

**STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HARYANA**  
**Bay No. 55-58, Prayatan Bhawan, Sector-2, PANCHKULA.**

No. SEIAA/HR/2019/ 460

Dated: 09-12-2019

To

**M/s Wonder Cement Limited,  
 R.K.Nagar, Tehsil-Nimbahera,  
 Dist-Chittorgarh (Rajasthan)**

**Subject: Environment Clearance for Proposed Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (2.5 MTPA-Phase I & 2.5 MTPA Phase II) at Village Jhanswa, Tehsil Matenhail, District Jhajjar (Haryana).**

[1] This letter is in reference to your application addressed to M.S. SEIAA, Haryana received on 11.04.2019 and subsequent letter dated 16.09.2019 seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, Form1-A, Conceptual Plan, EIA/EMP on the basis of approved ToR and additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) in its meetings held on 30.04.2019, 16.05.2019 and 11.10.2019 recommended for environment clearance to the project.

[2] It is inter-alia, noted that the project involves the Proposed Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (2.5 MTPA-Phase I & 2.5 MTPA Phase II) at Village Jhanswa, Tehsil Matenhail, District Jhajjar (Haryana). The details of the project as given below:

Sr. No.	Particulars	Details
1.	Plot Area	21.78 ha
2.	Total Built Up area	Plant area: 3.6 ha; Roads : 1.75 ha; Railway siding: 4.3 ha, Parking : 1.5 ha
3.	Total Green Area with Percentage	7.21 ha (33 % of the total project area)
4.	Rain Water Harvesting Pits	54
5.	STP Capacity	25 KLD
6.	Total Parking	2.0 ha
7.	Power Requirement	25 MW(Phase-I: 13 MW & Phase - II: 12 MW)
8.	Power Backup	6.5 MW DG Set
9.	Total Water Requirement	550 KLD (300 KLD for Phase - I and 250 KLD for Phase - II)
10.	Domestic Water Requirement	30 KLD
11.	Fresh Water Requirement	550 KLD
12.	Treated Water	10 KLD
13.	Waste Water Generated	12 KLD
14.	Solid Waste Generated	27.6 kg/day
15.	Biodegradable Waste	41.4 kg/day.
16.	Sludge from Sewage Treatment Plant	2 KLD
17.	Diesel tank	25 KL

18.	Railway siding		One number
19.	Total Cost of the project:	i) Land Cost ii) Construction Cost Total cost (Phase I) Total Cost (Phase 2)	Rs 25 Crore Rs 455 Crore Rs 480 Crore Rs 350 Crore
20.	CER		Rs 7.2 Crores (Phase - I) and Rs 5.75 Crores (Phase -2)
21.	Incremental Load in respect of: i) PM		0.10 micro gram per NM <sup>3</sup>

#### Raw Material

Sr. No.	Material	Quantity			
		Phase-I		Phase-II	
		PPC	OPC	PPC	OPC
1.	Clinker	1.5	2.375	1.5	2.375
2.	Fly Ash	0.875	0	0.875	0
3.	a) Mineral Gypsum b) Chemical Gypsum	0.125	0.125	0.125	0.125

#### Fuel Requirement

S. No.	Name	Quantity	Calorific value (Kcal/kg)	% Ash	% Sulphur
1.	Diesel (HSD)	300 Litre/Hr	10000	-	0.05%

#### List of Machinery

Sr. No.	Description	Unit	Capacity (Phase-I)	Capacity (Phase-II)
1.	Gypsum crusher	TPH	1 X 150	-
2.	Clinker Grinding Circuit	TPH	1X350	1X350
3.	Packing plant			
4 (a)	Packer	TPH	3 X 240	1 X 240
4 (b)	Truck Loaders	Nos.	9	4
5.	Truck Tipplers for Clinker unloading (2)	TPH	2 X 100	-
6.	Sector Gates under Truck Tipplers	Nos	4	-
7.	Belt conveyors, Elevators, system for material transport	Lot	1	1

#### Storage Facility Details

Type of Material	Type of Storage	Capacity (Tonnes)	
Cement	RCC Silo	3 X 7500	-
Clinker	RCC Silo	40000	-
Fly ash	RCC Silo	3000	3000
Gypsum	Covered Yard	4500	-



[3] The State Expert Appraisal Committee, Haryana after due consideration of the relevant documents submitted by the project proponent and additional clarification furnished in response to its observations, have recommended the grant of environmental clearance for the project mentioned above, subject to compliance with the stipulated conditions. Accordingly, the State Environment Impact Assessment Authority in its 121<sup>st</sup> meeting held on 25.11.2019 decided to agree with the recommendations of SEAC to accord necessary environmental clearance for the project under Category 3(b) of EIA Notification 2006 subject to the strict compliance with the with the following stipulations mentioned below:-

**A. Specific Conditions**

- i) The PP shall provide captive Railway siding for transportation of raw material/finished products.
- ii) The PP shall submit the approved Wildlife Conservation Plan before the commencement of the operation of the project.
- iii) The PP shall take the approval for storage of diesel if above the threshold level from the Competent Authority.
- iv) Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e. Ultra Filtration. The Treated effluent from STP shall be recycled /reused for Gardening etc.
- v) The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
- vi) The Project Proponents would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (specially the bacterial counts), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- vii) Separate wet and dry bins must be provided for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
- viii) Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be ensured
- ix) 21 tree cutting has been proposed in the project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 7.21 ha (33 % of the total project area) shall be provided for Green Area development. 11010 trees shall be planted in the project area.
- x) The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies before commencement of operation. All the construction shall be done in accordance with the local building byelaws.
- xi) Consent to establish / operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1981 and the Water (Prevention and control of pollution) Act, 1974.
- xii) The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of firefighting equipments etc. as per National Building Code including protection measures from lightening etc.
- xiii) The project proponent shall comply with the provisions contained in Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility
- xiv) The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the commencement of the project and also obtained the CTO from HSPCB after the approval from CGWA



- xv) The PP shall not carry any construction above or below the Revenue Rasta.
- xvi) The PP shall carry out the quarterly awareness programs for the staff
- xvii) 54 Rain water harvesting pits shall be provided for ground water recharging as per the CGWB norms.
- xviii) The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 54 RWH pits.
- xix) The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- xx) Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

#### **B. Statutory Compliance**

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. 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. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish/ Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the central Ground Water Authority, in case of drawl of ground water/ from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the hazardous and other Waste Management Rules, 2016 as amended from time to time.

#### **I. Air Quality Monitoring and Preservation**

- i. The project proponent shall install 24\*7 continuous emissions 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 09th May, 2016(Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor 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 install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emissions, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least four locations (one within and three outside the plant area at an angle of 120oeach), covering upwind and downwind directions. (case to case basis small plants: Manual; large plants; Continuous)
- iv. The project proponent shall 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 emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP guidelines of CPCB.



- viii. Sufficient number of mobile or stationary vacuum cleaners shall be provided to clean plant roads, shop floors, roofs regularly.
- ix. Ensure covered transpirations and conveying of raw material to prevent spillage and dust generation; use closed bulkers for carrying fly ash.
- x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- xi. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xii. 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 mode of transport.
- xiii. Ventilation system shall be designed for adequate air changes as per ACCGIH document for all tunnels, motor houses, cement bagging plants.

## **II. Water Quality Monitoring and Preservation**

- i. The project proponent shall install effluent monitoring system with respect to standard 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 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. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall 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.
- iv. adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. 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.
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- ix. 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.

## **III Noise Monitoring and Prevention**

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

## **IV Energy Conservation Measures**

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iii. Provide the project proponent for LED lights in their offices and residential areas.
- ii. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.

## **V Waste management**

- i. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.

- ii. 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).

#### **VI 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.

#### **VII 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 PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

#### **VIII 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 1<sup>st</sup> May, 2018 as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environment 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 report to the head of the organization.
- iv. Action Plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.

#### **IX 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; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as Stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for the 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 authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
  - ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
  - x. 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)/SEIAA, Haryana.
  - xi. 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.
  - xii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  - xiii. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  - xiv. 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.
  - xv. 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, 1980, 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.
  - xvi. 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.
  - xvii. The Project Proponent shall ensure the commitments made in Form-1, Form-1A, EIA/EMP and other documents submitted to the SEIAA for the protection of environment and proposed environmental safeguards are complied with in letter and spirit. In case of contradiction between two or more documents on any point, the most environmentally friendly commitment on the point shall be taken as commitment by project proponent.
  - xviii. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (soft copies) to the northern Regional Office of MoEF, HSPCB and SEIAA Haryana.
  - xix. STP outlet after stabilization and stack emission shall be monitored monthly. Other environmental parameters and green belt shall be monitored on quarterly basis. After



- every 3 (three) months, the project proponent shall conduct environmental audit and shall take corrective measure, if required, without delay.
- xx. The Project proponent shall not violate any judicial orders/pronouncements issued by any Court/Tribunal.
  - xxi. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the Project Proponent if it was found that construction of the project has been started before obtaining prior Environmental Clearance.
  - xxii. The project proponent shall maintain the distance between STP and water supply line.
  - xxiii. For disinfection of the treated wastewater ultra-violet radiation or ozonization process should be used.
  - xxiv. The project proponent shall strive to minimize water in irrigation of landscape by minimizing grass area, using native variety, xeriscaping and mulching, utilizing efficient irrigation system, scheduling irrigation only after checking evapo-transpiration data.
  - xxv. The Project Proponent shall use zero ozone depleting potential material in insulation, refrigeration, air-conditioning and adhesive. Project Proponent shall also provide Halon free fire suppression system.
  - xxvi. Standards for discharge of environmental pollutants as enshrined in various schedules of rule 3 of Environment Protection Rule 1986 shall be strictly complied with.
  - xxvii. All electric supply exceeding 100 amp, 3 phase shall maintain the power factor between 0.98 lag to 1 at the point of connection.
  - xxviii. The project proponent shall not use fresh water for HVAC and DG cooling. Air based HVAC system should be adopted and only treated water shall be used by project proponent for cooling, if it is at all needed. The Project Proponent shall also use evaporative cooling technology and double stage cooling system for HVAC in order to reduce water consumption. Further temperature, relative humidity during summer and winter seasons should be kept at optimal level. Variable speed drive, best Co-efficient of Performance (Cop), as well as optimal Integrated Point Load Value and minimum outside fresh air supply may be resorted for conservation of power and water. Coil type cooling DG Sets shall be used for saving cooling water consumption for water cooled DG Sets.
  - xxix. The project proponent shall ensure that the transformer is constructed with high quality grain oriented, low loss silicon steel and virgin electrolyte grade copper. The project proponent shall obtain manufacturer's certificate also for that.
  - xxx. The validity of this environment clearance letter is valid up to 7 years from the date of issuance of EC letter.
  - xxxi. If project is not completed within the validity period then the project proponent shall submit the application for extension of validity within one month before the lapse of validity period of Environment Clearance i.e. 7 years.
  - xxxii. The project proponent should intimate to the Authority well before shifting their address of communication.

  
Chairman,

**State Level Environment Impact  
Assessment Authority, Haryana, Panchkula.**

Endst. No. SEIAA/HR/2019/

Dated:.....

- A copy of the above is forwarded to the following:
1. The Additional Director (IA Division), MoEF&CC, GoI, Indra Paryavaran Bhavan, Zor bagh Road-New Delhi.
  2. The Regional office, Ministry of Environment, Forests & Climate Change, Govt. of India, Bay's no. 24-25, Sector 31-A, Dakshin Marg, Chandigarh.
  3. The Chairman, Haryana State Pollution Control Board, C-11, Sector-6, Pkl.

  
Chairman,

**State Level Environment Impact  
Assessment Authority, Haryana, Panchkula.**