



File No: IA-J-11011/458/2008-IA-II(IND-I)

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



Date 23/01/2024



To,

M/s Shree Cement Ltd.
Shree Cement Ltd. Bangur Nagar, Post Box No. 33, Beawar 305901, Rajasthan
anil.trivedi@shreecement.com

Subject: Expansion of Integrated Cement Plant - Clinker (2.4 to 8.0 Million TPA), Cement (4.0 to 9.0 Million TPA), Waste Heat Recovery Power Generation (30 to 70 MW), D.G. Sets (2000 to 3000 KVA) along with installation of Captive Power Plant (2 x 25 MW), Synthetic Gypsum Plant (1560 TPD) & Railway Siding by M/s Shree Cement Limited (Unit: Karnataka Cement Project), located at Village: Benkanhalli, Taluka: Sedam, District: Kalaburagi, Karnataka- Grant of corrigendum in Environmental Clearance – regarding.

Sir/Madam,

This is with reference to your proposal No. IA/CG/IND/444286/2023, for which Environment Clearance was granted by MoEF&CC vide EC Identification No.: EC23A1101KA5664051E and MoEF&CC File no. IA-J-11011/458/2008-IA-II(IND-I) on 27th September, 2023. In the EC letter dated 27th September, 2023, it is mentioned that the specific & general conditions are attached as Annexure-1. However, there was no Attachment depicting Specific & General conditions in the issued EC letter, dated 27th September, 2023.

2. The particulars of clearance granted against which the corrigendum is sought are as under:

(i) Unique Identification No.	EC23A1101KA5664051E
(ii) File No.	IA-J-11011/458/2008-IA-II(IND-I)
(iii) Clearance Type	Application of corrigendum- EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	3(b) Cement plants Expansion of Integrated Cement Plant - Clinker (2.4 to 8.0 Million TPA), Cement (4.0 to 9.0 Million TPA), Waste Heat Recovery Power Generation (30 to 70 MW), D.G. Sets (2000 to 3000 KVA) along with installation of Captive Power Plant (2 x 25 MW), Synthetic Gypsum Plant (1560 TPD) & Railway Siding At Village:
(vii) Name of Project	

- (viii) Name of Company/Organization
(ix) Location of Project (District, State)
(x) Issuing Authority

Benkanhalli, Taluka: Sedam, District: Kalaburagi
(Karnataka) By Shree Cement Limited (Unit:
Karnataka Cement Project)
M/s Shree Cement Ltd.
KARNATAKA
MOEF&CC

3. Subsequently, the PP vide Proposal No. IA/KA/IND1/453557/2023 has made a request for issuance of Corrigendum for the obtained EC letter dated 27th September, 2023 with **Annexure1** showing Specific & General Conditions.

4. In view of the above, the instant proposal was considered by the EAC in its **50th meeting held during 13-15th December 2023** and after detailed deliberations, the committee **recommended** the instant proposal for grant of corrigendum in Environment Clearance (No.: EC23A1101KA5664051E) dated 27th September, 2023 with stipulation of the specific and general conditions as detailed in **Annexure-1** under the provisions of EIA Notification, 2006.

Decision of MoEF&CC

5. The undersigned is directed to inform that 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 for corrigendum in Environment Clearance accorded by the Ministry vide F. No. IA-J-11011/458/2008-IA-II(IND-I), dated 27th September, 2023 as detailed in **Annexure-I**.

6. All other terms and conditions mentioned in the Environment Clearance letter number IA-J-11011/458/2008-IA-II(IND-I), dated 27th September, 2023 shall remain unchanged.

7. The project proponent shall obtain fresh Environment Clearance in case of change in scope of the project, if any.

8. This issues with the approval of the Competent Authority.

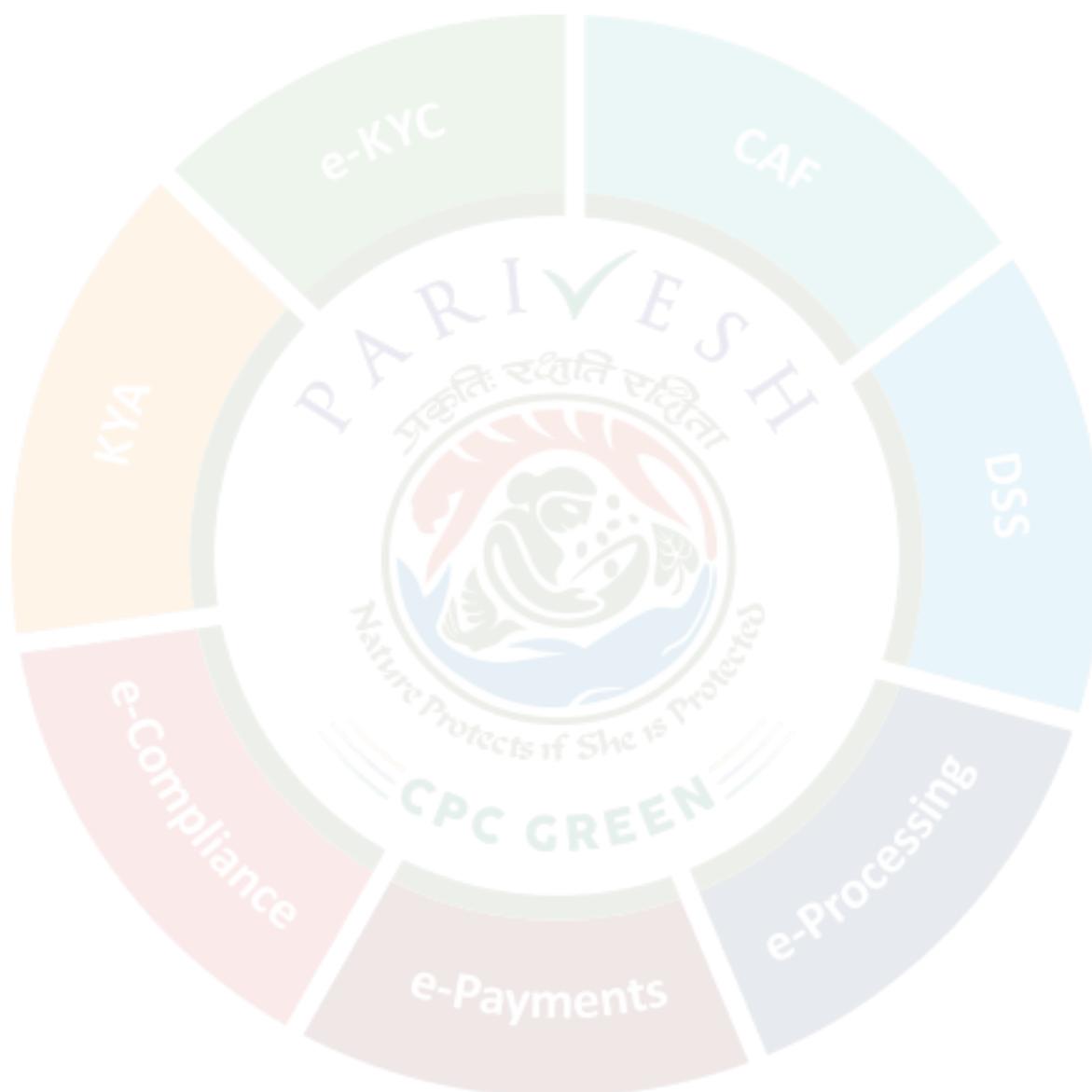
Yours faithfully,

(Dr. R. B. Lal)
Scientist 'F'/Director
Tel: 011-20819346
Email-rb.lal@nic.in

Copy To

1. Secretary, Forest, Ecology & Environment Department, Government of Karnataka, Secretariat, Bangalore-560 001.
2. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi
3. Chief Conservator of Forests, Forest, Ecology & Environment Department, Government of Karnataka, Secretariat, Bangalore-560 001.
4. Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore – 560034
5. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
6. Member Secretary, Karnataka State Pollution Control Board, No. 25, 6– 9th Floor, Public Utility Building, M.G. Road, Bangalore – 560 001.
7. Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
8. Guard File/Record File/Monitoring File.

- 9. MoEF&CC Website
- 10. The District Collector, Kalaburagi, Karnataka.



A. Specific conditions:

- (i) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- (ii) The PP shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii) The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (iv) PP shall strictly implement the additional Environmental safe guards as proposed to address the emissions due to high AAQ values.
- (v) The nearest human settlement from the site is Benkanhalli Village located at a distance of 1.5 Kms in the North direction of the project site. Also there is a school and approx. 34 villages in 10 km radius study area. Project Proponent shall prepare and implement an action plan for environmental safeguard measures to minimise the impact on these ESA's. The company shall also include some of these locations in its environmental monitoring programme.
- (vi) The water requirement of 2543 m³/day, shall be met from Groundwater (983 m³/day), Kagina River (1500 m³/day) and Mine pit (60 m³/day) of the captive mines of Shree Cement Limited. Necessary permission shall be obtained from the Competent Authority(ies). PP shall also explore the possibility for alternate source of water to reduce dependency on ground water.
- (vii) Three tier Green Belt shall be developed in atleast 33% of project area in in the coming monsoons of 2023 with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards nearby villages. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- (viii) All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 41 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

- (ix) As committed, the PP shall adopt 5 villages naming Benahakalli, Kodla. Dongaom, Hugoyal and Rajole and implement the Village Adoption program consisting of need-based community development activities, to develop them into model villages.

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. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall 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.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- 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. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

- ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xvii. Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xviii. Provide Low NOx burners as primary measures and SCR /NSCR technologies as secondary measure to control NOx emissions.
- xix. The emission norms applicable for the cement plant shall be adhered to.
- xx. Dioxin and Furan monitoring shall be carried out once in six months at cement kiln stack.
- xxi. DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm^3 by using best available technology.
- xxii. Petcoke dosing shall be controlled automatically to control SO₂ emission from chimney within the prescribed limits.
- xxiii. PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- xxiv. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- xxv. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to

compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.

- xxvi. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m³, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

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 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 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. 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.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- ix. Air Cooled condensers shall be used in the captive power plant.

IV. Noise monitoring and prevention

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

- iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

V. 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;
- ii. Provide LED lights in their offices and residential areas.
- iii. 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.
- iv. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- v. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.
- vi. Waste heat recovery system shall be provided for kiln and cooler.

VI. Waste management

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
- ii. Kitchen waste shall be composted or converted to biogas for further use.
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at <https://cpcb.nic.in/technical-guidelines-3/>. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
- v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- vi. Solid waste utilization
 - a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
 - b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
 - c. 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 by trees.
- ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.
- iii. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

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.
- 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, creche 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.

IX. Environment Management

- 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. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- 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.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

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. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. 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.
- vii. 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.
- viii. 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.
- 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. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- xii. 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).
- 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. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.
- xv. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
- xvi. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- xvii. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
