

File No: IA-J-11011/292/2006-IA-II(IND-I)

Government of India Ministry of Environment, Forest and Climate Change IA Division



Date 20/02/2024



To,

M/s Ambuja Cement Limited(Unit: Maratha Cement Works)

228. Udyog Vihar, Phase-I Gurgaon, GURUGRAM, HARYANA, Pin 122016

Email: anurag.solankey@ambujacement.com

Subject:

Expansion of Integrated Cement Project (Clinker - 2.85 to 6.15 Million TPA, Cement - 4.75 to 10 Million TPA and WHR - 45 MW) by Installation of New Line – II, by M/s. Ambuja Cements Limited (Unit: Maratha Cement Works), located at Villages: Upparwahi & Kukkudsat, Taluka: Korpana and Villages: Bhendyi & Hardona, Taluka: Rajura, District: Chandrapur, Maharashtra – Grant of Environmental Clearance under the provisions EIA Notification, 2006 - regarding.

Sir/Madam,

This refers to your proposal no IA/MH/IND1/442651/2023 dated 02.12.2023 along with copy of EIA 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, the PP has uploaded the information on portal on 16.01.2024.

2. The particulars of the proposal are as below:

(i) EC Identification No. EC23A1102MH5578159N

(ii) File No. IA-J-11011/292/2006-IA-II(IND-I)

(iii) Clearance Type Fresh EC

(iv) Category A

(v) **Project/Activity Included Schedule No.** 3(b) Cement plants ,1(d) Thermal Power Plants

(vi) Sector Industrial Projects - 1

Expansion of Integrated Cement Project (Clinker - 2.85 to 6.15 Million TPA, Cement - 4.75 to 10 Million TPA and WHR - 45 MW) by Installation of

(vii) Name of Project

New Line - II At Villages: Upparwahi &

Kukkudsat, Taluka: Korpana and Villages: Bhendvi & Hardona, Taluka: Rajura, District: Chandrapur (Maharashtra) by M/s. Ambuja Cements Limited (Unit: Maratha Cement Works) (viii) Name of Company/Organization

(ix) Location of Project (District, State)

(x) Issuing Authority

(xi) Applicability of General Conditions as per EIA Notification, 2006

Ambuja Cement Limited CHANDRAPUR, MAHARASHTRA MoEF&CC

No

3. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity is covered schedule S. No. 3(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

- 4. The proposal is considered in the **51th meeting of the EAC for Industry-I sector held during 2nd -4th January, 2024,** wherein the Committee, after detailed deliberations, recommended the proposal. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at https://parivesh.nic.in.
- 5. 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 given at **Annexure 1**, Unit configuration and capacity are given at **Annexure II**.
- 6. The EAC, in its meeting held during 2nd to 4th January, 2024, inter-alia, deliberated the following:
- 1. The instant proposal is for Expansion of Integrated Cement Project (Clinker 2.85 to 6.15 Million TPA, Cement 4.75 to 10 Million TPA and WHR 45 MW) by Installation of new Line II.
- 2. The existing project was accorded environmental clearance for Expansion of Clinker Production (2.40 to 2.85 Million TPA), Cement Plant (2.85 to 4.75 Million TPA), and Captive Power Plant (55 to 70 MW) at Villages: Upparwahi, District: Chandrapur (Maharashtra) from MoEFCC, New Delhi vide Letter No. J-11011/292/2006-IA. II(I) dated 03rd Nov., 2006. Consent to Operate for Clinker (2.85 Million TPA), Cement (OPC, PPC, PSC, Composite Cement & Masonry Cement) (4.75 Million TPA), Captive Power Plant (60 MW), D.G. Set (10 MW), AFR Feeding System (650 TPD) along with Railway Siding (24000 TPD) was accorded by Maharashtra Pollution Control Board vide Consent No.: Format1.0/CAC/UAN No. MPCB-CONSENT-0000146931/CR/2302001893 dated 27th February, 2023 which is valid upto 31st October, 2024.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
- 7. The total plant area is 194.65 ha, which is under the possession of the company and converted for industrial use. The proposed expansion will be done within the existing plant premises.
- 8. Village Uparwahi (0.28 km, WNW), Village Ambiguda (0.5 km, SE), Village Mangi Lahan (0.5 km, E) along with other 53 villages and other sensitive areas within the study area of the project site. The EAC is of the opinion that PP shall prepare and strictly implement the environmental safeguard measures to minimise the impact on the habitation of the locals
- 9. Tutra Nala is passing through the railway line of the plant. Mangi Nala is flowing adjacent to the project in North-East

- direction along with other water bodies. The EAC is of the opinion that the water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and implemented.
- 10. PP has reported that there are interlinked project to the instant project. There are four nos. of Captive Limestone Mines having total production capacity of 4.0 Million TPA. Environmental Clearance for all the captive mines has been obtained from MoEFCC/ SEIAA. To cater the additional limestone requirement (i.e. 3.0 Million TPA) for the proposed expansion project, the company has proposed expansion in limestone production capacity of ML I & ML II. The company is in advance stage of obtaining EC for expansion of ML-I (1.5 to 3.5 Million TPA) i.e. the Final EC application for ML-I after conduction of Public hearing has been uploaded on PARIVESH web portal. After obtaining EC for ML-I, the limestone availability will be 8.0 Million TPA. Since, the plant commissioning will take approx. 24 months; during this period, the company may also submit the application for grant of EC for ML-II.
- 11. Existing water requirement is 7140 KLD which is obtained from Pagadigudam Dam, Ground water and Mine pits. The water requirement for the proposed project is estimated as 1820 KLD. Thus, the total water requirement after expansion will be 8960 KLD. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permissions from the Competent Authority in this regard.
- 12. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall prepare and strictly implement a plan to minimise the level of environmental parameters.
- 13. The PP has submitted that existing greenbelt has been developed in 45.89 ha area which is about 3% of the total existing Plant area i.e., 121.41 ha with total saplings of 1,02,608 trees. At present, about 1,02,608 saplings have been planted with density of 2236 saplings/ ha. Further, 12,115 trees will be planted by gap filling to maintain the density by 2500 saplings/ ha. Along with this, out of the Additional Area of 73.24 ha, 24.2 ha (i.e., 33% of the additional area) will be further developed under greenbelt/ plantation with density of @ 2500 saplings per hectare. Thus, a total of 70.09 ha (36% of total project area i.e., 194.65 ha) will be developed as greenbelt. Total no. of 60425 saplings will be planted and nurtured in 24.2 ha in next 4 years. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that greenbelt shall be completed within a period of 3 years.
- 14. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
- 15. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
- 16. Eight Schedule I species are present within 10 km radius study area. Wildlife Conservation Plan for eight Schedule I species has been prepared and submitted to DFO, Chandrapur for authentication. The company has allocated Rs. 5 Croes for next 5 years for implementation of Wildlife Conservation plan.
- 17. The Committee deliberated on the certified compliance report of IRO and found it satisfactory.
- 18. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.
- 19. 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.
- 20. 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.
- 21. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.
- 7. The EAC, in its 51th meeting of Expert Appraisal Committee (Industry-1 Sector) held during **2nd to 4th January**, **2024**, based on information & clarifications provided by the project proponent and after detailed deliberations **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-

34/2018-III dated 9/8/2018 based on project specific requirements.

- 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. Ambuja Cements Limited (Unit: Maratha Cement Works), under the provisions of EIA Notification, 2006 subject to specific conditions and general conditions at Annexure III.
- 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

Copy To

- 1. The Secretary, Environment & Forest Department, Government of Maharashtra, 4th Floor, Mantralaya, Mumbai-400032
- 2. The Secretary, Revenue Department, Government of Maharashtra, 4th Floor, Mantralaya, Mumbai-400032
- 3. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi.
- 4. The Principal Chief Conservator of Forests & Government of Maharashtra, MECL Building, Dr. Ambedkar Bhawan, Seminary Hills, Civil Lines, Nagpur-440006
- 5. The Deputy Director General of Forests (C), Integrated Regional Office, Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building Civil Lines, Nagpur-440001
- 6. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi 32
- 7. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. PVR Cinema, Sion Circle, Mumbai-400 022.
- 8. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
- 9. The District Collector, Chandrapur, Mumbai
- 10. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
- 11. Guard File/Monitoring File/Website/Record File/Parivesh Portal

Details of the proposal are as per the EIA/EMP report

S.	Particulars	Details								
No.	T CDC	04.02.200	21. 26.05.2022/4	1						
a.	Terms of Reference for undertaking EIA	04.03.202	21, 26.05.2022(Ameno	iment in Tok)						
	study									
b.	Period of baseline	March to	May, 2021							
	data collection	Transfer to	1114), 2021							
c.	Date of Public	04th May	y, 2023							
	Consultation									
d.	Action plan to		An amount of Rs. 2250 Lakhs has been earmarked for implementation of the commitments made during Public							
	address the PH		implementation of the commitments made during Public Hearing and need based activities. Detail of activities							
	issues	_	Hearing and need based activities. Detail of activities proposed attached as Annexure IV .							
e.	Location of the		Upparwahi & Kukki		na and					
С.	project									
	project		Villages: Bhendvi & Hardona, Taluka: Rajura, District Chandrapur, Maharashtra							
f.	Latitude and	Point	Latitude	Longitude						
	Longitude of the	A	19°44'42.77"N	79°12'59.09"E						
	project site	В	19°44'53.74"N	79°13 <mark>'27</mark> .49"E						
		C	19°4 <mark>4'5</mark> 2.05"N	79°13'24.68"E						
		D	19°44'4 <mark>9.</mark> 12 <mark>"</mark> N	79°13'2 <mark>4.</mark> 30"E						
		E	19°44'49.01"N	79°13'2 <mark>1.</mark> 97"E						
		F	19°44'36.46"N	79°13'20.72"E						
	3	G	19°44'32.63"N	79°13'18.14"E						
		H	19°44'29.46"N	79°13'17.18"E						
	6	J	19°44'23.49"N 19°44'21.17"N	79°13'12.18"E 79°13'12.41"E						
	8 1	K	19°44'19.71"N	79°13'12.41 E						
	3	L	19°42'56.24"N	79°13'11.41'E						
	70/L	M	19°42'47.01"N	79°13'26.57"E						
		N	19°42'46.40"N	79°13'31.55"E						
		0	19°42'33.92"N	79°13'30.43"E						
		P	19°42'32.55"N	79°13'38.97"E						
		Q	19°41'53.50"N	79°13'35.73"E						
		R	19°41'53.29"N	79°13'22.08"E						
		S	19°41'55.57"N	79°13'7.24"E						
		T	19°42'12.42"N	79°12'56.19"E						
		U	19°42'30.74"N	79°12'47.51"E						
		V	19°42'31.25"N	79°12'56.35"E						
		W	19°42'29.57"N	79°13'16.98"E						
		X Y	19°42'37.57"N 19°42'55.33"N	79°13'18.84"E 79°13'18.63"E						
		Z	19°42'55.70"N	79°13'18.76"E						
		AA	19°44'18.74"N	79°13'8.70 E						
		AB	19°44'19.23"N	79°13'7.97"E						
		AC	19°44'37.98"N	79°13'5.42"E						
		AD	19°44'41.67"N	79°13'1.79"E						

S. No.	Particulars	Details						
g.	Total land	Total Plant area is 194.65 ha						
h. i.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 Existence of	The total land is already under the possession of the company. The proposed expansion will be done within the existing plant premises (i.e., 194.65 ha). Project site: No habitation exists in the plant site.						
	habitation & involvement of	Study area: Villages falling near to the plant site are a given below:						
	R&R, if any	Habitation	Distance (km)	Direction				
		Village Uparwahi	0.28 km	WNW direction				
		Village Ambiguda	0.5 km	SE direction				
	0-1	Village Mangi Lahan	0.5 km	East direction				
		Village Sonapur	1.0 km	SW direction				
		Village Saleguda	1.0 km	SSW direction				
		Village Sonapur	1.0 km	SW direction				
		Village Ramjiguda	2.0 km	SE direction				
		Village Lakhmapur	3.0 km	NNW direction				
		Village Gopalpur	3.5 km	WNW direction				
	V / Q	Apart from the above to	here are approx	. 53 villages falling				
		within the 10 km radius study area.						
j.	Elevation of the project site	229 to 239 m above me	an sea level.	08:				
k. 1.	Involvement of Forest land if any. Water body exists	Not applicable as no Forest land is involved in the project site. Plant site: Nil						
	within the project site as well as study	Study area: Following km radius study area:	water bodies a	re falling in the 10				
	area	Water body	Distance (km) Direction				
		Tutra Nala		gh the railway				
	70/.	Mangi Nala	Adjacent	NE				
	13 nc	Chandanvayi Nala	2.0	NNE				
		Chandanvayi Nala	4.0	WNW				
		Amal Nala Dam	4.5	WSW				
		Pedda Vagu	4.5	ENE				
		Vagu Nala	4.5	WNW				
		Chikli Vagu	8.0	South				
		Khadak Nala	9.0	South				
m.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	Nil List of Reserved and Manikgarh Reserve						

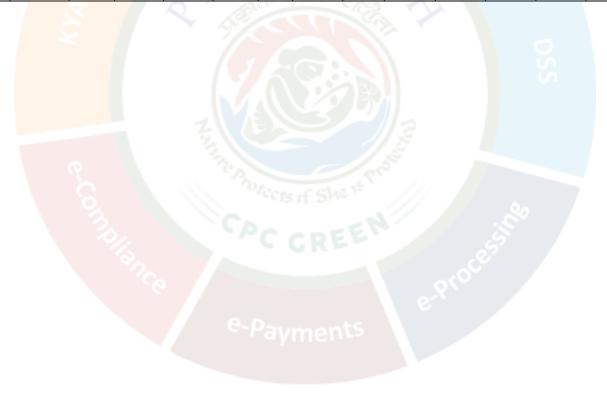
S. No.	Particulars		Details	
n.	Project cost	Proposed – IN	NR Rs 2000 Crores	
0.	EMP cost	Туре	Capital (Rs. in Crores)	Recurring (Rs. in Crores)
		Proposed	165	1.74
p.	Employment opportunity	2050 persons		
q.	Water and Power requirement	(Total)Water	–8960 KLD, Power –1	100 MW





Unit configuration and capacity

		E	Existing F	'acilities	as per E	Cs da	ted 03 rd]	Nov., 20	06					
S. No Plant . Equipme					mplemented in (A)		Un - implemente d (B)		As per CTO		Proposed Unit		Final (Existing + Proposed)	
		Config	Capacity	Config	Capacity	Config	Capacit	Config	Capacity	Config	Capacity	Config	Capacit y	
1.	Kiln for Clinker	8000 TPD	2.85 MTP A	8000 TPD	2.85 MTP A	Nil	Nil	8000 TPD	2.85 MTP A	12000 TPD	3.3 MTP A	200 00 TP D	6.15 MTP A	
2.	Cement Mill	750 TPH	4.75 MTP A	750 TPH	4.75 MTP A	Nil	Nil	750 TPH	4.75 MTP A	1000 TPH	5.25 MTP A	1750 TPH	10 MTP A	
3.	СРР	70 MW	70 MW	60 MW	60 MW	Nil	Nil	70 MW	70 MW	Nil	Nil	60 MW	60 MW	
4.	D.G. Set	10 MW	10 MW	10 MW	10 MW	Nil	Nil	10 MW	10 MW	Nil	Nil	10 MW	10 MW	



Specific and General EC conditions

A. Specific Condition:

- i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- ii. The project proponent 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.
- iii. 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.
- iv. Village Uparwahi (0.28 km, WNW), Village Ambiguda (0.5 km, SE), Village Mangi Lahan (0.5 km, E) along with other 53 villages and other sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- v. Tutra Nala is passing through the railway line of the plant. Mangi Nala is flowing adjacent to the project in North-East direction along with other water bodies. 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.
- vi. The PP shall obtain the requisite Environment Clearance(s) for the proposed expansion of limestone mines to meet the raw material requirement of the proposed project.
- vii. The total water requirement after proposed expansion of 8960 m³/day shall be met from Pagadigudam Dam, Ground water and Mine pits. PP shall obtain necessary permissions from the Competent Authority. PP shall explore the possibility for gradual phase out of ground water through alternate source to reduce dependency on ground water.
- viii. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 3 years along 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 also 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 sensitive areas nearby project site. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
 - ix. All the commitments made towards socio-economic development of the nearby villages 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 amounting to Rs. 22.50 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- x. PP shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
- xi. 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.
- xii. A road-map must be drawn up to attain carbon neutrality consistent with Country's commitment to achieve carbon neutrality by 2070.
- xiii. PP shall carry out period soil testing to monitor the soil degradation and undertake appropriate measures to prevent the same.

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 at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems 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 carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} 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.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- 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 mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiii. 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.
- xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm³ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xvii. Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xviii. Provide Low NOx burners as primary measures and SCR /NSCR technologies as secondary measure to control NOx emissions.
 - xix. The emission norms applicable for the cement plant shall be adhered to.
 - xx. Dioxin and Furan monitoring shall be carried out once in six months at cement kiln stack.
 - xxi. DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm³ by using best available technology.
- xxii. Petcoke dosing shall be controlled automatically to control SO_2 emission from chimney within the prescribed limits.

- xxiii. PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- xxiv. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- xxv. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xxvi. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m³, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection)

 Act, 1986 and NABL accredited laboratories.
- iii. 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.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. 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. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
 - ix. Air Cooled condensers shall be used in the captive power plant.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, 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.
- iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

V. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas.
- iii. The project proponent make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- iv. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- v. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.
- vi. Waste heat recovery system shall be provided for kiln and cooler.

VI. Waste management

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
- ii. Kitchen waste shall be composted or converted to biogas for further use.
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. 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.
- v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall

- submit the programme for reduction of the same including carbon sequestration by trees.
- ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/balancing, carbon sequestration activities and carbon capture, use and storage and 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 monitor able with defined time frames.
- iii. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

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. 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

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 nearby 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 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.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

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. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. 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.
- vii. 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.
- viii. 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.
 - ix. 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.
 - x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) 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.
- xi. 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.
- xii. 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).

- xiii. 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.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. 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.
- xvii. 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.



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

					Unit of Mea	asurement			Tentativ
S.	Concerns raised during	Physical activity to	1 st Ye	ar	2 nd Ye	ear	3 rd Yes	ar	e Budget (Rs. In Lakhs)
No.	the Public Hearing	be done	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	Lumis)
		Develop Farmer Training cum demonstration center to provide services regarding Modern Agriculture & Horticultural practices and promotion of Farmer Producer Organization for Sustainable Livelihood.	01 Centre - Village Upparwahi	20	1 Centre - Village Bhendvi	20	1 Centre - Village Hardona	20	60
1.	Employment / Skill Development	Establishment of Livestock Development Centre for Fodder & Breed improvement (1 Center each)	Village Hardona	20	Village Lakmapur	20	Village Upparwahi	20 60 20 60 20 60 20 60 30 90	60
	N.S.	Women empowerment center by providing Income generation training in Farm and Non-Farm activity.	01 Centre - Village Hirapur	15	01 Centre - Village Hardona	15	01 Centre - Village Upparwahi	15	45
		upgradation of Existing Skill Development Centre	Transport Nagar, Hardona	80	Transport Nagar, Hardona	80	Tr <mark>an</mark> sport Nagar, Hardona	40	200
		Development of Community Clinics of Ambuja Foundation	Village Saleguda, Bhendvi & Isapur	10	Village Hardona, Kukkursad & Upparwahi	10	Village Pimpalgaon & Thutara	10	30
2.	Health	Assistance to Sub centers in providing quality health services	Village Upparwahi	20	Village Lakmapur	20	Village Sonapur	20	60
		Developmenmt of Aanganwadi in Villages (30 Aanganwadis in villages)	Village Bendvi, Lakmapur & Sonapur	50	Village Mangi, Upparwahi & Hardona	50	Village Kukkursad, Pipalgaon & Lakmapur	50	150
3.	Plantation	Distribution of plant saplings & tree guards, boring, fencing and plant security (10000 saplings (including tree guards and fencing)	Village Bendvi, Lakmapur & Sonapur	30	Village Mangi, Upparwahi & Hardona	30	Village Kukkursad, Pipalgaon & Lakmapur	30	90
4.	Education	Development of computer lab to promote smart education	Village Hardona, Thutara & Mangi	10	Village Upparwahi	10	Village Bhendavi, Isapur & Pimpalgaon	12	32

					Unit of Mea	asurement	· ,		Tentativ
S.	Concerns raised during	Physical activity to	1 st Ye	ar	2 nd Y€	ear	3 rd Yea	ar	(Rs. In
No.	the Public Hearing	be done	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	e Budget
		Distribution of furniture in schools - 2 Schools at Each Village		12	Lakhmapu r & Kukudsath	12		12	36
		Upgradation of school building (Construction/Reno vation of stage Play ground for cultural activities and playground, Sanitation facilities, etc.)	Village Bhendvi, Isapur & Hardona	20	Village Sonapur, Saleguda & Lakhmapu r	20	Village kukkudsat, Thutara & Pimpalgaon	20	60
		Development of School infrastructure (Tables, Chairs, school bags, science lab, etc.)	Village Upparwahi , Lakmapur, Sonapur & Bhendvi	40	Village Thuthra, Hardona, Mangi & Isapur	40	Village Saleguda, Hirapur, Pimpalgaon & Kukkursad	40	120
	3	Installation of Solar systems in schools	Village Upparwahi , Lakmapur, Sonapur & Bhendvi	12	Village Thuthra, Hardona, Mangi & Isapur	12	Village Saleguda, Hirapur, Pimpalgaon & Kukkursad	11	35
5.	Water Conservation	Construction and renovation of water harvesting structure. (Checkdam, gabian structure, etc.)	Village Mangi & Upparwahi	15	Village Saleguda, Sonapur & Isapur	22	Village Bhendvi & Hirapur	15	52
		Contribution of RO Filter for treatment (1 at each village)	Village Hirapur	8	Village Kukkudsat	8	Village Chandanwah i	8	24
	Socio	Construction of CC Road	500m road - Village Upparwahi to Upparwahi Plant gate	50 50	2 Km road - Village Isapur to Gadchandu r road and 3 km from Upparwahi to Hardona bus stop	180	1000 m road - Village Kukkudsat	60	290
6.	Economic Development al Activities	Development of Internal roads in villages (500m in each village)	Village Upparwahi , Lakmapur, Sonapur & Bhendvi	100	Village Thuthra, Hardona, Mangi & Isapur	100	Village Saleguda, Hirapur, Pimpalgaon & Kukkursad	100	300
		Construction and Expansion of community Hall (1 at each village)	Village Upparwahi	40	Village Sonapur	50	Village Bhendvi	40	130
		Distribution of Farming equipments (Solar fence, Drip	Village Upparwahi , Lakmapur,	50	Village Thuthra, Hardona,	50	Village Saleguda, Hirapur, Pimpalgaon,	50	150

					Unit of Mea	asurement			Tentativ
S. No.	Concerns raised during	Physical activity to	1 st Ye	ar	2 nd Ye	ear	3 rd Year		e Budget (Rs. In Lakhs)
No.	the Public Hearing	be done	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	
		irrigation system, etc.)	Sonapur & Bhendvi		Mangi & Isapur		& Kukkursad		
		Development of internal drainage systems in villages and greywater management and segregation shed	Village Upparwahi , Lakmapur, Sonapur & Bhendvi	80	Village Thuthra, Hardona, Mangi & Isapur	80	Village Saleguda, Hirapur, Pimpalgaon & Kukkursad	80	240
		Installation of Solar Street Lights	Village Upparwahi , Lakmapur, Sonapur & Bhendvi	5	Village Thuthra, Hardona, Mangi & Isapur	5	Village Saleguda, Hirapur, Pimpalgaon & Kukkursad	5	15
		Development of Oxygen Park at community place (1 at each village)	Village Upparwahi , Lakmapur, Sonapur & Bhendvi	23	Village Thuthra, Hardona, Mangi & Isapur	24	Village Saleguda, Hirapur, Pimpalgaon & Kukkursad	24	71
	Tota	al	5	710	16.37	858		682	2250