email: env.head@dalmiacement.com

Project: Proposed Integrated Cement Plant - Clinker (3.25 MTPA), Cement (2.5 MTPA), WHRS (15 MW) and D.G. Set (1000 KVA) by M/s. Dalmia Cement (Bharat) Ltd., located at Kharora, Tehsil: Kharora (Earlier Tilda), District: Raipur, Chhattisgarh – Grant of Environmental Clearance regarding.

Sir,

This refers to your proposal no. IA/CG/IND1/413879/2023 dated 23.01.2023 along with copy of EIA/EMP report, Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. Further, PP has uploaded the information on Parivesh Portal on 14.02.2023.

2. The proposed project activity is listed at schedule no. 3(b) Cement Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at central level.
3. The instant Proposal was considered in the 22nd EAC Meeting held during 30th – 31st January, 2023 wherein after detailed deliberations, the committee recommended the proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <https://parivesh.nic.in>
4. The details of the proposal are as per the EIA/EMP report submitted by the proponent. The salient features of the proposal as presented during the above-mentioned meetings of EAC (Industry 1 Sector) are as under: -

S. No.	Particulars	Details submitted by PP
a.	Terms of Reference for undertaking EIA study	27 th June, 2019
b.	Period of baseline data collection	Post Monsoon Season (Oct., to Dec., 2022)
c.	Date of Public Consultation	24 th Jan., 2020
d.	Action plan to address the PH issues	An amounts of Rs 26 Cr have been earmarked to address the issues raised during public hearing. Detail of activities proposed attached as Annexure 1 .



S. No.	Particulars	Details submitted by PP		
e.	Location of the project	Village Kharora, Tehsil: Kharora (Earlier Tilda), District: Raipur, Chhattisgarh		
f.	Latitude and Longitude of the project site	Point	Latitude	Longitude
		1.	21 ⁰ 25' 08.76"	81 ⁰ 55' 28.43"
		2.	21 ⁰ 25' 01.51"	81 ⁰ 55' 10.73"
		3.	21 ⁰ 24' 57.14"	81 ⁰ 55' 10.10"
		4.	21 ⁰ 24' 55.43"	81 ⁰ 55' 03.20"
		5.	21 ⁰ 24' 55.22"	81 ⁰ 54' 56.08"
		6.	21 ⁰ 24' 52.88"	81 ⁰ 54' 55.80"
		7.	21 ⁰ 24' 52.87"	81 ⁰ 54' 54.70"
		8.	21 ⁰ 24' 50.16"	81 ⁰ 54' 54.25"
		9.	21 ⁰ 24' 50.18"	81 ⁰ 54' 53.29"
		10.	21 ⁰ 24' 45.66"	81 ⁰ 54' 53.43"
		11.	21 ⁰ 24' 45.60"	81 ⁰ 54' 54.19"
		12.	21 ⁰ 24' 42.35"	81 ⁰ 54' 54.19"
		13.	21 ⁰ 24' 39.78"	81 ⁰ 54' 58.19"
		14.	21 ⁰ 24' 37.65"	81 ⁰ 54' 53.86"
		15.	21 ⁰ 24' 33.90"	81 ⁰ 54' 54.68"
		16.	21 ⁰ 24' 37.40"	81 ⁰ 55' 10.71"
		17.	21 ⁰ 24' 40.66"	81 ⁰ 55' 10.32"
		18.	21 ⁰ 24' 40.51"	81 ⁰ 55' 16.18"
		19.	21 ⁰ 24' 46.33"	81 ⁰ 55' 21.26"
20.	21 ⁰ 24' 57.40"	81 ⁰ 55' 28.76"		
g.	Total land	Total area 60 Ha [Pvt. Land – 59.717; Govt. Land – 0.081]		
h.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	DCBL intends to install the Cement Plant excluding the CPP and colony over an area of 60 ha. Out of total project area; 33.389 ha land has already been purchased in the name of Dalmia Bharat Green Vision Ltd. (A Wholly owned subsidiary of Dalmia Cement (Bharat) Ltd. Consent has been obtained from private land owners for 10.451 ha and 3.334 ha is yet to be taken. Remaining land belongs to industries / Industrialist like Shri Sarda / CIL – 7.227 ha, Century /Ultratech Cement Ltd.- 5.316 ha which will be purchased/exchange in due course		
i.	Existence of habitation & involvement of R&R, if any	Plant Site: No habitation exists within the plant site and R&R is not applicable.		
		Study Area:		
		Habitation	Distance (km)	Direction
		Kharora (NP)	~1.2	SE
		Kesla	~1.8	SE
		Math	~2.0	SW
		Nawagaon	~2.5	South
		Pachri	~2.5	NNE
		Bardih	~2.5	East
		Chheriya	~2.6	NNE
Nahardih	~2.9	ENE		
There are approx. 72 other villages in 10 km radius study area.				
j.	Elevation of the project site	292 m to 302 m above mean sea level		



S. No.	Particulars	Details submitted by PP																														
k.	Involvement of Forest land if any.	No Forest Land is involved.																														
l.	Water body exists within the project site as well as study area	<p>Plant site: No water body exists within the plant site. Study area: Following water body fall within 10 km radius:</p> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Mahanadi Canal (Baloda branch)</td> <td>3.5 km</td> <td>ENE</td> </tr> <tr> <td>Mahanadi Canal (Lawan branch)</td> <td>4.5 km</td> <td>South</td> </tr> <tr> <td>Mahanadi Canal (Bhatapara branch)</td> <td>5.5 km</td> <td>WSW</td> </tr> <tr> <td>Pindraon Tank</td> <td>2.5 km</td> <td>West</td> </tr> <tr> <td>Pikridih Tank</td> <td>4.0 km</td> <td>WSW</td> </tr> <tr> <td>Kumhari Tank</td> <td>4.5 km</td> <td>North</td> </tr> <tr> <td>Kosrangi Tank</td> <td>7.5 km</td> <td>SE</td> </tr> <tr> <td>Tengna Nala</td> <td>8.5 km</td> <td>NNE</td> </tr> <tr> <td>Khorsi Nala</td> <td>9.5 km</td> <td>ENE</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Two seasonal water reservoirs towards north 	Water body	Distance (km)	Direction	Mahanadi Canal (Baloda branch)	3.5 km	ENE	Mahanadi Canal (Lawan branch)	4.5 km	South	Mahanadi Canal (Bhatapara branch)	5.5 km	WSW	Pindraon Tank	2.5 km	West	Pikridih Tank	4.0 km	WSW	Kumhari Tank	4.5 km	North	Kosrangi Tank	7.5 km	SE	Tengna Nala	8.5 km	NNE	Khorsi Nala	9.5 km	ENE
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m.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	<p>Study area Name of the ESZ/ESA: Not Applicable Status of Notification: Not Applicable Distance of project from ESZ/ESA: Authenticated map of ESZ projecting distance of ESZ from project site: Not Applicable Status of NBWL approval: Not applicable List of Protected forests (PF)</p> <ul style="list-style-type: none"> Khaulidabri PF (Adjacent in N direction) Mohranga PF (4.5 km in NNW direction) <p>Note: (ix). Three schedule - I species i.e., Monitor lizard (Varanus bengalensis), Python (Python molurus) & Indian Peafowl (Pavo cristatus) has been reported in study area of the proposed project site. Wildlife Conservation Plan has been approved by Principle Chief Conservator of Forest (Wildlife) and Chief Wildlife Warden, Raipur Chhattisgarh vide letter No. S.No. / Wildlife/Management-475/466, Nava Raipur, dated 28th Jan., 2020. The total budget allocated for implementation of Conservation Plan is Rs. 49.50 Lacs for the implementation period of 5 years.</p>																														
n.	Project cost	The capital cost of the proposed project is Rs 1800 crores.																														
o.	EMP cost	The capital cost for environmental protection measures is proposed as Rs 195 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 8 crores/annum																														
p.	Employment opportunity	The employment generation from the proposed project is 2644 persons (During Construction 1544 + During Operation 1100).																														
q.	Water and Power requirement	The water requirement for the proposed project is estimated as 1850 m ³ /day. The power requirement for the proposed project is estimated as																														



S. No.	Particulars	Details submitted by PP
		42 MW

Unit configuration and capacity:

S. No.	Plant Equipment / Facility/Area	Proposed Capacity as per ToR and Public Hearing	Applied for EC/Proposed Unit	
			Configuration	Capacity
1	Clinker	3.25 Million TPA	Kiln: 1 x 9500 TPD	3.25 Million TPA
2	Cement	2.5 Million TPA	Cement Mill: 760 TPH	2.5 Million TPA
3	CPP	27 MW	Dropped	0
4	WHRS (MW)	15 MW	PH & AQC Boiler: 15 MW	15 MW
5	DG Sets (KVA)	1000 KVA	1000 KVA	1000 KVA
6	Project area (ha)	102.6 Ha	60 Ha	60 Ha

6. The EAC, in its meeting held during 30th – 31st January, 2023, inter-alia, deliberated the following:

- i. The instant proposal is for proposed Integrated Cement Plant - Clinker (3.25 MTPA), Cement (2.5 MTPA), WHRS (15 MW) and D.G. Set (1000 KVA).
- ii. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
- iii. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
- iv. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
- v. Total proposed land area is 60 ha out of which 33.389 ha land has already been purchased in the name of Dalmia Bharat Green Vision Ltd. (A Wholly owned subsidiary of Dalmia Cement (Bharat) Ltd. Consent has been obtained from private land owners for 10.451 ha and 3.334 ha is yet to be taken. Remaining land belongs to industries / Industrialist like Shri Sarda / CIL – 7.227 ha, Century /Ultratech Cement Ltd.- 5.316 ha which will be purchased/exchange in due course. The EAC further noted that earlier, total land area proposed for the Plant was approx. 102.6 ha (Including colony, CPP and Conveyor to mine). ToR was obtained from MoEFCC for the same area on 27th June, 2019 and Public hearing has also been conducted on 24th January, 2020 for the



same area and same configuration. However, due to delay in land acquisition because of Covid, DCBL has dropped the proposal for setting of CPP and colony which in turn the proposed project area reduced from 102.6 ha to 60.0 ha. Now, DCBL proposes to install the Cement Plant excluding the CPP and colony over an area of 60 ha. The Committee accepted the request of PP for reduction of area.

- vi. The nearest habitation to plant are Kharora (NP) (1.2 km, SE), Kesla (1.8 km, SE), Math (2.0 km, SW), Nawagaon (2.5 km, South), Pachri (2.5 km, NNE), Bardih (2.5 km, East), Chheriya (2.6 km, NNE) and Nahardih (2.9 km, ENE).
- vii. Two seasonal water reservoirs towards north along with Mahanadi Canal (Baloda branch) (3.5 km, ENE), Mahanadi Canal (Lawan branch) (4.5 km, South), Mahanadi Canal (Bhatapara branch) (5.5 km, WSW), Pindraon Tank (2.5 km, West), Pikridih Tank (4.0 km, WSW), Kumhari Tank (4.5 km, North), Kosrangi Tank (7.5 km, SE), Tengna Nala (8.5 km, NNE) and Khorsi Nala (9.5 km, ENE) exists within the study area of 10 km from the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
- viii. The water requirement for the proposed project of 1850m³/day, is proposed to be met ground water.
- ix. Three schedule - I species i.e., Monitor lizard (*Varanus bengalensis*), Python (*Python molurus*) & Indian Peafowl (*Pavo cristatus*) has been reported in study area of the proposed project site. Wildlife Conservation Plan has been approved by Principle Chief Conservator of Forest (Wildlife) and Chief Wildlife Warden, Raipur Chhattisgarh vide letter No. S.No. / Wildlife/Management-475/466, Nava Raipur, dated 28th Jan., 2020. The total budget allocated for implementation of Conservation Plan is Rs. 49.50 Lacs for the implementation period of 5 years.
- x. Proposed greenbelt will be developed in 19.8 ha which is about ~33% of the total project area. Total no. of 49,500 saplings will be planted and nurtured in 5 years. Besides this, company has proposed distribution of tree saplings (15000 nos.) in nearby villages & schools and 10,000 trees will be planted along with road adjacent to the plant area. Also, company will undertake additional greenbelt/Plantation in contiguous areas of the existing Plant boundary over an area of 4.2 Ha to make the total plantation area up to 24 ha which is approx. 40 % of the total plant area proposed for the project. Company will adopt Miyawaki technique as recommended by Hon'ble EAC for greenbelt development / plantation. During 1st and 2nd Year peripheral plantation will be undertaken and completed along with Construction of the plant and during 3rd year after completion of construction, Internal plantation and laydown area will be covered.
- xi. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
- xii. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
- xiii. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
- xiv. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
- xv. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.



xvi. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

7. The EAC (Industry-1 Sector), in its 22nd meeting held on January 30 - 31, 2023, based on information & clarifications provided by the project proponent and after detailed deliberations **recommended** the proposal for grant of Environment Clearance subject to stipulation of specific and general conditions as detailed in the point below.

8. The MoEF&CC has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Industry-1 Sector) hereby decided to grant **Environment Clearance for instant proposal of M/s Dalmia Cement (Bharat) Ltd** under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions:

A. Specific conditions:

- (i) The PP shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii) The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (iii) The nearest habitation to plant are Kharora (NP) (1.2 km, SE), Kesla (1.8 km, SE), Math (2.0 km, SW), Nawagaon (2.5 km, South), Pachri (2.5 km, NNE), Bardih (2.5 km, East), Chheriya (2.6 km, NNE) and Nahardih (2.9 km, ENE). Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The PP shall also include some of these locations in its environmental monitoring programme.
- (iv) Two seasonal water reservoirs towards north along with Mahanadi Canal (Baloda branch) (3.5 km, ENE), Mahanadi Canal (Lawan branch) (4.5 km, South), Mahanadi Canal (Bhatapara branch) (5.5 km, WSW), Pindraon Tank (2.5 km, West), Pikridih Tank (4.0 km, WSW), Kumhari Tank (4.5 km, North), Kosrangi Tank (7.5 km, SE), Tengna Nala (8.5 km, NNE) and Khorsi Nala (9.5 km, ENE) exists within the study area of 10 km from the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- (v) As committed, PP shall adopt villages namely Kharora, Nahardih, Bardih and Kesla and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages.
- (vi) The water requirement for the proposed project of 1850m³/day, is proposed to be met ground water. Necessary permission shall be obtained from the Competent Authority in this regard. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.



- (vii) Three tier Green Belt shall be developed in a time frame of one year covering at least 40% of the total project area as per the submitted plan with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards the villages namely Kharora (NP) (1.2 km, SE), Kesla (1.8 km, SE), Math (2.0 km, SW), Nawagaon (2.5 km, South), Pachri (2.5 km, NNE), Bardih (2.5 km, East), Chheriya (2.6 km, NNE) and Nahardih (2.9 km, ENE). Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- (viii) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (ix) The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.
- (x) The PP shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.
- (xi) All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.
- (xii) All internal and connecting road to the Highway shall be black topped/ concreted with suitable load in term of Million Standard Axle (MSA) as per IRC guidelines.
- (xiii) Performance monitoring of pollution control equipment shall be taken up yearly and compliance status in this regard shall be reported to the concerned Regional Office of the MoEF&CC.
- (xiv) Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.
- (xv) Particulate matter emissions from all the stacks shall be less than 30 mg/Nm³.
- (xvi) DeSO_x system shall be provided dry type. NO_x level shall be maintained below 600 mg/Nm³ by using best available technology.
- (xvii) Petcoke dosing shall be controlled automatically to control SO₂ emission from chimney within the prescribed limits.
- (xviii) PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- (xix) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xx) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.
- (xxi) All the recommendations made in the risk assessment report shall be implemented and compliance status in this regard shall be furnished to the Regional Office of the MoEF&CC along with the six monthly compliance report.



- (xxii) All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- (xxiii) The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at <https://cpcb.nic.in/technical-guidelines-3/>. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
- (xxiv) The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- (xxv) The recommendations of the approved Site-Specific 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 to the concerned Regional Office of the MoEF&CC.

B. General conditions

I. Statutory compliance:

- i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement); 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 recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- 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 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.
- 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.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
- x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- xi. Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.
- 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 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) 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 recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall regularly monitor ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.



- iv. 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
- v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- vi. 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.

IV. Noise monitoring and prevention

- i. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 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. Waste heat recovery system shall be provided for kiln and cooler.
- ii. The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- iii. 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.
- iv. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

- i. Used refractories shall be recycled as far as possible.

VII. Green Belt

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.
- ii. Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

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 project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.



- iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- 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 report to the head of the organization.

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; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- 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.
 - viii. 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.
 - ix. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
 - x. 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).
 - xi. 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.
9. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.
10. 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 the Environment (Protection) Act, 1986.
11. Any appeal against this environmental clearance 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.
12. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 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.
13. This issues with approval of the competent authority.



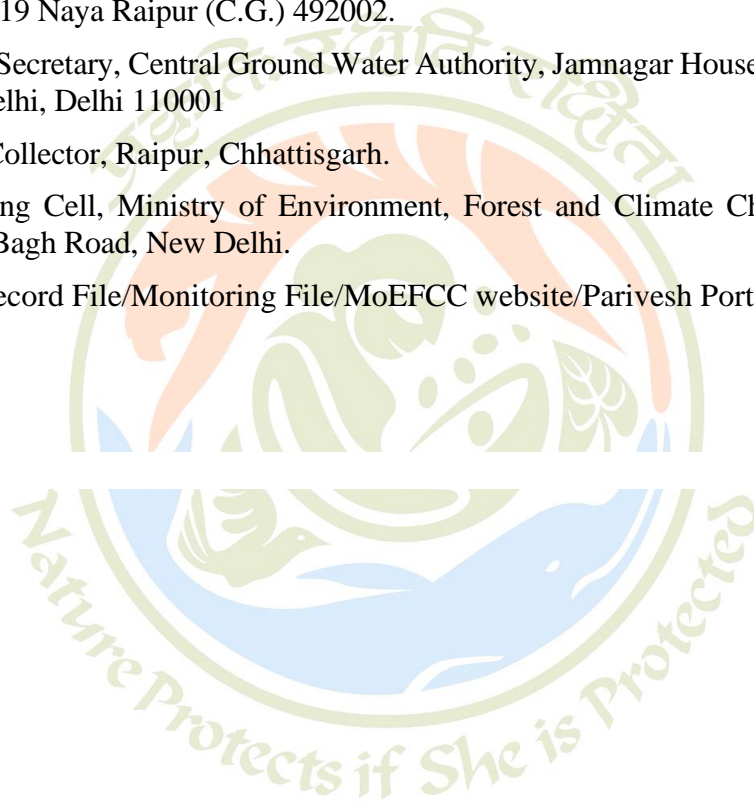
(Dr. R. B. Lal)
Scientist 'F'/ Director
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Encl. as above at Annexure –I

Copy to: -

1. The Principal Secretary Forest, Mahanadi Bhawan, Nawa Raipur, Atal Nagar Chhattisgarh, India.
2. The Additional Chief Secretary Forest, Mahanadi Bhawan, Nawa Raipur, Atal Nagar, Chhattisgarh.
3. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi.
4. The Principal Chief Conservator of Forests (HoFF) Chhattisgarh Forest Department, Jai Road Aranya Bhawan Raipur (C.G.)-492007.
5. Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Aranya Bhawan, North Block, Sector-19 Naya Raipur, Atal Nagar, Chhattisgarh - 492002.
6. The Chairman, Central Pollution Control Board, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
7. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhawan, North Block Sector-19 Naya Raipur (C.G.) 492002.
8. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
9. The District Collector, Raipur, Chhattisgarh.
10. The Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
11. Guard File/Record File/Monitoring File/MoEFCC website/Parivesh Portal



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Table: Action plan as per MoEF&CC O.M. dated 30/09/2020

S. No.	Activities	Budget	Physical Targets		
		(Rs. Lakh)	1 st Year	2 nd Year	3 rd year
A	Socio- economic Development Related				
1	Development of community play grounds	40	Nahardih & Bardih	Kesla	Kharora
2.	Construction/Rejuvenation of Community Centers	120	Kharora	Nayakatand & Manth	Moherenga
3.	Repair / Restoring the Village Pathways/Road	250	Kharora & Kesla	Nahardih & Bardih	Nayakatand & Manth
4.	Provision of solar lights/Fans (200 nos.) in the village streets, Anganwadi, schools and distribution of Solar lantern in villages Nahardih, Kharora, Kesla and Bardih	60	Nahardih & Bardih	Kesla	Kharora
Sub-Total (A)		470			
B	Health Related				
1.	Upgradation of medical equipment such as providing extra beds, X-ray machines, ECG machines etc. in existing health sub-centers	150	Kharora	Moherenga	Nahardih
2.	Providing Mobile Medical Van facility	25	Kharora		
3.	Renovation of Community Health Centre	80	Kharora	Nayakatand & Manth	Moherenga
Sub-Total (B)		255			
C	Drinking Water Facility				
1.	Provision of Clean drinking water in schools and Gram Panchayat / villages of Nahardih, Kharora, Kesla and Bardih etc. (RO, UV, Water Tank, Hand pump, Water tanker for community service in nearby villages etc.) (5 nos.)	75	Kharora	Kesla	Nahardih & Bardih
Sub-Total (C)		75			
D	Education Infrastructure Development				
1.	Installation of Smart classes in the Government schools to promote Digital education	150	Kharora	Nahardih	Kesla
2.	Improvement/refurbishment of Govt. schools like construction of Girls toilets in Schools, drinking water facility, sanitation, sports equipment, laboratory equipment etc.)	250	Kharora	Nayakatand & Manth	Moherenga
Sub-Total (D)		400			
E	Water Conservation				
1.	Rejuvenation of Ponds (10 nos)	250	Kharora	Moherenga	Nahardih
2.	Construction of check- dams (5 nos)	250	Math	Sirri	Chheriya

S. No.	Activities	Budget	Physical Targets		
		(Rs. Lakh)	1 st Year	2 nd Year	3 rd year
3.	Ground Water Recharging through defuncted Bore wells (250 nos)	250	Nahardih, Kesla & Bardih	Kharora, Raikhera & Beparitala	Math, Sirri & Chheriya
4.	Support in Infrastructural development for Rain water harvesting on Govt. School Buildings and public buildings	250	Kharora	Math	Beparitala
Sub-Total (E)		1000			
F	Skill Development & Livelihood Enhancement				
1	Setting up of skill training center (1 nos.) under the banner of Dalmia Institute of Knowledge and Skill Harnessing (DIKSHa) for training of unemployed youth common for plant and captive mines proposed in the area. Providing Vocational Training to local youths for development of own business for the livelihood such as: i. Small enterprises – Workshops, grocery stores, electric repair shops etc; ii. Dairy farming; iii. Poultry farming iv. Flour mills, Dall mills etc. Affiliation: NSDC/Chhattisgarh State Skill Dev. Mission	165	Village Kesla (In addition to 90 lacs committed under mines; 75 lacs additional for enhanced facilities)		
2	Providing Infrastructural Support through Women Income Generating Programmes through the formation of SHGs to various economic activities like Cutting & Tailoring, Nursery, Stitching / embroidery, Pickle & Sauces making, Soft Toys & Gem Jeweller and Beautician Courses will be carried out for Women Empowerment in the area.	75	Nahardih & Bardih	Kesla	Kharora
Sub-Total (F)		240			
G	Plantation				
1	Distribution of tree saplings (25000 nos.) in nearby villages & schools and Quarterly incentives for maintenance	25	Nahardih, Kesla & Bardih	Kharora, Raikhera & Beparitala	Math, Sirri & Chheriya
2	Training and Infrastructure Support for development of Nursery/Orchard in nearby villages	45	Kharora	Kesla	Math
Sub-Total (G)		70			
H	Agriculture Practices and Productivity				
1.	Providing seeds and organizing training camps for improvement of Agri - crop yield & social forestry	40	Kharora & Kesla	Nahardih & Bardih	Nayakatand & Manth
2.	Training, Scientific Support and Awareness to local Farmers to increase yield of crop and Fodder, Contribution to	50	Nahardih, Kesla & Bardih	Kharora, Raikhera & Beparitala	Math, Sirri & Chheriya



S. No.	Activities	Budget	Physical Targets		
		(Rs. Lakh)	1 st Year	2 nd Year	3 rd year
	various Govt. Schemes (Swachh Bharat etc.)				
Sub-Total (H)		90			
Grand Total		2600			
Note: The Action Plan has been in the manner to develop the project impacted villages namely Kharora, Nahardih, Bardih and Kesla as a Model village.					

