

F. No. J-11011/243/2016-IA.II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

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Dated: 23rd July, 2018

To

**The Unit Head,
M/s JK Cement Limited,
Kailash Nagar, TehasilNimbahera,
District Chittorgarh, Rajasthan**

Subject: Expansion of Integrated Cement Plant [Clinker (2.8 MTPA to 5.0 MTPA); Cement (3.6 MTPA to 6.5 MTPA); CPP (22 MW to 47 MW); and WHRB (13.2 MW to 15.0 MW) located at Kailash Nagar, TehasilNimbahera, District Chittorgarh, Rajasthan by **M/s JK Cement Limited Kanpur** - Environmental Clearance under the provisions of EIA Notification, 2006 Regarding.

Sir,

This has reference to your application vide online proposal no. **IA/RJ/IND/60653/2016** dated 2nd November 2017 along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 and your letters dated 16th January 2018 and 12th June 2018 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category "A" of EIA Notification, 2006 and the proposal is appraised at Central level

Details submitted by Project Proponent:

2.0 The proposed expansion project of M/s J. K. Cement Works, Nimbahera located at Kailash Nagar, Tehsil –Nimbahera, District-Chittorgarh State Rajasthan was initially received in the Ministry on 25th November 2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 14th meeting held on 23rd December 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 31st January, 2017 vide letter No. J-11011/243/2016-IA.II(I).

3.0 The project of M/s J. K. Cement Works, Nimbahera located at Kailash Nagar, Tehsil – Nimbahera, District-Chittorgarh State Rajasthan is for expansion of production of Clinker from 2.8 MTPA to 5.0 MTPA, Cement from 3.6 to 6.5 MTPA, WHRB from 13.2 MW to 15.0

Environmental clearance for the proposed expansion of Integrated Cement Plant [Clinker (2.8 MTPA to 5.0 MTPA); Cement (3.6 MTPA to 6.5 MTPA); CPP (22 MW to 47 MW); and WHRB (13.2 MW to 15.0 MW) located at Kailash Nagar, Tehasil Nimbahera, District Chittorgarh, Rajasthan by M/s JK Cement Limited Kanpur

MW and CPP from 22 MW to 47 MW. The existing project was accorded Consent to Operate vide letter no. F (Tech)/ Chittorgarh (Nimbahera)/ 5(1)/2010–2011/ 8039-8041 dated 20.12.2017 which is valid up to 31.05.2022 with respect to the clinker and cement, F (Tech)/ Chittorgarh (Nimbahera)/ 5(1)/ 2010 – 2011/ 2378 – 2380 dated 25.05.2016 which is valid up to 31.03.2019 with respect to 22 MW CPP and F (Tech)/ Chittorgarh (Nimbahera)/ 5(1)/ 2010 – 2011/ 5724 – 5727 dated 28.12.2015 which is valid up to 31.07.2018 with respect to WHRB. The status of Certified compliance of Present CTO was obtained from RSPCB Regional Officer Chittorgarh on 22.09.2017. There were no non-compliances reported by Regional Officer. The proposed capacity after expansion for different products are as below:

Product	Existing(MTPA)	Proposed(MTPA)	Total After Expansion (MTPA)
Clinker	2.8	2.2	5.0
Cement	3.6	2.9	6.5
Power Generation			
CPP	22 MW	25 MW	47 MW
WHRB	13.2 MW	1.8 MW	15.0 MW

4.0 The total land required for the project is 170.27 Ha (including residential colony), out of which 57.77 ha is for greenbelt. The proposed expansion will be carried in the existing plant premises and no additional land is required to be acquired. No forestland involved. Water bodies existing around the project are Gambhiri Dam-7.1 km, NE; Gambhiri River-2.5 km, E; Uncha Talab-8.976km, SW; Nimbahera River-2.087km, E and Kadmali River - 2.187 km, NE and no modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lies between 24°38'18.46" to 24°38'41.50" N latitude and 74°41'5.93" to 74° 41'1.84" E Longitude in Survey of India toposheet No. 45L/10, at an elevation of 446 m AMSL. The ground water table is ranges between 22.05m below the surface level during the post-monsoon season and 38.11m below the land surface during the pre-monsoon season.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The authenticated list of flora and fauna provided through the Dy.Conservator of Forests, Chittorgarh reporting presence of Schedule-I fauna in the study area. The detailed action plan for conservation of schedule species found in the area in consultation with local DFO was prepared and Rs.57.0 Lacs budgetary provision for Leopard is estimated a period of 10 Years. Plantation suggested in the villages of buffer zone i.e. Arnoda, Ganeshpura, Phootwar, Khara, Pemadiyakhera, Motha and Tumba etc. The Existing budgetary provision for conservation of the Pea Fowl is 8.90 Lacs and the proposed budgetary provision is kept Rs. 25.8 Lacs for 10 Years and suggested plantation in the villages i.e. Ahirpura, Baroligha, Rampura, Ishakabad, Lakshmanpura, Borakher and Kalyanpur.

7.0 It was reported that dry process of cement manufacture utilizing the pre-calciner technology is adopted. The basic raw materials used in the cement plant are Limestone, Red

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Ochre, Laterite, Flyash and Gypsum. Pet coke, Indian Coal, alternative fuels (AFR) and Imported Coal respectively are used in the process. The major raw material for manufacture of cement is limestone and is sourced from various limestone mines located at villages- Maliakhera, Karunda and Ahirpura. Limestone produced will be transported to the cement plant by tippers/ Rubber Belt Conveyor (RBC). The proposed Over Land Belt Conveyor System length is approx. 8.0 Km, Width – 1000 mm. (Capacity – 1500 TPH), Total no. of pillars proposed are 208.

8.0 The requirement of raw material for project are Limestone (7.28 MMTPA); Red Ochre (0.537 MMTPA); Laterite (0.78 MMTPA); Gypsum (0.387 MMTPA); Dry Fly ash (0.888 MMTPA); wet fly ash (0.161MMTPA); Indian coal for CPP (1150 TPD); Pet coke for CPP (615 TPD) based on MoEF notification; Indian Coal for Cement Plant (3099 TPD); Pet coke for Cement Plant (1697 TPD); Imported Coal for Cement Plant (2498 TPD). Coal requirement would be fulfilled by Indian as well as imported. The fuel will be mainly coal and pet coke and partially AFR fuel (like Agro Waste; Tyre Chips/carbon black, Plastic resin waste; ETP waste; Pb-Zn slag; Pharma waste, Municipal segregated solid waste, waste mix solid and liquid; Chemical Gypsum, Jerosite & Red oxide as additive) to minimize hazardous and other waste generating from various industries.

9.0 The water requirement of the project is estimated as 4,071 m³/ day. Daily water requirement will be 3,301 m³/day and Recycled Water – 770 m³/day. About 2,545 KLD will be met from Ground water, 1,396 KLD from Gambhiri Dam and remaining water will be met from existing adjacent Ahirpura Limestone Mine Pit, Maliakhera Mine, Karunda Mine, Tilakhera Mine & Mangrol Mine. The permission for drawl of groundwater/surface water is obtained from CGWA vide letter No. 21-4(34)/WR/CGWA/2005-1675 on dated 28.10.2015 and dam water vide agreement between J K Cement works Nimbahera and Govt. of state of Rajasthan.

10.0 The power requirement of the project after expansion is estimated as 62.6 MW. Out of which 22 MW will be met from CPP, 15.0 MW (13.2 MW existing + 1.8 MW proposed) from WHRB, 25 MW from proposed CPP and remaining will be met from State grid as and when required.

11.0 Baseline Environmental studies were conducted during winter season i.e. from December' 2016, January' 2017 and February' 2017. Ambient air quality monitoring has been carried out at eight locations during December' 2016, January' 2017 and February' 2017 and the data submitted indicated: PM₁₀ (91.2 µg/m³ to 28.9 µg/m³), PM_{2.5} (56.2 µg/m³ to 15.8 µg/m³), SO₂ (13.1 µg/m³ to 4.1 µg/m³) and NO_x (28.3 µg/m³ to 8.9 µg/m³). The results of the modeling study indicate that the maximum increment of GLC for the proposed expansion will be 8.2 µg/m³ with respect to the PM₁₀, 5.5 µg/m³ with respect to the PM_{2.5}, 8.6 µg/m³ with respect to the NO_x and 5.1 µg/m³ with respect to the SO₂.

12.0 Ground water quality has been monitored in eight locations in the study area and analysed. pH: 7.18 to 7.65, Total Hardness: 200mg/l to 630mg/l, Chlorides: 50 mg/l to 270.1 mg/l, Fluoride: 0.5 mg/l to 1.1 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from two locations. pH: 7.96 to 7.91; DO: 6.0 mg/l to 6.6 mg/l and BOD: 05mg/l

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to 06 mg/l. COD from 16 mg/l to 18 mg/l.

13.0 Noise levels are in the range of 66.1 to 48.8 dB (A) for daytime and 60.9 to 39.3 dB(A) for night time.

14.0 It has been reported that there is no habituation in the core zone of the project. No R&R is involved. It has been envisaged that no families to be rehabilitated.

15.0 The dust collected in the air pollution control equipment in Cement process will be recycled back feeded to the transport system. Hence no solid waste which requires disposal is generated from the plant. Fly ash generated from CPP will be utilized in the cement manufacturing process. Solid waste generated from colony is disposed after segregating the waste into biodegradable and non-biodegradable. Bio- Degradable waste is being used as compost and Non-Bio- Degradable waste is land filled within the colony premises at identified areas. Solid waste generated at STP is dried in the sand beds and is being used as compost for Green Belt development. Existing hazardous waste generated to the tune of 29.0 KL used oil during FY 2016-17, out of which 27.8 KL was sent to authorized recycler and remaining 1.2 KL used in-house.

16.0 It has been reported that the Consent to Operate from the Rajasthan State Pollution Control Board obtained vide letter no. F (Tech)/ Chittorgarh (Nimbahera)/ 5(1)/ 2010 – 2011/ 1636 – 1639 dated 26.05.2014 which is valid up to 31.05.2017 and renewal application has already been submitted. With respect to the clinker and cement, F (Tech)/ Chittorgarh (Nimbahera)/ 5(1)/ 2010 – 2011/ 2378 – 2380 dated 25.05.2016 which is valid up to 31.03.2019 with respect to ther 22 MW CPP and F (Tech)/ Chittorgarh (Nimbahera)/ 5(1)/ 2010 – 2011/ 5724 - 5727dated 28.12.2015 which is valid up to 31.07.2018 with respect to the WHRB. The status of earlier CTO was obtained from RSPCB Regional Officer Chittorgarh on 22.09.2017.

17.0 Public hearing of the project was held on 30.06.2016 at Sub Divisional Office, Nimbahera, Tehsil – Nimbahera, District – Chittorgarh (Raj.). under the chairmanship of ADM, Sh. Anurag Bhargava for the expansion project. The issues raised during public hearing are employment, development of social infrastructure, pollution issues & women empowerment etc. The Time bound action plan and budgetary provision has been earmarked for Public Hearing issue total Rs. 1056 Lacs (Upto FY- 20-21) in the various heads i.e. Jobs & sustainable employment self-income- generating opportunity, Centre for woman training, Public Convention Centre at Nimbahera, Soil Fertility improvement, Community Centre at Mangrol, Medical & Modern Health Technology & Blood Bank at Nimbahera, Water Supply line works at Shahbad, Installation of tree guard, Management of Truck Movement and reduction, and Socio Agro Forestry.

18.0 An amount of Rs 1,49, 00,000 under various head i.e. Centre for Woman Training, community/Centre at Mangrol Medical Health, Water Supply line works at Shahbadhas been earmarked for Enterprise Social Commitment based on public hearing issues. Rs 2,73,00,000 under various heads i.e. School/ education, Livelihood promotion/ job creation& skill generation, Infrastructure work, drinking water has been earmarked for Environmental social responsibility

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(ESR) based on public hearing issues. Therefore, total is Rs. 4,22,00,000.

S. No	ESTIMATED BUDGET CER SCHEMES FOR THE FINANCIAL YEAR 2017-22						
	Enterprise Social Commitment Activities	2017-18	2018-19	2019-2020	2020-21	2021-22	Total
1.	Centre for Woman Training						
	Woman income generating programmes through the various economic activities- Cutting & Tailoring, Pickle & Sauces making, Soft Toys & Gem Jewelers and Beautician Courses will be continued.		20,00,000	15,00,000	15,00,000	-	50,00,000
2.	Community Centre required at Mangrol						
	Mangrol residents were continuously requiring a community centre as mention in the Public Hearing	-	40,00,000		-	-	40,00,000
3.	Medical Health						
	Further modern technology development in the Hospital Nimbahera (Path lab equipments OT, Diagnostic centre	-	5,00,000	5,00,000	5,00,000	5,00,000	20,00,000
	Establishment of the blood bank in Nimbahera in approach of the Hospital, Nimbahera.	-	15,00,000	2,00,000	2,00,000		19,00,000
4.	Water supply line works required at Shababad						
	Laying of water supply line works in Shababad, to solve the water supply		20,00,000	-	-	-	20,00,000
Total			10000000	22,00,000	22,00,000	5,00,000	149,00,000

S. No	ESTIMATED BUDGET CER. SCHEMES FOR THE FINANCIAL YEAR 2017-22						
		2017-18	2018-19	2019-2020	2020-21	2021-22	Total
1.	School/Education						
	Construction of three new rooms in Govt. School PhacherAhiran (Total six room constructed -500 sq.ft. each room)	30,00,000	--	---	--	--	30,00,000
	To recognize and motivate the student on independence day function (8 th to 12 th class) by distributor of silver medal to those who have achieved 65% and above marks in Board Exam Nimbahera	2,00,000	--	--	--	--	2,00,000
	Permanent water body creation by anicut/check bund.	--	--	11,00,000	11,00,000		22,00,000

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2.	Livelihood promotion / job creation & skill generation						
	Organize a rural skill developing programme for Women & Youth. Provide the various kind of training (Handicraft, agriculture, Cattle farming, Jewellery, Tailoring, Cottage industrial training)	23,00,000	--	7,00,000	7,00,000	--	37,00,000
3.	Infrastructure work						
	C.C. roads & drainage line construction work in Phalwavi village (P.P. mode) & Maintenance	40,00,000	40,00,000	-	-		80,00,000
	Grave Yard shed & boundary wall construction work in Shababad village (P.P.mode)	9,00,000	-	-	-		9,00,000
	Community hall construction work in Bhawliya village (P.P.mode)	5,00,000	-	50,000	-		5,50,000
	Construction & Development of a community centre in Manglore village.	-	40,00,000	-	-		40,00,000
4.	Drinking Water						
	Water tanker supply in summer season in Nimbaheera city Nearby village.	10,00,000	10,00,000	-	-	-	20,00,000
	Mukhyamantri JAL SWALAMBAN YOJNA 2017-18		12,00,000				12,00,000
	Water pipe line work construction work in Pipaliya village (P.P.mode)	15,00,000		50,000			15,50,000
	Total	1,34,00,000	1,02,00,000	59,00,000	18,00,000	-	2,73,00,000

18.0 The overall investment in the existing & proposed project for plant is assumed to be Rs. 2,667.51 Crore. The capital cost for environmental protection measures is proposed as Rs. 1484.65 Lacs. The annual recurring cost towards the environmental protection measures is proposed as Rs 121.48 Lacs. The employment generation from the proposed project / expansion is 125. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

S. No.	Description of Item	Existing		(Proposed)	
		Capital Cost (In Lacs)	Recurring Cost (In Lacs)	Capital Cost (In Lacs)	Recurring Cost (In Lacs)
1	Air Pollution Control/ Noise	1804	180.0	1288.65	99.5
2	Water Pollution Control	55.0	8.0	20.0	0.60
3	Environmental Monitoring and Management	100.0	14.04	124.5	12.38
4	Green Belt Development	175.0	17.5	46.5	6.50
5	Occupational Health	62.0	68.04	5.0	2.5

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Total	2196.0	287.58	1484.65	121.48
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19.0 Greenbelt will be developed in 3.752 Ha and 54.02-hectare greenbelt is already developed around plant boundary green cover as per CPCB/ MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 tress per ha. As stipulated in the ToR prescribed by the Expert Appraisal Committee, New Delhi, vide their letter no. J-11011/ 243/ 2016 – IA.II (I) dated 31.01.2017. In Para iv of point no 7 described green belt over an additional area of 15 ha for the same company will be develop additional green belt by using local plant species. For additional 15 ha green belt development, every year 3.0-hectare area will be developed for plantation for next five years.

20.0 The adoption of slip power recovery system for proposed line no.4-is equipped with Bag House Fan (Raw Mill, Kiln PH Fan-1, Separator Fan for Cement Mill Polycom, Separator fan for Raw Mill Polycom with range operating speed will be 65-95% and saving in KW per Hr.(KWH) will be 10-12%.

21.0 There is no court case or violation under EIA Notification to the project or related activity.

22.0 Name of EIA consultant: M/s. Enkay Enviro Services Pvt. Ltd., Jaipur QCI Accredited (SI.No.41, at QCI list dated 16/11/2017).

22.0 The proposal was considered in the 27th meeting of Expert Appraisal Committee (Industry-I) held on 3rd – 5th January, 2018 and Further considered in the 32nd meeting of Expert Appraisal Committee held during 11th to 13th June, 2018. After detailed deliberations, the committee recommended for grant of environmental clearance for the proposed expansion project subject to following specific and general conditions:

A. Specific Conditions:

1. The project proponent shall implement the conservation plan for schedule-I species (Pea fowl and Leopard) in consultation with the local forest department with the fund provisions of Rs. 82.80 Lakhs in addition to the existing fund provision of 8.90 Lakhs.
2. The project proponent shall adopt the slip power recovery system for proposed line no.4equipped with Bag House Fan (Raw Mill, Kiln PH Fan-1, Separator Fan for Cement Mill Polycom, Separator fan for Raw Mill Polycom).
3. The project proponent shall utilize the alternate fuels to the maximum extent possible.
4. The treated water from the STP shall be recycled and reused to conserve the water.

B. General Conditions:

1. An amount of Rs 4.22 Crores proposed towards Corporate Environment Responsibility (CER) shall be utilized as capital expenditure in project mode. The project shall be

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completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.

2. Green belt shall be developed in 72.77 Ha with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
3. The Capital cost Rs. 36.80 Crores (21.96 Crores for Existing+14.84 Crores for expansion) and annual recurring cost Rs 4.08 Crores per annum (Rs. 2.87 Crores for existing + 1.21 Crores for expansion) towards the environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.
4. The project proponent shall (Air Quality Monitoring):
 - a. install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (Co-processing Cement); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - b. monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - 04 c. Install system 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 at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions;
 - d. submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emission to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

5. The project proponent shall (Water Quality Monitoring):

- a) install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system

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from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- b) 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 recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories; and
- c) submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

6. The project proponent shall (Air Pollution Control):

- a) provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- b) provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags;
- c) provide pollution control system in the cement plant as per the CREP Guidelines of CPCB;
- d) provide sufficient number of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs regularly;
- e) recycle and reuse lime fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after agglomeration;
- f) ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;
- g) Provide wind shelter fence and chemical spraying on the raw material stock piles;
- h) provide Low NO_x burners as primary measures and SCR /NSCR technologies as secondary measure to control NO_x emissions. Have separate truck parking area and monitor vehicular emissions at regular interval.

7. The project proponent shall (Water Pollution Control):

- a) adhere to 'zero liquid discharge';
- b) provide Sewage Treatment Plant for domestic wastewater; and

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- c) provide garland drains and collection pits 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.
8. The project proponent shall (Water Conservation);
- a) practice rainwater harvesting to maximum possible extent;
 - b) provide water meters at the inlet to all unit processes in the cement plants; and
 - c) make efforts to minimise water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.
9. The project proponent shall (Energy Conservation):
- a) provide Waste heat recovery system for kiln and cooler;
 - b) 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;
 - c) 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;
 - d) provide the project proponent for LED lights in their offices and residential areas;
 - e) maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards; and
 - f) maximize utilization of alternate fuels and Co-processing to achieve best practice norms.
10. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport.
11. Used refractories shall be recycled as far as possible.
12. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.
13. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

14. The PP 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 of Factory Act.
15. The PP shall adhere to the corporate environmental policy and system of the reporting of any infringements/ non-compliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF&CC as a part of six-monthly report.
16. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.
17. A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of the organization.
18. 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, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
19. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
20. 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).
21. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
22. The storage of NH₃ and other hazardous chemicals at the site shall be as per the provisions of Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended from time to time.
23. 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.
24. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
25. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.
26. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.

Environmental clearance for the proposed expansion of Integrated Cement Plant [Clinker (2.8 MTPA to 5.0 MTPA); Cement (3.6 MTPA to 6.5 MTPA); CPP (22 MW to 47 MW); and WHRB (13.2 MW to 15.0 MW) located at Kailash Nagar, Tehasil Nimbahera, District Chittorgarh, Rajasthan by M/s JK Cement Limited Kanpur

27. Sufficient number of colour coded waste collection bins shall be constructed at shop floors in each shop to systematically segregate and store waste materials generated at the shop floors (other than Process waste) in designated coloured bins for value addition by promoting reuse of such wastes and for good housekeeping.
28. Kitchen waste shall be composted or converted to biogas for further use.(*to be decided on case to case basis depending on type and size of plant*)
29. The project proponent shall (post-EC Monitoring):
- send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
 - put on the clearance letter on the web site of the company for access to the public.
 - inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at <http://envfor.nic.in>.
 - upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
 - 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;
 - submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
 - 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;
 - inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

23.0 The Ministry of Environment, Forest and Climate Change has considered the application based on the recommendations of the Expert Appraisal Committee (Industry-I) and hereby decided to grant environmental clearance for the proposed expansion of Integrated Cement Plant

Environmental clearance for the proposed expansion of Integrated Cement Plant [Clinker (2.8 MTPA to 5.0 MTPA); Cement (3.6 MTPA to 6.5 MTPA); CPP (22 MW to 47 MW); and WHRB (13.2 MW to 15.0 MW) located at Kailash Nagar, Tehsil Nimbahera, District Chittorgarh, Rajasthan by M/s JK Cement Limited Kanpur

[Clinker (2.8 MTPA to 5.0 MTPA); Cement (3.6 MTPA to 6.5 MTPA); CPP (22 MW to 47 MW); and WHRB (13.2 MW to 15.0 MW)] located at Kailash Nagar, TehasilNimbahera, District Chittorgarh, Rajasthan by **M/s JK Cement Limited Kanpur** under the provisions of EIA Notification, 14th September, 2006, as amended, subject to strict compliance of the above conditions.

24.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.


25.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

26.0 The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and that during their presentation to the Expert Appraisal Committee. The commitment made by the project proponent to the issue raised during Public Hearing shall be implemented by the proponent

27.0 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.

28.0 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.

This issues with the approval of competent Authority.



(Sharath Kumar Pallerla)
Scientist 'F' / Director

Copy to:-

1. **The Secretary**, Department of Environment, Government of Rajasthan, Secretariat, Jaipur.
2. **The Chief Wildlife Warden** of the State Govt. of Rajasthan, Jaipur
3. **The Additional Principal Chief Conservator of Forests(C)**, Ministry of Environment, Forest and Climate Change, Regional Office (CZ), Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow – 226020.
4. **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
5. **The Chairman**, Rajasthan State Pollution Control Board, 4, Institutional area, Jhalana, Doongri, Jaipur.

Environmental clearance for the proposed expansion of Integrated Cement Plant [Clinker (2.8 MTPA to 5.0 MTPA); Cement (3.6 MTPA to 6.5 MTPA); CPP (22 MW to 47 MW); and WHRB (13.2 MW to 15.0 MW) located at Kailash Nagar, Tehasil Nimbahera, District Chittorgarh, Rajasthan by M/s JK Cement Limited Kanpur

6. **The Member Secretary**, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
7. **The District Collector**, Chittorgarh District, Rajasthan.
8. **Guard File / Record file / Monitoring file.**
9. **MOEF&CC Website.**


(Sharath Kumar Pallerla)
Scientist 'F'/Director

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