



सत्यमेव जयते

File No: IA-J-11011/275/2022-IA-II(IND-I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 08/05/2024



To,

M/s. MEGHALAYA CEMENTS LIMITED
BE-77, SALT LAKE CITY, SECTOR-1, KOLKATA-700064 , 24 PARAGANAS NORTH, WEST
BENGAL, , 700064
Email: vsaraf@topcem.in

Subject: Expansion of Cement & Clinkerization Plant from 2600 TPD (0.858 million TPA) to 4500 TPD (1.485 million TPA) with 10 MW CPP and 9.5 MW WHRS by M/s Meghalaya Cements Ltd., located at Village Thangskai, P.O. Lumshnong, District East Jaintia Hills, Meghalaya–Grant of Environmental Clearance under the provisions EIA Notification, 2006 -regarding.

Sir/Madam,

This refers to your proposal no IA/ML/IND1/453620/2023 Dated 15.01.2024 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 04.03.2024.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A1101ML5706847N
(ii) File No.	IA-J-11011/275/2022-IA-II(IND-I)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	3(b) Cement plants
(vi) Sector	Industrial Projects - 1
(vii) Name of Project	Expansion of Cement & Clinkerization Plant from 2600 TPD (0.858 million TPA) to 4500 TPD (1.485 million TPA) with 10 MW CPP and 9.5 MW WHRS of Meghalaya Cements Ltd.
(viii) Name of Company/Organization	MEGHALAYA CEMENTS LIMITED
(ix) Location of Project (District, State)	EAST JAINTIA HILLS, MEGHALAYA
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity is covered S. No. 3(b) Cement Plants and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

4. The proposal is considered in the 53rd meeting of the EAC for Industry-I sector held during 12th –14th February, 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 12th to 14th February, 2024, inter-alia, deliberated the following:

i. The instant proposal is for expansion of Cement & Clinkerization Plant from 2600 TPD (0.858 million TPA) to 4500 TPD (1.485 million TPA) with 10 MW CPP and 9.5 MW WHRS.

ii. PP had initially obtained CTE from Meghalaya SPCB obtained vide No. MPCB/TB - 838/4 - 2005/31 dated 08.06.2004. The existing project was accorded environmental clearance vide Letter no. SEIAA/PROJECT-2/2007/18 dated 25.03.2009 for Expansion of Cement Plant from 900 TPD to 2600 TPD along with 18 MW Captive Power Plant. Thereafter, amendment in EC was obtained from SEIAA vide Letter no. SEIAA/(P-2/2007)/Pt-25/2015/134/650 dated 29.06.2017 for stipulation of additional general condition followed by another amendment vide Letter no. : MI/SEIAA/(2018)/PP/PT/03/2019/14/350 dated 30.04.2019 with the insertion of Specific Condition regarding storage of coal in sheds, provide garland drains & AMD treatment, no AMD discharge with Corrigendum / amendment vide letter no. SEIAA/PROJECT- 2/2007/8/1818 dated 30.09.2020. Consent to Operate for the existing unit was accorded by Meghalaya State Pollution Control Board vide MPCB/CON-86(2016)/2023-2024/70 dated 08.09.2023. The validity of CTO is up to 31.03.2024.

iii. 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.

iv. 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.

v. 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.

vi. 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.

vii. The total land after the proposed expansion project will be 94.20 ha [Existing – 52.949 ha, Proposed – 41.251 ha]. The total land is under the possession of the company.

viii. Thankai Village (0.8 km, SW), Wahiejer village (0.7 km, S) and Shuiruphi (or Chiehruphi) Village (0.8 km, NW), MCL school (0.6, W of stack), Chiehruphi school (1.0, NW) exists along with 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.

ix. Three seasonal drains exist within the proposed expansion area along with several water bodies near within the study area of the project site. 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.

x. The nearest Wildlife Sanctuary is Narpuh WL Sanctuary whose ESZ is at a distance of 5.8 km in SE. The project area lies outside the notified eco-sensitive zone. The map verifying the distance has been received vide letter no. MWL/JH/299/Mining/2022-23/1186 dated 13.02.2023 from Office of The Divisional Forest Officer, Jaintia Hills Wildlife Division, Jowai, Meghalaya.

xi. The total water requirement of cement plant after expansion is 2489 m³/day which will be obtained from Chynryntong-Umparti River. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard.

xii. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.

xiii. Total 11 Schedule I faunal species has been found within the buffer zone of the proposed project. Wildlife Management Plan specific to Meghalaya Cements Ltd., Thangskai, East Jaintia Hills, Meghalaya has been prepared in December 2022 taking the services of Department of Environmental Sciences, North Eastern Hill University, Shillong for general protection of animals found in buffer zone. However, its approval shall be considered by Divisional Forest Officer, Jaintia Hills Wildlife Division, Jowai after the preparation of a "Regional Conservation Plan" by forest department, as per the communication received vide letter no. FWC/Clearance/20/717 dated 06.06.2023 from PCCF & CWLW, Meghalaya.

xiv. The PP has submitted that existing green belt has been developed in 19.92 ha area which is more than 33% of the existing project area of 52.949 ha. Proposed greenbelt will be developed in 11.166 ha. Thus, total of 31.086 ha area (33% of total project area) will be developed as greenbelt. Total no. of additional 26,625 saplings will be planted and nurtured in 11.166 ha from 2023-2026. The company has followed "Akira Miyawaki" method for plantation in project area. In post project monitoring, PP shall monitor the soil quality within 5 km radius of the project, periodically. PP undertakes to establish three tier green belt along periphery of school boundary with (a) minimum 5 m width in MCL school and (b) minimum 3 m width in Govt. LP School & Secondary School, Chiehruphi & playground. 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 1 year.

xv. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

xvi. 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.

xvii. The EAC deliberated on the certified compliance report of IRO along with the ATR submitted on the observations of IRO and is of the opinion that PP shall strictly comply with the observations of IRO and submit the status to IRO.

xviii. It has been reported by PP that, there is a litigation pending in NGT Eastern Zone in Original Application No. 154/2023. The project proponent has requested for impleadment in array of Respondents in OA No. 154/2023 during hearing dt. 19.10.2023, which was permitted during hearing dated 09.01.2024. The case is pending.

xix. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

xx. 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.

xxi. 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.

xxii. 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 53rd meeting of Expert Appraisal Committee (Industry-1 Sector) held during 12th–14th February, 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 **M/s Meghalaya Cements Ltd** under the provisions of EIA Notification, 2006 subject to **specific conditions and general conditions** at **Annexure III**. alongwith following conditions:-

(a) The PP shall implement the Action Plan for plantation and survival of 17,750 trees and the compliance report shall be submitted to IRO MoEFCC.

(b) The PP shall implement the Action Plan for protection of nearby schools and health centers from environmental pollution. The compliance report shall be submitted to IRO MoEFCC.

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
Tel: 011-20819346
Email-rb.lal@nic.in

Copy To

1. The Secretary, Department of Environment, Government of Meghalaya, Secretariat, Shillong.
2. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi.
3. The Principal Chief Conservator of Forests & HoFF, Meghalaya Forest Head Quarter, Sylvan House, Lower Lachumiere Shillong-793001
4. The Deputy Director General of Forests (C), Integrated Regional Office, Regional Officer, Ministry of Environment, Forest and Climate Change, Law-U-Sib, Lumbatngen, Near MTC Workshop, Shillong
5. The Member Secretary, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
6. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi 110001
7. The Member Secretary, Meghalaya State Pollution Control Board, ARDEN Lumpyngrigad, Shillong 793 003
8. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
9. District Magistrate/ Collector, East Jaintia Hills, Meghalaya
10. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
11. Guard File/Monitoring File/Parivesh portal/Record File

(Dr. R. B. Lal)
Scientist 'F'/ Director

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

S. No.	Particulars	Details			
a.	Terms of Reference for undertaking EIA study	18.08.2022			
b.	Period of baseline data collection	December 2021 to February 2022			
c.	Date of Public Consultation	24.08.2023			
d.	Action plan to address the PH issues	An amount of Rs. 204 Lakhs has been earmarked for implementation of the commitments made during Public Hearing and need based activities. Detail of activities proposed attached as Annexure IV .			
e.	Location of the project	Village Thangskai, P.O. Lumshnong, District East Jaintia Hills, Meghalaya			
f.	Latitude and Longitude of the project site	Coordinate Point	Latitude (N)	Longitude (E)	
		North most	25°12'39.67"N	92°23'16.21"E	
		East most	25°12'7.75"N	92°23'18.91"E	
		South most	25°11'59.96"N	92°23'17.60"E	
		West most	25°12'4.06"N	92°22'24.73"E	
g.	Total land	Existing - 52.949 ha Proposed additional - 41.251 ha Total - 94.20 ha			
h.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Land status	Existing as per EC dated 25.03.2009 & amendments*	Proposed Additional	Total after expansion
		In possession	52.949	41.251	94.20
		To be acquired	0	0	0
		<i>* amendments are dated as 30.04.2019, 19.08.2019, 12.09.2019 and 30.09.2022</i>			
i.	Existence of habitation & involvement of R&R, if any	Project site: Nil			
		Study area:			
		Habitation	Distance	Direction	
		Thanskai Village	0.8	SW	
		Wahiejer village	0.7	S	
Shuiruphi (or Chiehruphi) Village	0.8	NW			

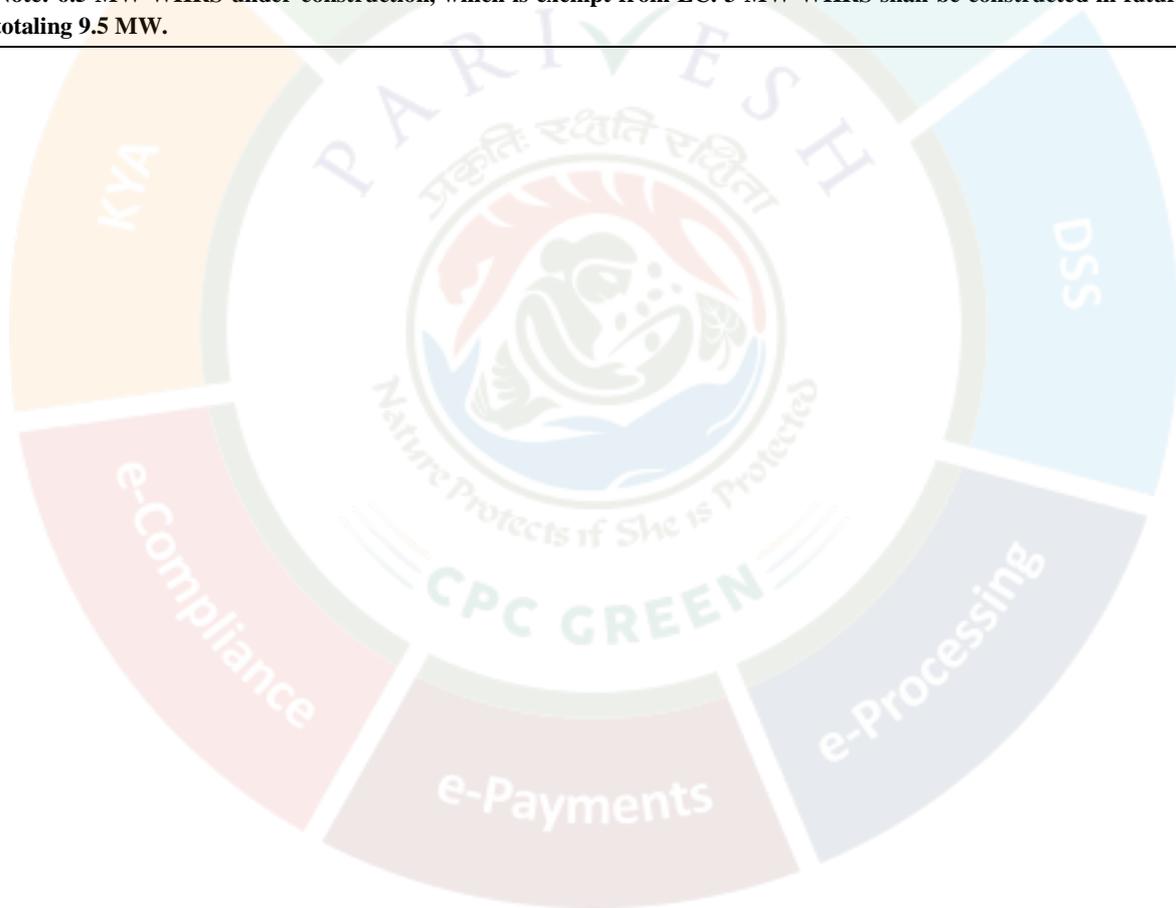
S. No.	Particulars	Details																																																												
j.	Elevation of the project site	The average elevation of the core zone varies from 731 in south-west to 799 meter above mean sea level (m amsl) in north-west portion, based on Google Earth.																																																												
k.	Involvement of Forest land if any.	No forest involved																																																												
l.	Water body exists within the project site as well as study area	<p>Project site: There is no perennial water body present in the project area. Three seasonal drains exist within the proposed expansion area. The total length of these seasonal drains in the expansion area is 1672 m.</p> <p>Study area: The main drainage of the study area is controlled by the Lukha River. It is located at 6.9 km south east of the plant.</p> <table border="1" data-bbox="544 656 1294 1989"> <thead> <tr> <th data-bbox="552 667 675 712">Sl. No.</th> <th data-bbox="683 667 903 712">Name</th> <th data-bbox="911 667 1286 712">Distance & Direction (km)</th> </tr> </thead> <tbody> <tr><td data-bbox="552 723 675 768">1.</td><td data-bbox="683 723 903 768">Lukha River</td><td data-bbox="911 723 1286 768">6.9 SE</td></tr> <tr><td data-bbox="552 779 675 824">2.</td><td data-bbox="683 779 903 824">Um Lunar</td><td data-bbox="911 779 1286 824">3.6 E</td></tr> <tr><td data-bbox="552 835 675 880">3.</td><td data-bbox="683 835 903 880">Um Sngat</td><td data-bbox="911 835 1286 880">4.0 E</td></tr> <tr><td data-bbox="552 891 675 936">4.</td><td data-bbox="683 891 903 936">Non Gang</td><td data-bbox="911 891 1286 936">9.5 SSW</td></tr> <tr><td data-bbox="552 947 675 992">5.</td><td data-bbox="683 947 903 992">Wah Lariang</td><td data-bbox="911 947 1286 992">4.3 SSW</td></tr> <tr><td data-bbox="552 1003 675 1048">6.</td><td data-bbox="683 1003 903 1048">Seshympa River</td><td data-bbox="911 1003 1286 1048">5.4 W</td></tr> <tr><td data-bbox="552 1059 675 1104">7.</td><td data-bbox="683 1059 903 1104">Rashniang Nala</td><td data-bbox="911 1059 1286 1104">6.9 NNW</td></tr> <tr><td data-bbox="552 1115 675 1160">8.</td><td data-bbox="683 1115 903 1160">Um Laro</td><td data-bbox="911 1115 1286 1160">8.2 NNW</td></tr> <tr><td data-bbox="552 1171 675 1216">9.</td><td data-bbox="683 1171 903 1216">Laphirawi Nala</td><td data-bbox="911 1171 1286 1216">9.2 NNW</td></tr> <tr><td data-bbox="552 1227 675 1272">10.</td><td data-bbox="683 1227 903 1272">Wahlong Nala</td><td data-bbox="911 1227 1286 1272">9.6 N</td></tr> <tr><td data-bbox="552 1283 675 1328">11.</td><td data-bbox="683 1283 903 1328">Um Badoh Nala</td><td data-bbox="911 1283 1286 1328">0.3 S</td></tr> <tr><td data-bbox="552 1339 675 1384">12.</td><td data-bbox="683 1339 903 1384">Um Utha Nala</td><td data-bbox="911 1339 1286 1384">2.5 W</td></tr> <tr><td data-bbox="552 1395 675 1541">13.</td><td data-bbox="683 1395 903 1541">Thangpyrshaid Nala</td><td data-bbox="911 1395 1286 1541">1.6 N</td></tr> <tr><td data-bbox="552 1552 675 1597">14.</td><td data-bbox="683 1552 903 1597">Kukha Nala</td><td data-bbox="911 1552 1286 1597">0.9 NE</td></tr> <tr><td data-bbox="552 1608 675 1653">15.</td><td data-bbox="683 1608 903 1653">Sakha Nala</td><td data-bbox="911 1608 1286 1653">2.8 NNW</td></tr> <tr><td data-bbox="552 1664 675 1765">16.</td><td data-bbox="683 1664 903 1765">Dongtangle Nala</td><td data-bbox="911 1664 1286 1765">2.4 N</td></tr> <tr><td data-bbox="552 1776 675 1877">17.</td><td data-bbox="683 1776 903 1877">Wah Thaniang Nala</td><td data-bbox="911 1776 1286 1877">5.8 NNE</td></tr> <tr><td data-bbox="552 1888 675 1933">18.</td><td data-bbox="683 1888 903 1933">Um Laper Nala</td><td data-bbox="911 1888 1286 1933">7.1 NNE</td></tr> <tr><td data-bbox="552 1944 675 1989">19.</td><td data-bbox="683 1944 903 1989">Kairang Nala</td><td data-bbox="911 1944 1286 1989">7.8 NNE</td></tr> </tbody> </table>	Sl. No.	Name	Distance & Direction (km)	1.	Lukha River	6.9 SE	2.	Um Lunar	3.6 E	3.	Um Sngat	4.0 E	4.	Non Gang	9.5 SSW	5.	Wah Lariang	4.3 SSW	6.	Seshympa River	5.4 W	7.	Rashniang Nala	6.9 NNW	8.	Um Laro	8.2 NNW	9.	Laphirawi Nala	9.2 NNW	10.	Wahlong Nala	9.6 N	11.	Um Badoh Nala	0.3 S	12.	Um Utha Nala	2.5 W	13.	Thangpyrshaid Nala	1.6 N	14.	Kukha Nala	0.9 NE	15.	Sakha Nala	2.8 NNW	16.	Dongtangle Nala	2.4 N	17.	Wah Thaniang Nala	5.8 NNE	18.	Um Laper Nala	7.1 NNE	19.	Kairang Nala	7.8 NNE
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S. No.	Particulars	Details								
		20.	Wah Sakhain Nala	9.4 NE						
		21.	Um Thlu Nala	6.7 NE						
		22.	UM The Nala	10.0 NE						
		23.	Latynger Nala	9.4 NE						
		24.	Um Lahe Nala	7.4 SSE						
		25.	Um Talang Nala	4.3 S						
		26.	Um Satain Nala	7.9 SSW						
		27.	Rumplung Nala	10.0 SW						
		28.	Um Kan Nala	8.7 SW						
m.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	<p>The nearest Wildlife Sanctuary is Narpuh WL Sanctuary whose ESZ is at a distance of 5.8 km in SE. The project area lies outside the notified eco-sensitive zone. The map verifying the distance has been received vide letter no. MWL/JH/299/Mining/2022-23/1186 dated 13.02.2023 from Office of The Divisional Forest Officer, Jaintia Hills Wildlife Division, Jowai, Meghalaya.</p> <p>Reserve forests within 10 km study area are</p> <ul style="list-style-type: none"> • Narpuh Reserved Forest Block I, 9.0 km, SE • Narpuh Reserved Forest Block II, 8.1 km, SE 								
n.	Project cost	Proposed – INR Rs 136 Crores								
o.	EMP cost	<table border="1"> <thead> <tr> <th>Type</th> <th>Capital (Rs. in Crores)</th> <th>Recurring (Rs. in Crores)</th> </tr> </thead> <tbody> <tr> <td>Proposed</td> <td>25.96</td> <td>1.425</td> </tr> </tbody> </table>	Type	Capital (Rs. in Crores)	Recurring (Rs. in Crores)	Proposed	25.96	1.425		
Type	Capital (Rs. in Crores)	Recurring (Rs. in Crores)								
Proposed	25.96	1.425								
p.	Employment opportunity	120 persons								
q.	Water and Power requirement	(Total)Water -2489 KLD, Power –21 MW								

Unit configuration and capacity

Sl. No.	Plant Equipment / Facility	Existing facilities as per EC dated 25.03.2009 and subsequent amendments								Proposed Units		Final (Existing + Proposed)	
		Total (A+B)		Implemented (A)		Unimplemented (B)		As per CTO		Confi g	Capacit y	Confi g	Capacit y
		Confi g	Capacit y	Confi g	Capacit y	Confi g	Capacit y	Confi g	Capacit y				
1.	Cement plant	2600 TPD	0.858 MTPA	2600 TPD	0.858 MTPA	0	0	2600 TPD	0.858 MTPA	1900 TPD	0.627 MTPA	4500 TPD	1.485 MTPA
2.	Clinker plant	2600 TPD	0.858 MTPA	2600 TPD	0.858 MTPA	0	0	2600 TPD	0.858 MTPA	1900 TPD	0.627 MTPA	4500 TPD	1.485 MTPA
3.	Captive Power Plant	18 MW	18 MW	10 MW	10 MW	8 MW	8 MW	10 MW	10 MW	0	0	10 MW	10 MW

Note: 6.5 MW WHRS under construction, which is exempt from EC. 3 MW WHRS shall be constructed in future, totaling 9.5 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. Thanskai Village (0.8 km, SW), Wahiejer village (0.7 km, S) and Shuiruphi (or Chiehruphi) Village (0.8 km, NW), MCL school (0.6, W of stack), Chiehruphi school (1.0, NW) exists along with 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. Three seasonal drains exist within the proposed expansion area alongwith several water bodies near within the study area of 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.
- vi. Total water requirement of 2489 m³/day shall be sourced from Chynryntong- Umparti River. PP shall obtain necessary permission from the Competent Authority in this regard. No ground water abstraction is permitted.
- vii. Three tier Green Belt shall be developed in at least 33% of the project area in a period of one year all 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 such as schools and villages nearby project site. As committed, PP shall establish three tier green belt along periphery of school boundary with (a) minimum 5 m width in MCL school and (b) minimum 3 m width in Govt. LP School & Secondary School, Chiehruphi & playground. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- viii. The health of the soil in the vicinity (5 km radius) must be monitored and reported to the IRO, MoEF&CC, once in a year

- 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. 2.04 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- x. The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
- xi. The project proponent shall strictly comply with the observations of IRO and submit the status to IRO, MoEF&CC.
- xii. 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.
- xiii. The board displaying the pollution levels in the Unit must be placed at the Gate of the Plant for convenient view by the public within one month.

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. 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. 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 02 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 NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area 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/Nm^3 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 NO_x burners as primary measures and SCR /NSCR technologies as secondary measure to control NO_x 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 SO₂ 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.
- vi. PP shall ensure that waste dumps shall be stabilised and covered by grasses, the objective being to mitigate soil erosion and soil conservation.

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 /

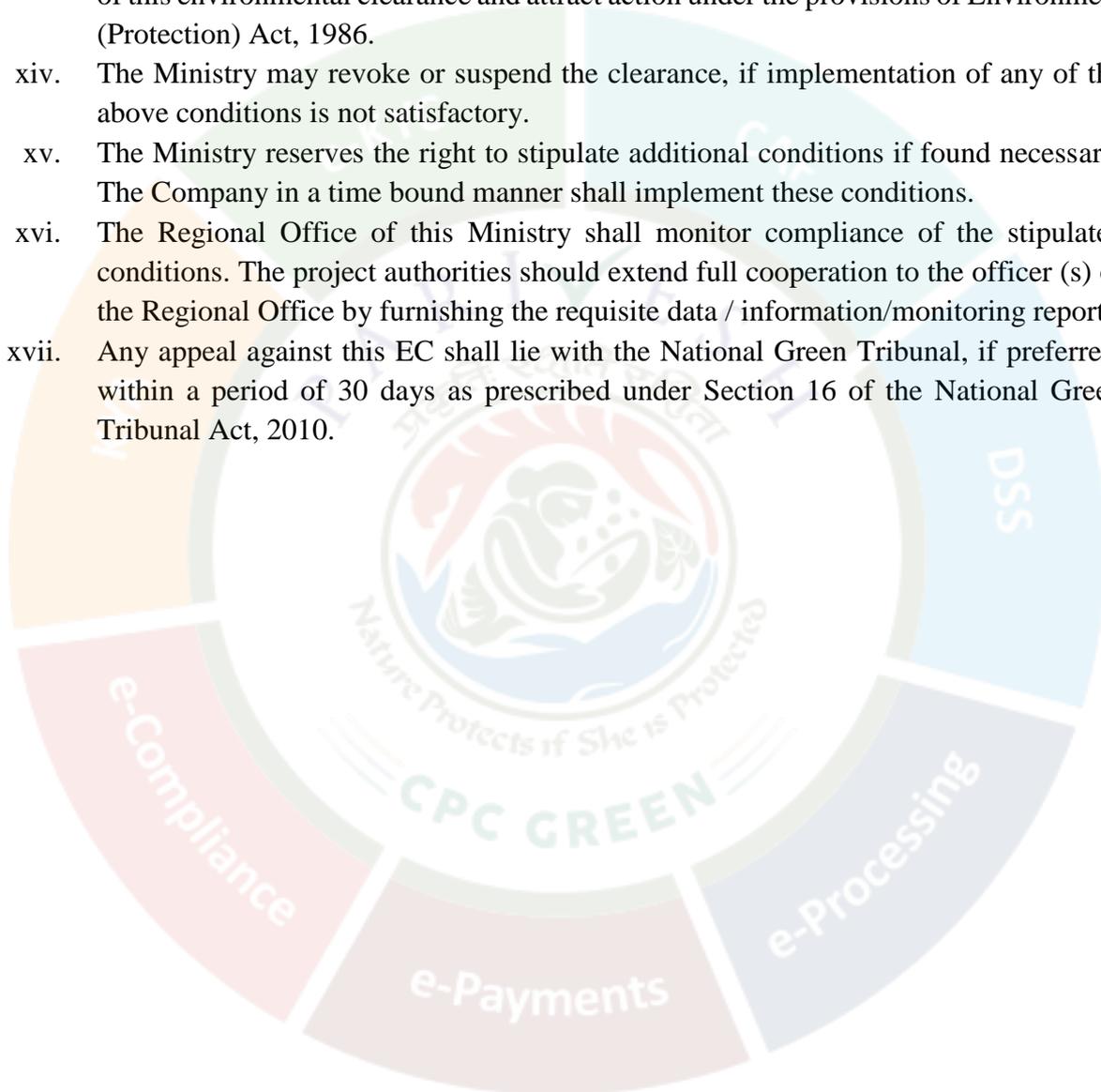
or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- 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

Thematic Area	Action Plan with Physical target	Budget (Rs. lakhs)			
		1 st Year	2 nd Year	3 rd Year	Total
Employment	Skill development for employability in cement plant expansion in jobs like, welder, fitter, driver, cleaners, maintenance, etc, 20 persons/year from villages Thangskai, Wahiajer and Chiehruphi	6	6	6	18
	Skill development programme like mobile repairing, AC/ heater repairing, welding motor mechanic etc. will be carried out to make the people self-employed. 10 persons/year from villages Thangskai, Wahiajer and Chiehruphi	3	3	3	9
	Scholarship to total 6 nos. youth per year for ITI, diploma or engineering training from villages Thangskai, Wahiajer and Chiehruphi	4	4	4	12
Livelihood and skill development for women	Capacity building for self-employment and involvement of women in non-farm based activities like tailoring & stitching, embroidery, homemade food items) and for Men (poultry, goatery dairy, mushroom farming, fishery bee keeping, etc)]. 20 persons/year from villages Thangskai, Wahiajer and Chiehruphi	1.2	1.2	1.2	3.6
Pollution control	Control of air pollution emissions, water pollution, waste water treatment and reuse, solid waste reuse, etc as detailed in EMP cost for following: <ul style="list-style-type: none"> ● Air pollution control : ESP, Reverse Air Bag House, Dust Collector Bag Filters, Permanent water sprayer ● Water pollution control : Effluent Treatment Plant (for mine vehicles but located in plant area), Sewage treatment Plant, Drainage (Storm Water + Drain Along Road + Water drain culverts) ● Noise pollution control : Acoustics for noise protection ● Green belt : Plantation 	(Rs. 125 lakhs cost included in EMP cost)	-	-	-
Drinking water	Installation of water pipelines in villages Thangskai, Wahiajer and Cheihruphi, where remaining, in consultation with villagers	10	10	10	30

Thematic Area	Action Plan with Physical target	Budget (Rs. lakhs)			
		1 st Year	2 nd Year	3 rd Year	Total
Sanitation	Construction of sewer and drainage system, where remaining in villages Thangskai, Wahiajer and Cheihruphi, in consultation with villagers	8	8	8	24
Sports	Construction of spectator area in football grounds of Wahiajer and Cheihruphi	0	10	10	20
Education	Target villages: Thangskai, Wahiajer and Cheihruphi				
	Repair/ renovation and/ or extension of existing school buildings and/ or their boundary walls/ toilets, etc.	12	12	14.4	38.4
	Scholarship to meritorious students and students from economically weaker sections (10 nos./ year)				
	Distribution of bags, study material (slate, globe, maps, charts, exercise book, duster, chalk etc.) as per demand from school.				
	Assistance in the form of furniture, uniforms, sports kits and other miscellaneous items				
Health	Organizing quarterly health checkup with free medicine in villages Thangskai, Wahiajer, Cheihruphi, Lumsnong and Musiantamare	10	10	10	30
Awareness program	Display boards in the villages of Thangskai, Wahiajer, Cheihruphi, Lumsnong and Musiantamare related to road safety, water saving, wildlife protection, etc (2 nos./ village)	0	5	5	10
Others	Installation of solar street lights at locations identified in conjunction with village people in villages Thangskai, Wahiajer and Cheihruphi (10 nos./ year)	3	3	3	9
	Total	57.2	72.2	72.2	204.0