

File No: IA-J-11011/498/2021-IA-II(IND-I)

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



Date 30/09/2024



To,

M/s. J K CEMENT LIMITED

JK Cement Limited, Kamla Tower, Kanpur Uttar Pradesh 208001, Kanpur, KANPUR NAGAR,

UTTAR PRADESH, , 208001

E-mail: bhaskar.rawat@jkcement.com

Subject:

Proposed Integrated Cement Plant - Clinker (2 x 4.0 Million TPA), Cement (2 x 3.0 Million TPA), WHRS (2 x 25 MW), DG Set [2 x 1250 KVA {1000 KVA or 500 KVA, 250 KVA & 125 KVA}], Oxygen Plant (2 x 80 m³/hr) in phased manner along with installation of Railway Siding with Wagon Tippler at Village: Parewar, Tehsil: Jaisalmer, District: Jaisalmer, Rajasthan by M/s JK Cement Ltd. - Consideration of Environmental Clearance - Reg.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/RJ/IND1/438401/2023 dated 01/07/2024 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below

(i) EC Identification No. EC23A1102RJ5642891N

(ii) File No. IA-J-11011/498/2021-IA-II(IND-I)

(iii) Clearance Type Fresh EC

(iv) Category A

(vii) Name of Project

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

(vi) Sector Industrial Projects - 1

Proposed Integrated Cement Plant - Clinker (2 x 4.0 Million TPA), Cement (2 x 3.0 Million TPA), WHRS (2 x 25 MW), DG Set [2 x 1250 KVA {1000 KVA or 500 KVA, 250 KVA & 125 KVA}], Oxygen Plant (2 x 80 m3/hr) in phased

manner along with installation of Railway Siding with Wagon Tippler at Village: Parewar, Tehsil:

Jaisalmer, District: Jaisalmer (Rajasthan) by M/s.

JK Cement Ltd.

(viii) Name of Company/Organization (ix) Location of Project (District, State)

(x) Issuing Authority

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

J K CEMENT LIMITED JAISALMER, RAJASTHAN MoEF&CC

No

- 3. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 4. The instant Proposal was initially considered by the EAC in its 63rd meeting of the EAC for Industry-I sector held on 23rd – 25th July 2024 wherein after detailed deliberations, the committee recommended the proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at https://parivesh.nic.in.
- 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 at Annexure-II.
- 6. The Unit configuration and capacity of the proposed project is at Annexure-III.

Deliberations of EAC

- 7. The EAC, in its its 63rd meeting of the EAC for Industry-I sector held on 23rd 25th July 2024, inter-alia, deliberated the following:
 - 1. The instant proposal is for setting up of Proposed Integrated Cement Plant Clinker (2 x 4.0 Million TPA), Cement (2 x 3.0 Million TPA), WHRS (2 x 25 MW), DG Set [2 x 1250 KVA {1000 KVA or 500 KVA, 250 KVA & 125 KVA}], Oxygen Plant (2 x 80 m³/hr) in phased manner along with installation of Railway Siding with Wagon Tippler.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. Total project land is 210 ha; which is government land. Set-a-Part order has been issued by the Revenue Department, Govt. of Rajasthan vide letter dated 27th May, 2022 for set-up of the Cement Plant by JK Cement Limited. Land has been converted for Industrial use as per Distt. Collector Jaisalmer letter dated 27th June, 2022.

- 7. The proposed project is a part of interlinked project with a Limestone Mine Khinya-II(A) Block, (Area: 304.0 ha) near Village: Khinya, Tehsil: Jaisalmer, District: Jaisalmer (Rajasthan). Environmental Clearance has already been granted by MoEF&CC vide letter No. IA-J-11015/77/2021-IA-II(NCM) dated 11th July, 2022 for Captive Limestone Mine Khinya-II(A) Block (Auction Block), (Area: 304.0 ha) with total excavation of 6.04 Million TPA including 5.50 Million TPA ROM (Cement grade 5.40 million TPA and SMS grade 0.10 million TPA); 0.28 Million TPA Interburden and 0.26 Million TPA Alluvial Sand/Top soil along with Installation of one mobile crusher of 50 TPH and 1500 TPH Crushers with vibrating screen. It was noted that the existing mine could meet the requirent of the proposed 1st phase of the cement unit. The EAC, therefore, recomended PP to approach Ministry before setting up 2nd phase cement unit with proper documentation of limestone source and availability from the point of view of interlinked project.
- 8. The PP submitted that transportation of limestone shall be carried out initially by road and thereafter by conveyor belt. Also, company is in process to secure an auction block from where Limestone will be sourced for Phase II of Proposed Integrated Cement Plant. The EAC discussed on the timeline by which the conveyor belt will be established and operational wherein PP undertook that the same will be established by March, 2030. The EAC further is of the opinion that PP shall emphasize making transportation of limestone through conveyor belt at the earliest as committed.
- 9. There is rich habitation nearby along with other sensitive areas within the study area of the project site. The EAC opined that proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent 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.
- 10. The water requirement for proposed project is estimated as 2950 KLD out of which, 1550 KLD will be required for Phase I, 1400 KLD will be required for Phase II. NOC for utilization of 1700 KLD water from Indira Gandhi Canal has been obtained from Indira Gandhi Nahar Department, Department of Water Resources, Govt. of Rajasthan vide letter no F. 6(3) IGNB/2021 dated 04.03.2022. However, 1700 KLD water will be sufficient for Integrated limestone mines (150 KLD) and cement plant Phase I Project (1550 KLD) and to start the operation of Phase II, additional 1300 KLD fresh water will be required. Therefore, the request letter to increase the sanctioned water allocation from 1700 KLD to 3000 KLD from Indira Gandhi Nahar Project has been submitted to the commissioner, Bureau of Investment Promotion (BIP) dated 27.04.2023. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard.
- 11. The company has proposed over land belt conveyer (OLBC) for the transportation of limestone from Captive Khinya Limestone Mine and the same will be installed by March, 2030. The undertaking in this regard is submitted.
- 12. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.
- 13. 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.
- 14. Five schedule I species found in buffer zone (10 km from proposed plant boundary); Common Mongoose (Herpestes edwarsii), Indian Porcupine (Hystrix leucura), Common Sand Boa (Eryx conicus), Indian Rat Snake (Ptyas mucosa), Tawny Eagle (Aquilla rapax). Company has prepared Wild Life Conservation plan and allocated Rs. 49.43 crores for the same. The Plan has been submitted to Divisional Forest Officer, Jaisalmer, Rajasthan for approval on 5th February, 2024. The approval of the same is under progress with the Competent Authority. The EAC opined that recommendations of the conservation plan shall be strictly implemented.
- 15. The PP has submitted that the greenbelt will be developed in 70 ha which is about ~33% of the total project area. Total no. of 1,75,000 saplings will be planted. The proposed greenbelt development & plantation area will be developed in consultation with AFRI and CAZRI, Jodhpur. The undertaking in this regard is submitted. 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

developed as committed.

- 16. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
- 17. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.
- 18. 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.
- 19. 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.
- 20. 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.

Recommendation of EAC

8. The EAC (Industry-1 Sector), in its 63rd meeting held during 23rd – 25th July 2024, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Environment Clearance subject to stipulation of specific and general EC conditions as detailed in the point below.

Decision of MoEFCC

9. 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. JK Cement Ltd., under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions (Annexure-I). The phase-wise configuration of the proposal is as below:

Plant Equipment /	Phase-1	Phase-II	Overall Proposed Capacity of
Facility			the Unit
Kiln & Cooler with 6	4 Million TPA	4 Million TPA	2 x 4.0 Million TPA
Stage Pre-heater for			
clinker production			
Cement Mill	3 Million TPA	3 Million TPA	2 x 3.0 Million TPA
WHRS	25MW	25 MW	2 x 25 MW
D.G. Set	1250 KVA {1000KVA or	1250 KVA {1000 KVA or 500	[2 x 1250 KVA {1000 KVA or
	500KVA, 250KVA &	KVA, 250 KVA & 125 KVA	500 KVA, 250 KVA & 125
	125KVA		KVA}]
Oxygen Plant	80 m ³ /hr	80 m ³ /hr	2 x 80 m ³ /hr

10. 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.

- 11. 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.
- 12. 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.
- 13. 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.
- 14. This issues with approval of the competent authority.

(Dinesh Runiwal) Scientist 'F'/ Director Tel: 011-20819346 E-mail: d.runiwal@gov.in

Copy To

- 1. The Secretary (Environment), Department of Environment and Climate Change, Government of Rajasthan, Secretariat, Jaipur, Rajasthan.
- 2. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Sub Office, A- 209 & 218, Aranya Bhawan, Mahatma Gandhi Road, Jhalana Institutional Area, Jaipur 304002
- 3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 4. The Chief Wildlife Warden, Govt. of Rajasthan, Van Bhawan, Vaniki Path, Jaipur -302005
- 5. The Chairman, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.
- 6. The Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 7. The District Collector, Jaisalmer District, Rajasthan.
- 8. Guard File/Record File/Monitoring File.
- 9. MoEF&CC website

(Dinesh Runiwal) Scientist 'F'/ Director

Annexure 1

Specific EC Conditions for (Cement Plants)

1. Specific

S. No	EC Conditions
1.1	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

S. No	EC Conditions
	to this project.
1.2	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.
1.3	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.
1.4	The PP shall to approach Ministry before setting up 2nd Phase cement unit with documentation regarding availabilty and interlinking aspects of limestone requirement.
1.5	There is rich habitation nearby 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. The project proponent 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.
1.6	Total water requirement of 2950 KLD out of which 1550 KLD is proposed to be required for Phase I, 1400 KLD will be required for Phase II. The water shall be obtained from Indira Gandhi Canal/Nahar Project. PP shall obtain necessary permission from the Competent Authority in this regard.
1.7	The PP committed to install over land belt conveyer (OLBC) for the transportation of limestone from Captive Khinya Limestone Mine by March, 2030.
1.8	Three tier Green Belt shall be developed in atleast 33% of the project area i.e. 70Ha, as committed, 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. The proposed greenbelt development & plantation area will be developed in consultation with AFRI and CAZRI, Jodhpur. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
1.9	The PP shall implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country, in compliance with Ministry's OM dated 24.07.2024.
1.10	All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan (Annexure-IV) based on the social impact assessment study of the project in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 74.43 Crores [Phase 1 + Phase 2] shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
1.11	The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.

S. No	EC Conditions
1.12	The Company shall explore the possibility for installation of floating Solar Power Plant over proposed Rain Water Harvesting Pond and Water reservoir to avoid evaporation losses.
1.13	PP shall prepare and implement the disaster management plan for Sand Storms.
1.14	CO sensors with alarm systems to be installed in the Plant, at strategic locations
1.15	PP shall implement the committed Environmental Protection Measures plan (Annexure-V) with provisions of Rs.399.45Crores (Phase I: 218.90 Crores; Phase II: 180.55 Crores) having annual recurring cost as Rs.38Crores (Phase I: 19 Crores; Phase II: 19 Crores)

Standard EC Conditions for (Cement plants)

1. Statutory Compliance

S. No	EC Conditions
1.1	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.
1.2	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.

2. Air Quality Monitoring And Preservation

S. No	EC Conditions
2.1	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.
2.2	The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
2.3	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.

S. No	EC Conditions
2.4	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
2.5	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
2.6	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
2.7	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
2.8	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
2.9	The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces
2.10	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
2.11	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
2.12	Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
2.13	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.
2.14	Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
2.15	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.
2.16	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.
2.17	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.

3. Air Quality Monitoring And Preservation In Case Of Integrated Cement Plants

S. No	EC Conditions
3.1	Provide Low NOx burners as primary measures and SCR /NSCR technologies as secondary measure to control NOx emissions.
3.2	The emission norms applicable for the cement plant shall be adhered to.
3.3	Dioxin and Furan monitoring shall be carried out once in six months at cement kiln stack.
3.4	DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm3 by using best available technology.
3.5	Petcoke dosing shall be controlled automatically to control SO2 emission from chimney within the prescribed limits.
3.6	PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
3.7	Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.

4. Water **Quality Monitor**ing And Preservation

S. No	EC Conditions
4.1	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.
4.2	The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
4.3	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.
4.4	Water meters shall be provided at the inlet to all unit processes in the plants.
4.5	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
4.6	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.

S. No	EC Conditions
4.7	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.
4.8	Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

5. Noise Monitoring And Prevention

S. No	EC Conditions
5.1	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.
5.2	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

6. Energy Conservation Measures

S. No	EC Conditions
6.1	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;
6.2	Provide LED lights in their offices and residential areas.

7. Energy Conservation Measures In Case Of Integrated Cement Plants

S. No	EC Conditions					
7.1	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.					
7.2	Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.					
7.3	Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.					
7.4	Waste heat recovery system shall be provided for kiln and cooler.					

8. Waste Management

S. No	EC Conditions
8.1	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.

S. No	EC Conditions				
8.2	Kitchen waste shall be composted or converted to biogas for further use.				
8.3	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.				
8.4	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.				
8.5	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.				

9. Green Belt

S. No	EC Conditions				
9.1	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.				
9.2	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.				
9.3	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.				

10. Public Hearing And Human Health Issues

S. No	EC Conditions					
10.1	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.					
10.2	The project proponent shall carry out heat stress analysis for the workmen who work in hig temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.					
10.3	Provision shall be made for the housing of construction labour within the site with all necessar infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking					

S. No	EC Conditions					
	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.					
10.4	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.					

11. Environment Management

S. No	EC Conditions					
The project proponent shall comply with the provisions contained in this Ministry's OM 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsib activity, company shall adopt nearby villages based on the socio-economic survey an community developmental activities in consultation with the village Panchayat and Administration as committed.						
11.2	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.					
11.3	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.					
11.4	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.					

12. Miscellaneous

S. No	EC Conditions						
12.1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.						
12.2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.						
12.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.						

S. No	EC Conditions					
The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, levels as well as stack emissions) or critical sectoral parameters, indicated for the display the same at a convenient location for disclosure to the public and put on the company.						
12.5	Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented					
12.6	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.					
12.7	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.					
12.8	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.					
12.9	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.					
12.10	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.					
12.11	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.					
12.12	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).					
Concealing factual data or submission of false/fabricated data may result in revocation environmental clearance and attract action under the provisions of Environment (Protect 1986.						
The Ministry may revoke or suspend the clearance, if implementation of any of conditions is not satisfactory.						
The Ministry reserves the right to stipulate additional conditions if found necessary. The in a time bound manner shall implement these conditions.						
12.16	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					

S. No	EC Conditions				
	furnishing the requisite data / information/monitoring reports.				
12.17	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.				



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

S. No.	Particulars	Details					Remarks
1.	Total land	Total area for proposed plant is 210 ha.			Land use: the		
							land use of the
							project area has
							been converted
							from
							Government
							barren land to
		_K7C					Industrial land.
2.	Land acquisition	The land	required for t	the pro	ject ar	ea is 210 ha. The	-
	details as per	complete	land of 210 h	a area	has bee	en acquired by the	
	MoEF&CC O.M.	company.					
	dated 7/10/2014	Letter has	s been issued	by Dis	strict C	ollector Jaisalmer	
		regarding	allotment of	210 h	a land	for industrial use	
		3				tment Rules, 1959	
		in the na	me of M/s. J	K Cen	nent Lt	td. vide letter no.	
	×	L12(3)()R	Revenue/2022/	2096	lated 9	th June, 2023 and	3
		land poss	ession letter	has be	en issu	ued by Tehsildar,	n
		Jaisalmer	vide letter no.	S.no/F	R <mark>e</mark> venue	e/2023/15 <mark>36</mark> dated	n
		_				nutation letter has	
			ed by Patwai	ri, Jais	almer	dated 4 th August,	
		2023.			<u> </u>		
3.	Existence of	- /-	Site: No habit	tation (exists v	within the project	R & R is not
	habitation &	site.	otests of SV	1C 15 "			applicable
	involvement of			alling r	near to	the project site are	
	R&R, if any.	as given b	elow:	EE.			
	Tanca .	Hal	bitation	Dista (kı		Direction	
	-0	Village 1	Khinsar	~4	.0	East	
		Odon ki	Dhani	~4	.0	SSE	
		Tulsiran	Ki Dhani	~5	0.0	NW	
		Village J	loga	~5	0.0	East	
		Village I	Parewar	~6	5.0	West	
		Village I	Khinya	~6	5.5	NNE	
		Village I	Lila Parewar	~8	3.0	West	
		Kabir Basti		~8	3.5	NNW	
		Village Rata		~9	0.0	NNE	
		Apart from the above there are approx. 11 villages					
		falling within the 10 km radius study area.					
4.	Latitude and	Point	S		-		
	Longitude of all	1.	27°16'37.70	0"N	70	°49'35.91"E	

S. No.	Particulars	Details	Remarks
	corners of the	2. 27°16'3.60"N 70°49'35.3	35"E
	project site	3. 27°16'4.36"N 70°48'36.8	88"E
		4. 27°16'55.07"N 70°48'37.7	'0"E
5.	Elevation of the project site	168 m to 172 m above mean sea level.	-
6.	Involvement of Forest land if any.	No forest land is involved in the proposed pro	Certificate mentioning no National Park, Sanctuary, Biosphere Reserve, Migratory Corridor of Wild Animal within the project site has also been issued by Dy. Conservator of Forest, Jodhpur Division on
7.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Project site: There is No Water body (River Pond, Nala, Natural Drainage, Canal etc.) exthe project site. Study area: There is no water body falling in radius study area. However, there is India. Canal which is at 12.5 km in NNE direction project site.	ists within the 10 km ra Gandhi
8.	Existence of ESZ/ ESA/national park/ wildlife sanctuary/	Nil.	-
	biosphere reserve/	List of Reserved and Protected Forest: Forest Distance (km) Di	rection
	tiger reserve/ elephant reserve etc. if any within	, ,	uth West
	the study area.		
9.	Details of interlinked Projects needs to be submitted.	Captive Limestone Mine - Khinya-II(A) (Auction Block), (Area: 304.0 ha) with total of 6.04 Million TPA including 5.50 Million T(Cement grade 5.40 million TPA and SMS gmillion TPA); 0.28 Million TPA Inter-burder	excavation FPA ROM grade 0.10

S. No.	o. Particulars Details			
		Million TPA Alluvial Sand/Top soil along with		
		Installation of one mobile crusher of 50 TPH and 1500		
		TPH Crushers with vibrating screen near Village:		
		Khinya, Tehsil & District: Jaisalmer (Rajasthan) by J.K.		
		Cement Limited. Environmental Clearance for the same		
		has already been granted by MoEFCC vide letter No.		
		IA-J-11015/77/2021-IA-II(NCM) dated 11 th July, 2022.		



Unit configuration and capacity

S. No.	Plant Equipment / Facility	Proposed Unit (Capacity)
1.	Kiln & Cooler with 6 Stage Pre-heater for	2 x 4.0 Million TPA
1.	clinker	2 X 4.0 Willion 11 A
2.	Cement Mill	2 x 3.0 Million TPA
3.	WHRS	2 x 25 MW
1	D.G. Set	[2 x 1250 KVA {1000 KVA or 500
4.	D.G. Set	KVA, 250 KVA & 125 KVA}]
5.	Oxygen Plant	2 x 80 m ³ /hr



PUBLIC HEARING ACTION PLAN

Socio- economic Development Activities (For phase I)

S. No.	Area of activity	Sector	Year wise Proposed Plan Capital cost (Rs. in Lakhs)			Plan
	e-KYC		Total Budget	Year 1	Year 2	Year 3
1.	Renovation of Primary health Centre building, support the basic infrastructure & equipment to Primary health Centre as per need of the community in Village Parewar and Khinya - facilities will be for 1 PHC in each village [Renovation (2 no. x 20 lakh), Procedural medical equipment (2 no. x 10 lakhs), Computers along with printer (2 no. x 1 lakhs), Medical instruments including Oxygen Concentrator (2 sets) @ Rs. Rs. 60000 per set, Medical Bed @ Rs. 25,000 per bed X 2 beds, stretcher (2 nos.) @ Rs. 15000, Wheel Chair @ Rs. 8000 x 2-wheel chairs, Medicines: 10 lakh)]	Health Related	73.16	20	20	33.16
2.	Financial support to the Govt / gram panchayat for Construction of well-equipped Govt. Veterinary Sub Centre for livestock at GP - Khinya, Staff will be appointed by Government	ments	150	150	0	0
3.	Regular Health check-ups, Food & Nutrition care for Mothers/ Senior citizens, infants & pregnant women of all nearby villages (Parewar, Leela Parewar, Khinsar, Joga, Ratta, Mandha, Khinya, Odon Ki Dhani, Moti Kilo Ki dhani & Kabir basti)		90	30	30	30

S. No.	Area of activity	Sector	Year wise Proposed Plan Capital cost (Rs. in Lakhs)			Plan
			Total Budget	Year 1	Year 2	Year 3
	Sub Total		313.16	200	50	63.16
1	Construction of Industrial Training Institute (ITI) College in the vicinity of the Plant area for providing vocational education and skill development for the local community as well as the public in large.	Educational Related	1250	0	0	1250
2	Construction of Primary School as per need of the area in collaboration with Local adminstration in the vicinity of the Plant site.	E COURT VER	250	0	0	250
3	Digital classrooms for smart education with computers, projector and wifi facilities in Parewar-1 set, Khinya- 3 sets, Khinsar-1 set, (1 set @ Rs. 1.5 lakhs & Computer: 30 nos. @ Rs. 0.5 lakhs per computer)		22.5	12	5.5	5
4	Construction/ Renovation of separate toilets (1-1 unit) for boys & girls (5 lakhs for each school) and Renovation, Repairing & Painting of Classrooms & construction/Renovation of boundary wall in Schools of villages Khinya: 3 Govt. Schools, Parewar: 1 Govt. School, Khinsar: 1 School (25 lakhs for each school)	GREEN/ments	150	90	30	30
	Sub Total		1672.5	102	35.5	1535
1	Construction of rainwater harvesting structures in nearby schools (Khinya, Parewar, Khinsar)	Water Facilities	15	5	5	5
2	Installation of Water Treatment Plant for clean drinking water availability in		60	20	20	20

S. No.	Area of activity	Sector	Year wise Proposed P Capital cost (Rs. in Lakhs)		Plan	
			Total Budget	Year 1	Year 2	Year 3
	nearby villages (Parewar, Khinsar and Khinya)					
	Sub Total		75	25	25	25
1	Construction/repairing of road connecting the cement plant & MDR - 19 passing through villages Khinsar, Parewar, Khinya, Ratta & Mandha	Rural Infrastructure development	1600	600	500	500
2	Renovation & beautification of Ashapura Mata Mandir at Khinsar & Maa Durga Mandir at Khinya - Cemented chair sitting-6 and plantation-50 and solar light- 5 (in each temple)	र्टिशित एउट्टी स्टिशित एउट्टी	10	5	5	0
3	Renovation/ development work of bus stand at village Parewar & Khinya along with installation of dustbins		24	12	12	0
4	Development at Cremation Ground along with construction of boundary wall (Parewar, Khinsar, Khinya)	-14	30	10	10	10
5	Installation of solar lights/ street lights in Schools, aaganwadis, bus stops of Villages Parewar, Khinsar & Khinya; 20 solar lights in each village, 5 solar lights in schools, aaganwadis & bus stops)	/ments	27	9	9	9
6	Development of Gaushala of Parewar, Khinsar & Khinya villages with construction of tin shed for storage of fodder, covered shed for cows, drinking water arrangements & electricity facilities and their maintenance up to 3 years		60	20	20	20

S. No.	Area of activity	Sector	Year	wise Pro Capital (Rs. in L	cost	Plan
			Total	Year	Year	Year
			Budget	1	2	3
	Sub Total		1751	656	556	539
1	Construction of Integrated Sports	Sports	150	0	150	0
	Complex including racing track,	Related				
	boundary wall, high rise sitting					
	structure, moveable goal posts for		44			
	hockey, badminton & tennis court, football tournaments etc. in co-					
	ordination with the Khinya Gram					
	Panchayat.					
2	Construction of Playground (400 mtr		100	100	0	0
	radius) along with sitting		1			
	arrangement, Volley ball poll with net				O	
	and Football goal post and Cricket Pit		1		S	
	at Village Parewar				,	
	Sub Total	سري	250	100	150	0
1	Local needs as per the discussion with	Others	73	-	-	-
	administration and Panchayat		0			
	Grand Total	s if She to	4134.66	1111.5	826	671.66

Socio- economic Development Activities (For phase II)

S. No.	Area of activity	Sector	Year wise Proposed Plan Capital cost (Rs. in Lakhs)			lan
			Budget	Year 1	Year 2	Year 3
1	Mobile Health Van with patient transfer services, medicines, consumables & equipment for nearby villages (Parewar, Khinsar, Joga, Ratta, Mandha, Khinya, Odon Ki Dhani, Moti Kilo Ki dhani & Kabir basti)-Ambulance Van-2 x 50 lakhs,	Health Related	130	60	60	10

S. No.	Area of activity	Sector	Year wise Proposed Plan Capital cost (Rs. in Lakhs)			Plan
			Budget	Year 1	Year 2	Year 3
	Medicines, consumables, equipments: 30 lakhs			1	2	3
2	Regular Health checkups & Wellness service at home for Pregnant women, infants & older villagers, Food & Nutrition care for Mothers/ Senior citizens, infants & pregnant women of all nearby villages (Joga, Ratta, Mandha, Odon Ki Dhani, Moti Kilo Ki dhani & Kabir basti)	E Secure View	90	30	30	30
3	Health & hygiene related awareness programmes for females along with free distribution of Sanitary napkins vending machine		60	20	20	20
	Sub Total		280	110	110	60
1	Completion of Construction of Industrial Training Institute (ITI) College in the vicinity of the Plant area for providing vocational education and skill development for the local community as well as the public in large.	Educational Related	1000	1000	0	0
2	Construction/ Renovation of separate toilets (1-1 unit) for boys & girls (5 lakh for each school) and Renovation, Repairing & Painting of Classrooms & construction/Renovation of boundary wall in Schools of Villages Leela Parewar: 1 Govt. School, Ratta: 1 School & Mandha: 1 School (25 lakhs for each school)	ments	90	30	30	30
3	Digital classrooms for smart education with computers, projector and wifi facilities in Leela Parewar - 1 set,		15	5	5	5

S. No.	Area of activity	Sector		wise Pro Capital (Rs. in L	cost	Plan
			Budget	Year 1	Year 2	Year 3
	Ratta-1 set, Mandha-1 set villages (3 digital classrooms @ Rs. 1.5 lakhs per set & Computer: 20 nos @ Rs. 0.5 lakhs per computer)					
4	Repair of anganwadi building (Leela Parewar, Ratta, Mandha) along distribution of supplementary food, hygiene kit, interactive games kit, story books for children and door to door consultation for mothers, pregnant women and infants.	YES	30	10	10	10
5	Financial assistance to meritorious students belonging to vulnerable & financially weaker students (Rs. 25,000 per student)	ध्यात राष्ट्रिय	25	10	10	5
6	Provision of educational kits, sports kit and School furniture: Setting up Library in Parewar-1, Khinsar-1 and Khinya - 3 (5 library with 2 almirah, 100 books, 2 tables, 10 chairs in each library @ Rs. 0.5 lakh per library X 5 library): Rs. 3.50 lakh, School furniture (@ 2500 per desk x 1000 desk), Sports kit (@ Rs. 3000 per kit x 500) and teaching aids (@Rs. 1000 x 500 school bags with stationaries).	SIF She IS WOOD	47.5	28.5	9.5	9.5
	Sub Total	monts	1207.5	1083.5	64.5	59.5
1	Construction of rainwater harvesting structures in nearby schools (Leela Parewar, Ratta & Mandha)	Water Facilities	15	5	5	5
2	Infrastructure support to the govt. / gram panchayat for Establishment of infrastructure like drinking water pipe line to Khinya, Ratta, Joga, Khinsar & Odon ki Dhani through ongoing Govt. Scheme Jal Mission		600	200	200	200

S. No.	Area of activity	Sector		wise Pro Capital (Rs. in L Year 1	cost	Year
3	Construction/ Renovation of water tank in nearby villages (Parewar, Leela Parewar, Khinsar, Khinya, Ratta, Mandha, Kabir basti & odon Ki Dhani)		50	10	20	20
	Sub Total		665	215	225	225
1	Construction of community hall (40X50 feet) along with 04 nos of Toilet (3X5 feet) and 02 nos Bathroom (3X5 feet) at Village Parewar & Khinsar	Rural Infrastructure development	120	60	60	0
2	Construction of Community toilets for men and women (5 male & 5 female) in villages Parewar, Leela Parewar, Khinya, Khinsar, Ratta and Mandha)	हरिस्ति स्टि	75	25	25	25
3	Development at Cremation Ground along with construction of boundary wall (Kabir Basti & Mandha)		100	50	50	0
4	Development of Gaushala of Leela Parewar, Kabir Basti, Ratta, Mandha, Moti Kilo Ki Dhani & Odhon Ki Dhani villages with construction of tin shed for storage of fodder, covered shed for cows, drinking water arrangements & electricity facilities and their maintenance up to 3 years	-EN	135	45	45	45
5	Installation of solar lights/ street lights in all nearby villages, Schools, aaganwadis, bus stops (Leela Parewar, Joga, Odon Ki Dhani, Ratta, Mandha & Kabir basti; 20 solar lights in each village, 5 solar lights in schools, aaganwadis & bus stops)	ments	54	18	18	18
	Sub Total		484	198	198	88
1	Distribution of trees (@Rs. 200 per tree x 18000 trees) in nearby villages	Greenbelt & Plantation	36	16	10	10

S. No.	Area of activity	Sector	Year wise Proposed Plan Capital cost (Rs. in Lakhs) Budget Year Year Year			Plan Year
				1	2	3
	along with their maintenance for three years					
	Sub Total		36	16	10	10
1	Development of Women Empowerment Centre with the installation of 50 sewing machines, 10 nos. of machines for making hand craft items & distribution of beauty parlor kits to make them employable.	Women Empowerment	180	60	60	60
	Sub Total	$\mathbf{Y} F$	180	60	60	60
1	Local needs as per the discussion with administration and Panchayat	Others	456	456	-	-
	Sub Total	163	456	456	-	-
	Grand Total		3308.5	1100	658	493

^{*}The above action plan will be implemented during project implementation phase. Zero date will start from the date of construction start for the proposed phases.



^{***}Villages can be interchanged as per situation demand. Activities may be changed as per situation and community requirement

EMP Measures

Cost Break up of EMP (Phase I)

S. No.	Item Description of EC Compliance	Budget (Rs. Lakhs)
A1	Air Pollution	
1	Air pollution Control equipment Bag filter/ESP etc.	5,000.00
2	Atomized Water Sprinkling arrangement	60.00
4	Sheds & Silos for raw material storage	10,000.00
5	E waste, Battery waste covered shed	10
6	Dry Fly ash Handling System	100
7	Internal Concrete Roads (8 Km)	3200
	Sub - Total	18,370.00
A2	Water Management	
8	STP of 375 KLD	50
9	RWH by constructing collection pond	100
10	Water filter Plant	100
	Sub - Total	250.00
A3	Green Belt Development & Plantation	
11	Greenbelt & plantation for Cement Plant Total = 70 Ha. area of total plant area	350
	Sub - Total	350.00
A4	Environmental Monitoring Capex	
12	Installation of cameras with night vision facility to display Raw mill kiln, cooler, coal mill and cement mill emission and connection with RSPCB-Minimum 03 Nos.	10
13	Online monitoring system (CAAQMS) and connectivity to CPCB and RSPCB	200
14	Online monitoring system (CEMS - Opacity meter and SO2 & NOx) connectivity with CPCB and RSPCB	100
15	Environment lab and monitoring	50
16	Water meters in cement plant process (Section wise consumption)	100
17	Water flow meters at STP (inlet & outlet)- 06 Nos.	10
	Sub - Total	470.00
A5	Others - As per EC Condition	
21	Rooftop & Storm water drainage system	200
22	LED Lights in offices, plant area	100
23	Solar energy installation like street lights, roof tops solar panels in guest house etc.	50
	Sub - Total	350.00
A6	OHS	25
A 7	Solid / Hazardous Waste Management	
A7	(Deferred for Operation phase)	
30	Alternate fuels - Waste processing facility	1500
30	Solid waste Management- Vacuum type sweeping machine	200
31	Used oil storage shed	50
33	Organic Waste Composting Systems (01 Nos. 100 kg capacity)	25

S. No.	Item Description of EC Compliance		Budget (Rs. Lakhs)
		Sub - Total	1,775.00
34	Contingency		300
		Sub - Total	300
		Grand Total	21,890.00

Cost Break up of EMP (Phase II)

S. No.	Item Description of EC Compliance	Budget (Rs. Lakhs)
A1	Air Pollution	
1	Air pollution Control equipment Bag filter/ESP etc.	5,000.00
2	Atomized Water Sprinkling arrangement	60.00
3	Sheds & Silos for raw material storage	10,000.00
4	E waste, Battery waste covered shed	10
5	Dry Fly ash Handling System	100
6	Internal Concrete Roads (2 Km)	800
	Sub - Total	15,970.00
A2	Water Management	
7	Water filter Plant	100
	Sub - Total	100.00
A ₃	Environmental Monitoring Capex	
8	Installation of cameras with night vision facility to display Raw mill kiln, cooler, coal mill and cement mill emission and connection with RSPCB- Minimum 03 Nos.	10
9	Online monitoring system (CEMS - Opacity meter and SO2 & NOx) connectivity with CPCB and RSPCB	100
	Sub - Total	110.00
A4	Solid / Hazardous Waste Management	
A4	(Deferred for Operation phase)	
10	Alternate fuels - Waste processing facility	1500
11	Used oil storage shed	50
12	Organic Waste Composting Systems (01 Nos. 100 kg capacity)	25
	Sub - Total	1,575.00
13	Contingency	300
	Sub - Total	300
	Grand Total	18,055.00

Recurring Cost Break up of EMP (For each phase)

S. No	Environmental Components	Activity to be monitored	Budgetary Provision Recurring Cost / annum (Cr)	Total
1	Air Pollution	Maintenance & Performance evaluation of	5	8
	Control	APCEs		
		Atomized water sprinkling arrangement	1	
		Maintenance of CEMS	1	

S. No	Environmental Components	Activity to be monitored	Budgetary Provision Recurring Cost / annum (Cr) Total	
		Maintenance of Concreted roads, storage facilities and Covered Conveyor Belt	1	
2	Wasta watan	·	1	3.5
2	Waste water management	Water Level Monitoring (Digital Water Level Recorder)	1	3.3
	management	Water Quality	0.5	-
		Installation of STP and Maintenance	1	
		Construction of Rain water harvesting	1	
		structures & drainage system and maintenance		
3	Noise Pollution Control	Calibration of Noise level monitoring equipment	0.5	1
		Noise level monitoring and providing noise abatement measures at Site	0.5	
4	Solid Waste Management	Alternate fuels - Waste processing facility	2	2
5	Environment Monitoring	Environment monitoring of Air, Noise, Water, Waste water	2	2
6	Greenbelt & Plantation	Plantation, their maintenance & gap filling	2	2
7	Others	Housekeeping by Vacuum Sweeping Machine, Conduction of Environmental Awareness Programme	0.5	0.5
Total 19				