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

To.

The Sr. Manager (Projects) JAYKAYCEM CEMENT LIMITED

H.No. 253, Shashi Kunj, Peptech City, Sohawal Mod,,Satna,Satna,Madhya Pradesh-485001

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/MP/IND/254132/2022 dated 02 Feb 2022. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.

2. File No.

3. **Project Type**

4. Category

5. Project/Activity including Schedule No.

6. Name of Project EC22A009MP110720

IA-J-11011/224/2016-IA-II(I)

Expansion7

3(b) Cement plants

Expansion in Clinker Production Capacity from 5.28 Million 17...
Power generation capacity of WHRO IIIO...
30 MW to 50 MW, DG Set from 500 KVA
3500 KVA and reduction in Captive Power generation capacity of WHRS from MW in Phased manner without change in Cement Production capacity of 6.0 Million TPA at Villages: Devra, Hardua, Puraina, Sotipura & Madaiyan, Tehsil: Amanganj, District: Panna (Madhya Pradesh) by M/s. Jaykaycem (Central) Ltd.

JAYKAYCEM CEMENT LIMITED

7. Name of Company/Organization

8. **Location of Project** Madhya Pradesh

9. **TOR Date**

N/A

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

Date: 02/03/2022

(e-signed) **Sundar Ramanathan** Scientist E IA - (Industrial Projects - 1 sector)

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

This is a computer generated cover page.

This refers to your proposal no. IA/MP/IND/254132/2022 dated 02/02/2022 submitted through PARIVESH Portal for grant of Environmental Clearance (EC) for the project mentioned above.

- 2. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity is covered under category 'A' of item 3(b) Cement Plants and 1 (d) Thermal Power Plant, and appraised at Central level.
- Accordingly, the above-mentioned proposal has been considered in 53rd meeting of Re-3. constituted Expert Appraisal Committee (Industry 1 Sector) held on 10-11th February, 2022. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at https://parivesh.nic.in/.

The details of the proposal are as per the EIA report submitted by the proponent. The salient features of the proposal as presented during the above-mentioned meetings of EAC (Industry

1) are as under: -

S No	Particulars	2	3. Real Details				
a.	for undertaking E study	IA	EC is under para 7	N. Co.			
b.	Period of baseline data collection		Baseline monitoring data for the period from June to December, 2021 based on post project monitoring data.				
c.	Date of Public Consultation		Public consultation for the project was held on 14/06/2019 as a part of the existing EC dated 14/10/2020.				
d.	issues	to PH	As per the pervious EC dated 14/10/2020, the proponent had earmarked and amount of Rs. 30.80 Crores to address the issues raised during public consultation.				
e.	Location of to	the	Villages Devra, Hardua, Puraina, Sotipura & Madaiyan, Tehsil Amanganj, District Panna, Madhya Pradesh				
f.	TO A STATE OF THE	and the	8. 24°19'47.71"N 9. 24°19'47.71"N 10. 24°19'49.29"N 11. 24°19'46.72"N 12. 24°19'47.62"N 13. 24°19'47.00"N 14. 24°19'54.09"N 15. 24°19'53.80"N	79°57'32.78"E 79°57'33.88"E 79°57'34.68"E 79°57'50.11"E 79°57'49.79"E 79°57'56.57"E 79°57'56.44"E 79°57'58.52"E 79°57'59.03"E 79°58'23.88"E 79°58'24.18"E 79°58'24.18"E 79°58'29.98"E 79°58'32.68"E 79°58'35.67"E 79°58'39.70"E 79°58'41.45"E	44. 45. 46. 47.	24°19'19.99"N 24°19'20.93"N 24°19'24.94"N 24°19'25.29"N 24°19'26.09"N 24°19'29.59"N 24°19'30.79"N 24°19'32.03"N 24°19'33.27"N 24°19'31.56"N 24°19'31.56"N 24°19'28.69"N 24°19'28.69"N 24°19'29.27"N 24°19'26.69"N 24°19'25.30"N 24°19'25.30"N 24°19'25.30"N 24°19'25.80"N 24°19'25.80"N 24°19'22.26"N 24°19'22.26"N 24°19'26.35"N	79°58'21.59"E 79°58'18.69"E 79°58'18.45"E 79°58'12.28"E 79°58'12.28"E 79°58'8.24"E 79°58'8.99"E 79°58'3.14"E 79°58'2.69"E 79°57'53.58"E 79°57'53.32"E 79°57'47.17"E 79°57'46.32"E 79°57'46.32"E 79°57'40.96"E 79°57'40.96"E 79°57'38.33"E
			24. 24°19'46.94"N 25. 24°19'46.30"N 26. 24°19'43.73"N 27. 24°19'43.06"N	79°58'44.51"E 79°58'43.28"E	66. 67. 68. 69.		



S No	Particulars	Details				
		28. 24°19'35.47"N	79°58'41.36"	E 70.	24°19'31.65"N	79°57'36.79"E
		29. 24°19'34.63"N			24°19'32.18"N	
		30. 24°19'33.40"N				79°57'37.81"E
		31. 24°19'31.17"N			24°19'34.71"N	
			79°58'49.04" 79°58'42.49"		24°19'37.68"N 24°19'37.98"N	79°57'38.84"E 79°57'39.36"E
		34. 24°19'30.59"N			24°19'41.13"N	79°57'39.30 E
i i		35. 24°19'31.35"N				79°57'38.46"E
		36. 24°19'31.19"N			24°19'45.18"N	
		37. 24°19'32.34"N	79°58'34.86"		24°19'45.53"N	
			79°58'34.19"		24°19'48.94"N	
		39. 24°19'31.56"N			24°19'49.42"N	
			79°58'30.89"			79°57'36.07"E
			79°58'26.65" 79°58'26.06"		24°19'48.91"N	79°57'32.31"E 79°57'31.90"E
~	Total land	The second control of	The state of the s	E 04.	24 19 49.80 N	79 37 31.90 E
g. h.	Land acquisition	123.25ha [Private Total land of 123.		- 4		41
11.	details as per MoEF&CC O.M. dated 7/10/2014	Thus, no additiona				
i.	Existence of	Nil		7		
1.	habitation &	1,11				
300						
	involvement of					
	R&R, if any			10-10-		
j.	Elevation of the project site	308 - 318 m AMSL				
k.	Involvement of Forest land if any.	Nil				
1.	Water body exists within the project					
	site as well as study	Study area:	-5			
	area	Water Body	Distance	Direction	on	
	7. \ %	Ken River	1.0 km	SW		
		Jonaro Nala	3.0 km	South	i .	
		Sonar River	5.5 km	WNW	1	
	e_{λ}	Bateha Nala	6.5 km	NW		
	17.	Karhwani Nala	7.0 km	NNE		
		77	ASS	E PARTITION WAS ALLESS		
		Dhabeha Nala	7.5 km	SSW		
		Jamunha Nala	8.0 km	SSW		
		Patne River	8.5 km	ESE	150 5.	
		Mirhasan River	9.5 km	NNW	7	
m.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	Nil. List of Reserved Pagra RF (7.5 kr		in 10 kı	n radius stu	dy area:
n.	Project cost	INR 5586.95 Crores as per EC dated 14/10/2020, No additional cost is proposed.				
0.	EMP cost	INR 232.86 Crores as per EC dated 14/10/2020, No additional EMP cost is proposed				



S No	Particulars	Details		
p.	Employment opportunity	820 as per EC dated 14/10/2020, No additional employment is proposed.		
q.	Water and Power requirement	Water – 5125 m ³ /day, Power – 72 MW		

Unit configuration and capacity:

S No	Facility	Capacity as per EC dated 14/10/2020	Proposed changes under para 7(ii)	Final Capacity after Amendment
1	Clinker	5.28 MTPA	Increase by 1.32	6.6 MTPA
		(2x2.64 MTPA)	MTPA	(2x3.3 MTPA)
2	Cement	6.0 MTPA	-	6.0 MTPA
		(2x3 MTPA)		(2x3 MTPA)
3	CPP	80 MW (2x40)	Reduced by 40 MW	40 MW
4	WHRS	30 MW	Increase by 20 MW	50 MW
5	D.G. Set	500 KVA	Increase by 2000	2500 KVA
		17: 1	KVA	(500/250/125 KVA)

- 5. The EAC, in its 53rd meeting of Re-Constituted Expert Appraisal Committee (Industry-1 Sector) held on 10-11th February, 2022, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Environment Clearance under the provision of para 7 (ii) of EIA Notification, 2006 subject to stipulation of specific and general conditions as detailed in the point below.
- 6. 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) hereby decided to grant Environment Clearance for instant proposal of M/s. Jaykaycem (Central) Limited under the provisions of para 7 (ii) of EIA Notification, 2006 subject to the following specific conditions and general conditions:

A. Specific conditions

- i. Particulate matter emissions from cement mill stacks shall be less than 20 mg/Nm³ and for CPP less than 30 mg/Nm³.
- ii. Air cooled condensers shall be used in the captive power plant in place of water-cooled system.
- iii. Project proponent is permitted to abstract up to 2140 KLD ground water, for next 15 months from the date of issue of the Environment Clearance after obtaining requisite permission from the concerned Competent Authority. Thereafter, water from mine pit and Ken River shall be used and ground water abstraction is not permitted.
- iv. Total water requirement after expansion shall not exceed 5125 KLD. Water shall be sourced from ground (195 KLD) and 4930 KLD from mine pit and Ken River.
- v. Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.
- vi. Green belt shall be developed in 33% of the total area all along the entire periphery of the area with a density of 2500 trees per ha. This shall include development of green belt with a width of 20 m within the project site towards the mining area and Hardua village located at 0.5 km from the project site.
- vii. All stockyards shall be having impervious s flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.

- viii. Slip roads shall be provided at the gates and along crossings on main roads.
- ix. All internal and connecting road to the Highway shall be black topped/concreted with suitable load in term of Million Standard Axle (MSA) as per IRC guidelines.
- x. Performance monitoring of pollution control equipment shall be taken up yearly and compliance status in this regard shall be reported to the concerned Regional Office of the MoEF&CC.
- xi. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xii. Limestone from mines to the cement plant shall be transported through Overhead Conveyor Belt within a period of two years from date of issue of the Environment Clearance.
- xiii. Hot air dryer shall not be installed. Flue gases of preheater shall be used to dry the slag/bottom ash.

B. General conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 Continuous Emission Monitoring System (CEMS) at process stacks to monitor stack emission as well as 4 Nos. Continuous Ambient Air Quality Station (CAAQS) 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 monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
- iii. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- iv. The project proponent shall 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;
- v. The project proponent shall provide wind shelter fence and chemical spraying on the raw material stock piles;
- vi. Ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, and cement bagging plants.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement)as amended from time to time; 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 recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. The project proponent shall regularly monitor ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- vi. The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

i. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

V. Energy Conservation measures

- i. Waste heat recovery system shall be provided for kiln and cooler.
- ii. The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iv. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

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

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

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



IX. Environment Management

- 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.
- The company shall have a well laid down environmental policy duly approve by the ii. 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.
- A separate Environmental Cell both at the project and company head quarter level, iii. with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

X. Miscellaneous

- The project proponent shall make public the environmental clearance granted for their i. 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.
- The copies of the environmental clearance shall be submitted by the project ii. 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.
- The project proponent shall upload the status of compliance of the stipulated iii. environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, iv. 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.
- The project proponent shall submit six-monthly reports on the status of the V. compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- The project proponent shall submit the environmental statement for each financial vi. 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.
- The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- No further expansion or modifications in the plant shall be carried out without prior ix. 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 of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.



- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. 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.
- xiv. 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.
- 7. This issues with the approval of the Competent Authority.

(Sundar Ramanathan) Scientist 'E'

Copy to: -

- 1. Secretary, Department of Environment, Government of Madhya Pradesh, Secretariat, Bhopal.
- 2. Chief Wildlife Warden, Government of Madhya Pradesh, Van Bhavan, 1st Floor, Tulsi Nagar, Bhopal 462 003.
- 3. Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road No.3, Ravishankar Nagar, Bhopal –462 016.
- 4. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
- 5. Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 6. Chairman, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal 462016.
- 7. District Collector, Panna District, Madhya Pradesh.
- 8. Guard File/Record File/Monitoring File.
- 9. MoEF&CC Website.

(Sundar Ramanathan) Scientist 'E'