

F. No. J-11011/1173/2007-IA.II(I)  
Government of India  
Ministry of Environment, Forest and Climate Change  
(Impact Assessment Division)  
\*\*\*\*\*

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Dated: 3<sup>rd</sup> February, 2021

To

Dr. Anil Kumar Trivedi  
Sr. GM (Environment)  
M/s. Shree Cement Limited  
Village Gothra, Tehsil Nawalgarh  
District Jhunjhunu, Rajasthan  
E-mail: bhargavr@shreecementltd.com

**Subject:** Integrated Cement Plant (Cement 4.0 Million TPA; Clinker 2.0 Million TPA), Captive Power Plant 25 MW, WHRS 20 MW along with DG Sets of 2000 KVA (1000/500/250/125 KVA) by M/s. **Shree Cement Limited** located at Village Gothra, Tehsil Nawalgarh, **District Jhunjhunu, Rajasthan** - Environment Clearance – regarding.

Sir

1. This has reference to your online application vide proposal no. IA/RJ/IND/109426/2019 dated 27.11.2020 along with Form 1&2, and feasibility report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement plants under Category "A" of EIA Notification, 2006 and the project is appraised at the Central level.
2. The aforesaid proposal was considered in 26<sup>th</sup> & 27<sup>th</sup> meeting of the EAC (Industry-1) held on 16-17<sup>th</sup> December 2020 and 30-31<sup>st</sup> December, 2020 respectively. The EAC proceedings of the said proposal is given as below:

**Details submitted by the project proponent**

3. The detail of the ToR is furnished as below:

Date of application	Consideration	Details	Date of accord
28/06/2019	9 <sup>th</sup> meeting held on 30 <sup>th</sup> -31 <sup>st</sup> of July, 2019	Terms of Reference	23/09/2019

*Environmental Clearance for the project titled "Integrated Cement Plant (Cement 4.0 Million TPA; Clinker 2.0 Million TPA), Captive Power Plant 25 MW, WHRS 20 MW along with DG Sets of 2000 KVA (1000/500/250/125 KVA) by M/s. Shree Cement Limited located at Village Gothra, Tehsil Nawalgarh, District Jhunjhunu, Rajasthan".*

4. The project of M/s. Shree Cement Limited located at Gothra Village, Nawalgarh Tehsil, Jhunjhunu District, Rajasthan State is for setting up of a new Integrated Cement Plant for production of Cement 4.0 Million TPA, Clinker 2.0 Million TPA, Captive Power Plant 25 MW, WHRS 20 MW along with DG Sets of 2000 KVA (1000/500/250/125 KVA).
5. Environment Clearance has been granted for Integrated Cement Plant (Clinker: 2.0 MTPA, Cement: 3.0 MTPA), CPP: 36 MW, WHRS: 15 MW and Limestone Mine (ML Area: 624 ha) with limestone production capacity of 3.2 MTPA was obtained from MoEF&CC, New Delhi vide Letter No. J-11011/1173/2007-IA II (I) on 15/07/2009; validity extended vide letter dated 29/09/2016 which got expired on 14/07/2019 and the same EC is valid for Captive Limestone Mines up to 14/07/2039. Due to expiry of earlier granted EC for Integrated Cement Plant, a fresh application for EC of Integrated Cement Plant on same project site with revised capacities has been applied.
6. The proposed capacity for different products for new site area as below:

Units	Proposed Capacity
Clinker	2.0 MTPA*
Cement**	4.0 MTPA
CPP	25 MW
WHRS	20 MW
DG Set	2000 KVA (1000/500/250/125 KVA)

\*Balance clinker (0.32 Million TPA) will be sourced from sister units located at Beawar-Ajmer and Ras-Pali through road & rail.

\*\*OPC, PPC, PSC, RHPC, SRC & Composite Cement

7. The total land required for the project is 145.71 ha, out of which, 142.16 ha (i.e. 97.6%) is single crop agricultural land, allotted by RIICO for Industrial use to setup Cement Plant; and is under possession of the Company and remaining 3.55 ha (i.e. 2.4%) is Govt. Land; acquisition for allotment is under process. More than 97% of the land is under the possession of the company. No forest land is involved. No River passes through the project area. It has been reported that no water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.
8. The topography of the area is flat with low lying mound of stabilized sand and reported to lies between 27°47' 16.74" N to 27°48' 3.88" N Latitude and 75°19' 37.02" E to 75°20' 31.88" E Longitude in Survey of India Toposheet No.: G43D1, G43D2, G 43D5 & G43D6 at an elevation of 415 to 422 mRL. The ground water table reported to ranges between 69 to 71 m below the land surface during the post-monsoon season and 70 to 72 m below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be 1300 m from centre of mine pit. Further, the stage of groundwater development is reported to be 92 % and 149% in core and buffer zone, respectively and thereby these are designated as critically exploited areas.
9. 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. Two schedule - I

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species i.e. Indian Peafowl (*Pavo cristatus*) & Desert Cat (*Felis libyca*) recorded in the study area during field survey; which are categorized as Schedule - I according to (IWPA) Indian Wildlife Protection Act' 1972. The total budget allocated for implementation of Peafowl and Desert Cat Conservation is Rs. 16.60 Crores. Wildlife Conservation Plan for above mentioned Schedule - I species has been prepared and approved by DCF, Jhunjhunu and PCCF, Jaipur vide letter dated 26/11/2020.

10. Major raw material required for Clinker & Cement production is Limestone, Laterite/ Iron ore/ Mill scale/ Lead Zinc Slag, Fly ash, Gypsum (Mineral / Chemical / Synthetic / Imported) & Clinker. Details regarding quantity of raw materials required, their source along with distance and mode of transportation are given as below:

S. No	Raw Material	Proportion % by weight	Quantity (MTPA)	Source	Distance (km)	Mode of Transportation
<b>Raw Material Requirement for Clinkerization Plant</b>						
1	Limestone	-	3.2	Captive limestone mine	-	Covered Conveyor belt
2	Laterite/ Iron ore/ Mill scale/ Lead Zinc Slag	-	0.06	Laterite from Bhilwara, Lead zinc slag, Iron ore and red ochre from Chittorgarh (Raj.) and mill scale from Mandi Gobindgarh, Punjab	280 - 400	By Road
<b>Raw Material Requirement - OPC/RHPC/SRC Cement</b>						
1	Clinker	93	2.0	Proposed clinker unit	-	Conveyor Belt
2	Gypsum (Mineral / Chemical / Synthetic / Imported)	7	0.15	Mineral & Chemical Gypsum from Nagaur and Bikaner (Raj.); Synthetic Gypsum from sister	169-300	By Road & Rail

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S. No.	Raw Material	Proportion % by weight	Quantity (MTPA)	Source	Distance (km)	Mode of Transportation
				units of SCL at Beawar (Ajmer) and Ras (Pali); Imported Gypsum from Oman & Pakistan	900	
Raw Material Requirement - PPC						
1	Clinker	58	2.32	Proposed clinker unit (2.0 Million TPA) and balance from sister units at Beawar-Ajmer and Ras-Pali	Within Plant/ 213 - 300	Conveyor Belt/ By Road & Rail
2	Fly Ash	35	1.40	Panipat Thermal Power Station / Suratgarh Super Thermal Power Station (RVUNL), Suratgarh & CPP	232 / 300	By Road
3	Gypsum (Mineral / Chemical / Synthetic / Imported)	7	0.28	Mineral & Chemical Gypsum from Nagaur and Bikaner (Raj.); Synthetic Gypsum	169-300	By Road & Rail

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S. No	Raw Material	Proportion % by weight	Quantity (MTPA)	Source	Distance (km)	Mode of Transportation
				from sister units of SCL at Beawar (Ajmer) and Ras (Pali); Imported Gypsum from Oman & Pakistan	900	
<b>Raw Material Requirement - PSC</b>						
1	Clinker	38	1.52	Within Plant Production	-	Conveyor Belt
2	Slag	55	2.2	Tata Steel Ltd., Jamshedpur ; Rourkela Steel Plant, Rourkela; Bhilai Steel Plant, Bhilai	1400-1600 km	By Road & Rail
3	Gypsum (Mineral / Chemical / Synthetic / Imported)	7	0.28	Mineral & Chemical Gypsum from Nagaur and Bikaner (Raj.); Synthetic Gypsum from sister units of SCL at Beawar (Ajmer) and Ras (Pali); Imported Gypsum	169 -300  900	By Road & Rail

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S. No.	Raw Material	Proportion % by weight	Quantity (MTPA)	Source	Distance (km)	Mode of Transportation
				from Oman & Pakistan		
Raw Material Requirement - Composite Cement						
1	Clinker	38	1.52	Within Plant Production	-	Conveyor Belt
2	Fly Ash	35	1.40	Panipat Thermal Power Station / Suratgarh Super Thermal Power Station (RVUNL), Suratgarh & CPP	232 / 300	By Road
3	Slag	20	0.8	Tata Steel Ltd., Jamshedpur ; Rourkela Steel Plant, Rourkela; Bhilai Steel Plant, Bhilai	1400-1600 km	By Road & Rail
4	Gypsum (Mineral / Chemical / Synthetic / Imported)	7	0.28	Mineral & Chemical Gypsum from Nagaur and Bikaner (Raj.); Synthetic Gypsum from sister units of SCL at Beawar (Ajmer) and	169 -300 900	By Road & Rail

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Environmental Clearance for the project titled "Integrated Cement Plant (Cement 4.0 Million TPA; Clinker 2.0 Million TPA), Captive Power Plant 25 MW, WHRS 20 MW along with DG Sets of 2000 KVA (1000/500/250/125 KVA) by M/s. **Shree Cement Limited** located at Village Gothra, Tehsil Nawalgarh, District Jhunjhunu, Rajasthan".

S. No.	Raw Material	Proportion % by weight	Quantity (MTPA)	Source	Distance (km)	Mode of Transportation
				Ras (Pali); Imported Gypsum from Oman & Pakistan		

11. The targeted production capacity of the Cement is 4.0 Million TPA & Clinker is 2.0 Million TPA. The limestone for the plant would be procured from Captive limestone mine; Laterite from Bhilwara, Lead zinc slag, Iron ore and red ochre from Chittorgarh (Raj.); mill scale from Mandi Gobindgarh, Punjab; Mineral & Chemical Gypsum from Nagaur and Bikaner (Raj.); Synthetic Gypsum from sister units of SCL at Beawar (Ajmer) and Ras (Pali); Imported Gypsum from Oman & Pakistan. The limestone transportation will be done through Covered Conveyor belt.
12. The water requirement of the project is estimated as 1200 KLD which will be sourced from Ground Water and STP Treated Water of Nagar Palika, Nawalgarh. Out of the total water requirement, 750 KLD will be used in proposed Integrated Cement Plant (including CPP & WHRS) and remaining 450 KLD in Mine, Crusher and Colony for which EC would be taken as per MoEF&CC O.M. dated 24/12/2010. Permission for withdrawal of 1200 KLD groundwater has been obtained from CGWA vide letter No. 21-4 (258)/WR/CGWA/2008-567 dated 05<sup>th</sup> August, 2008 with a validity of two years. Renewal of NOC has been obtained from CGWA vide letter No.21-4(258)/WR/CGWA/2008-472 dated 28<sup>th</sup> April, 2011. Further, extension of NOC has been recommended by Regional Director, CGWB, Jaipur to CGWA, New Delhi vide letter No. TS/21B (535)/CGWA/2012-4364 dated 08<sup>th</sup> May, 2018 and letter No. TS/21B (535)/CGWA/2012-1882 dated 14<sup>th</sup> August, 2019. STP treated water of Nagar Palika, Nawalgarh will be used, for which an agreement has been made on 21<sup>st</sup> July, 2020 between Shree Cement Ltd. and Nagar Palika, Nawalgarh for supply of 3 MLD treated sewage water to meet the requirement of non-potable industrial applications.
13. The power requirement for Project is estimated as 35.6 MW; and the same will be sourced from Proposed CPP & WHRS. The required power will be sourced from Grid until the installation of the proposed CPP & WHRS.

14. Baseline Environmental Studies

Period	March to May, 2019
AAQ parameters at eight locations	PM <sub>2.5</sub> = 22.6 to 47.5 µg/m <sup>3</sup> PM <sub>10</sub> = 42.6 to 78.8 µg/m <sup>3</sup> SO <sub>2</sub> = 5.2 to 12.4 µg/m <sup>3</sup> NO <sub>x</sub> = 7.4 to 22.6 µg/m <sup>3</sup>
AAQ modelling	PM <sub>10</sub> = 2.32 µg/m <sup>3</sup> SO <sub>2</sub> = 2.76 µg/m <sup>3</sup> NO <sub>x</sub> = 5.51 µg/m <sup>3</sup>

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Ground water quality at eight locations	pH: 7.61 to 7.92. Total Hardness: 143.10 to 217.30 mg/l, Chlorides: 55.44 to 202.49 mg/l, Fluoride: 0.34 to 1.31 mg/l. Heavy metals are within the limits.
Surface water quality	It is reported that surface water sample could not be collected as the surface water body is seasonal and was found dry during the monitoring period.
Noise levels	50.4 to 53.9 Leq dB (A) for day time and 40.4 to 43.8 Leq dB (A) for night time.

15. It has been reported that there is no habitation in the core zone of the project. No/ R&R is involved.
16. It has been reported that a total of 60 KL/annum of used oil will be generated due to the project activity, which will be sold to CPCB/ SPCB authorized recycler. It has been envisaged that an area of 48.0 ha will be developed as greenbelt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.
17. The details of Solid and Hazardous Waste Generation and their mitigation is as follows:

Plant Unit	Section	Type of Waste	Waste	Treatment / Disposal
Cement Plant	APCE	SW	Dust	Dust collected from various APCEs will be totally recycled into the process.
CPP	-	SW	Fly ash	Used in manufacturing of PPC grade cement
STP	-	SW	STP Sludge	Used as manure for greenbelt development / plantation
Plant Maintenance	Different sections	HW	Used Oil (Cat 5.1)	Will be sold to CPCB registered recycler
MSW	Plant and Colony	Dry	Bottles, paper, cans, textile, etc.	Will be sold to registered recycler.
		Wet	Kitchen and canteen/ Green waste	Bio-degradable waste will be will be converted into organic manure by installation of Organic Waste Composting (OWC) machine (Capacity: 200 kg/day) and manure will be used for greenbelt development / plantation.

18. The Public hearing of the project was held on 20<sup>th</sup> Feb., 2020 at Tehsil Office, Nawalgarh, Dist.: Jhunjhunu (Rajasthan) under the chairmanship of Shri Rajendra Prasad Agarwal (ADM). The issues raised during public hearing are Employment, Environment, CSR related, Greenbelt Development/ Plantation and Land related. An amount of 1630 Lakhs (~ 1.0 % of Project cost) has been earmarked to address the issues raised during public consultation. The action plan is given as below:

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Sector	Activity	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total Amount
<b>Agriculture and Animal Husbandry</b>	Upgrading facilities in veterinary hospitals at villages Gothra, Deogaon, Chaurhani, Basawa & Jhajhar	10	10	10	30
	Awareness and aid for organic farming in the nearby villages	10	20	20	50
	Plantation in nearby villages along the roads, Govt. offices and available free space in nearby villages	10	15	20	45
	Sub Total	30	45	50	125
<b>Infrastructure Development</b>	Strengthening road network at nearby village Gothra, Project site, Chaurhani, Parasrampura & Dholakhera, Jhajhar & Nawalgarh connecting with SH-8 & SH-37	300	340	360	1000
	Construction of Community center at villages Gothra, Deogaon, Chaurhani, Basawa & Jhajhar	20	30	30	80
	Infrastructure development at Goshala in villages Gothra, Deogaon, Chaurhani, Basawa & Jhajhar	20	30	30	80
	Rain water recharge structures at villages Gothra, Deogaon, Chaurhani, Basawa & Jhajhar	10	15	20	45
	Sub Total	350	415	440	1205
<b>Grand Total</b>					1630

19. The capital cost of the project is Rs. 1660 Crores and the capital cost for environmental protection measures is proposed as Rs. 5000 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 100 Lakhs. The employment generation from the proposed project is 1100 persons.

20. The details of cost for environmental protection measures is as follows:

S. No.	Particular	Capital Cost (Rs. In Crores)	Recurring Cost (Rs. In Crores)
1.	Pollution control during construction stage	1	-

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S. No.	Particular	Capital Cost (Rs. In Crores)	Recurring Cost (Rs. In Crores)
	(dust suppression, wastewater treatment and disposal, roads, monitoring, muck disposal)		
2.	Air pollution control system	45	0.6
3.	Water Treatment Plant & Sewage Treatment Plant	0.5	0.06
4.	Environmental monitoring instruments and laboratory	3	0.3
5.	Greenbelt development	0.2	0.02
6.	Safety and risk management	0.3	0.02
	<b>Total</b>	<b>50</b>	<b>1.00</b>

21. Greenbelt will be developed in 48.0 ha which is about 33% of the total acquired area. A 30 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1,20,000 saplings will be planted and nurtured in 48 hectares in three years.
22. The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
23. Name of the EIA consultant: M/s. J.M. EnviroNet Pvt. Ltd [S.No. 39, List of ACOs with their Certificate / Extension Letter no. Rev. 05, Dec. 18, 2020].

#### Observations of the Committee

24. The Committee noted the following:
- The Committee noted that the EIA/EMP report is found to be in order reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data reported and incremental GLC due to the proposed project are within NAAQ standards.
  - The Committee has also deliberated on the public hearing issues as well as action plan to address the issues raised public hearing submitted during the course of meeting by the project proponent and found it satisfactory.
  - The written submissions submitted by the project proponent during the course of meeting found to be satisfactory and addressing the concerns of the Committee.

#### Recommendations of the Committee


25. In view of the foregoing and after deliberations, the committee recommended the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 pertaining to Integrated Cement Plants based on project specific requirements.

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## Decision of MoEF&CC

26. The Ministry of Environment, Forest and Climate Change 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 under the provisions of EIA Notification, 2006 subject to the following of specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 pertaining to Integrated Cement Plants based on project specific requirements.

### A. Specific conditions:

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- i. Alternate fuel shall be used. The company will make arrangement for utilization of non-biodegradable waste (including Plastic) as RDF for co-processing in cement kiln in consultation and approval from local Gram Panchayat.
  - ii. Organic Waste Convertor will be installed in Gothra Village as Pilot Project in consultation and approval from local Gram Panchayat.
  - iii. The project proponent shall obtain the necessary permission from the competent authority concerned for drawl of groundwater before commencement of work.
  - iv. Dioxin/furan to be monitored by NABL accredited laboratory half yearly basis and report shall be furnished to the RO.
  - v. Stack emissions (PM) from all kilns shall not exceed 30 mg/Nm<sup>3</sup>.
  - vi. Action plan to address the issues raised during public hearing shall be implemented and compliance status shall be furnished to the RO on six monthly basis.
  - vii. PTFE bags shall be used in filter bag house and designed for 150% of normal design air flow.
  - viii. PP shall use ultralow NOx burner with three stage combustion, flue gas recirculation and auto combustion control system.
  - ix. 200 % rain water recharging shall be carried out as committed by the PP.
  - x. All roads in the plant shall be paved and industrial vacuum cleaners shall be used regularly to clean roads to reduce fugitive emissions.

### 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

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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 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. 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. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- vi. 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
- vii. Ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, 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 25<sup>th</sup> August, 2014 (Cement) and subsequent amendment dated 9<sup>th</sup> May, 2016 (Cement) and 10<sup>th</sup> May, 2016 (in case of Co-processing Cement) as amended from time to time; S.O. 3305 (E) dated 7<sup>th</sup> 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 recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Adhere to 'Zero Liquid Discharge'.
- iv. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- v. 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
- vi. Water meters shall be provided at the inlet to all unit processes in the cement plant.

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- vii. The project proponent shall make efforts to minimise 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 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.  
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.  
v. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.  
vi. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.

**VI. Waste management**

- i. Used refractories shall be recycled as far as possible.  
ii. Kitchen waste shall be composted or converted to biogas for further use.

 **VII. Green Belt**

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.  
ii. 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. Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.

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- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

**X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. 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.
- vi. 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.
- vii. 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.

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- ix. 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).
  - x. 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.
25. This issues with the approval of Competent Authority.



(Sundar Ramanathan)  
Scientist 'E'

**Copy to:-**

1. Secretary, Department of Environment, Government of Rajasthan, Secretariat Jaipur.
2. Addl. Principal Chief Conservator of Forests (C), Ministry of Env., Forest and Climate Change, Regional Office (CZ), Kendriya Bhawan, 5th Floor, Sector "H" Aliganj, Lucknow- 226020
3. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1 100032.
4. Member Secretary, Central Ground Water Authority, 1 8/11, Jamnagar House, Man Singh Road. New Delhi- 110011.
5. Chairman, Rajasthan State Pollution Control Board, 4 Institutional area, Jlalana, Doongri, Jaipur.
6. District Collector, Main Road, Jhunjhunu, Rajasthan
7. Guard File/Record File/Monitoring file.
8. MoEFCC Website



(Sundar Ramanathan)  
Scientist 'E'

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