



F. No. J-11011/458/2008-IA-II (I)  
Government of India  
Ministry of Environment and Forests  
(I.A. Division)

Paryavaran Bhawan  
CGO Complex, Lodhi Road  
New Delhi - 110 003

E-mail: ramesh.motipalli@nic.in  
Tele/fax: 011 - 24369734  
Dated: 19<sup>th</sup> September, 2012

To,

The Jt. Vice President  
M/s Shree Cement Limited  
Bangur Nagar, Post Box No. 33  
Beawar - 305 901, Rajasthan

Ph: 01462-228101-6; Fax: 01462-228117/228119; Email: environment@shreecementltd.com

**Sub:** Integrated Cement Project (Clinker - 2.4 MTPA, Cement - 4.0 MTPA, Captive Power Plant - 44 MW & Captive Limestone Mine - 3.8 MTPA, 551.36 ha) at Villages Kodla & Benkanhalli, Taluka Sedam, District Gulbarga, Karnataka by **M/s. Shree Cement Ltd.** -  
**regarding Environmental Clearance**

Sir,

This has reference to your letter no. SCL/Karnataka/EC/2012-13 dated 18.05.2012 along with copies of EIA/EMP and public hearing reports and subsequent communication dated 19.05.2011 seeking environmental clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined your application. It is noted that M/s. Shree Cement Limited have proposed for an integrated cement project in District Gulbarga, Karnataka. Total cement plant area is 173.32 ha and mining lease area is 551.36 ha. No eco-sensitive area like National Park, Wildlife Sanctuary, Biosphere Reserve exist within 10 km radius study area of project site. Only one Reserve Forest (Yadagir Reserve Forest) exists at 9.1 km distance in SW direction from project boundary. Total cost of the project is Rs. 1,050 Crores. Capital cost for Environmental Protection Measures is Rs. 60 Crores and Recurring Cost is Rs. 1.2 Crores/annum.

3. The proposed production capacities are as follows:

Project activity	Production Capacity
Clinker Production	2.4 MTPA
Cement Production	4.0 MTPA
Captive Power Plant	44 MW (2 x 22 MW)
Limestone Production from Captive Mine (ML area - 551.36ha)	3.8 MTPA

4. It is noted that method of mining will be mechanized open cast involve drilling and blasting. Limestone will be transported to cement plant by covered conveyor belt. Ultimate



working depth will be 30 m bgl (460 m RL) and mine working will not intersect the ground water table. The cement plant is based on the dry process technology for cement manufacturing with pre-heater and pre-calcliner technology. Major raw material required for the proposed cement project is limestone, which will be transported from the captive limestone mine via covered conveyor belt. Other raw materials are Iron ore, Gypsum, Coal, Petcoke (Indian and Imported) & Fly ash, which are transported by road/rail. The total power requirement for the integrated unit is around 35 MW. During implementation phase, power will be procured from KSEB and during operation phase, the power requirement will be met from the CPP of 44 MW.

5. Wet Drilling & controlled blasting technique will be used to avoid dust generation. Pollution control equipments like ESP, Bag houses and Bag filters will be installed to control particulate emission. All material transfer points will be provided with bag filters to control the emissions at the source itself. Clinker & fly ash will be stored in silo and gypsum in covered yard.

6. Total water requirement of 2,000 m<sup>3</sup>/d will be sourced from groundwater. CGWA permission has been obtained for the same, vide letter No 21-4(87)/SWR/CGWA/2008-1988 dated 29.01.09. Wastewater of mine area, generated from workshop will be passed through up-flow filter for separation of oil and grease contents and clearly treated water will be used for dust suppression in mine area and crusher. No industrial waste water will be generated in the Cement Plant. Domestic wastewater generated from Cement Plant will be treated in the STP. The treated water will be utilized for greenbelt development/horticulture activities. As per the mining plan, the total land at the conceptual stage will have excavated area of 534.81 ha, of which 224.31 ha will be partially backfilled and reclaimed by plantation. Rest of the excavated area of 310.50 ha will be converted into water reservoir. Garland drains would be provided around the mine and dump sites to prevent sedimentation of water courses.

7. No solid waste will be generated in the cement manufacturing process. Dust collected from Air Pollution Control Equipments will be fully recycled in the process. The Fly ash from the captive power plant will be used for cement manufacturing. The sludge from the sewage treatment plant will be used as manure for green belt development.

8. The Cement Plants and limestone mining projects are listed at S.N. 3(b) and 1(a) under Category 'A' and appraised by the Expert Appraisal Committee -1 (Industry) in the Ministry.

9. The proposal was considered by the Expert Appraisal Committee-1 (Industry) in its during 14<sup>th</sup> & 15<sup>th</sup> June, 2012. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing for the project was held on 2<sup>nd</sup> March, 2012.

10. Based on the information submitted by you, presentation made by you and consultant, M/s. J.M. EnviroNet Pvt. Ltd., Gurgaon, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006 subject to strict compliance of the following Specific and General conditions:

**A. SPECIFIC CONDITIONS:**

- i). Rehabilitation and Resettlement Plan for the project affected population including tribals, if applicable, shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Karnataka. Compensation paid in any case shall not be less than the norms prescribed under the National Resettlement and



Rehabilitation Policy, 2007.

- ii). The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the KSPCB. At no time, particulate emissions from the cement plant including kiln, coal mill, cement mill, cooler and CPP shall not exceed 50 mg/Nm<sup>3</sup>.
- iii). Continuous on-line monitors for particulate emissions shall be installed. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.
- iv). Data on ambient air quality (PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>) shall be regularly submitted to the Ministry including its Regional office at Bangalore and the State Pollution Control Board/Central Pollution Control Board once in six months. Further, quality of discharged water shall also be monitored [(TDS, DO, pH) and total Suspended solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain.
- v). The Company shall install low NO<sub>x</sub> burner with Kiln/calcliner for control of NO<sub>x</sub> emissions.
- vi). Secondary fugitive emissions shall be controlled within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.
- vii). The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 shall be followed.
- viii). Measures shall be taken to mitigate impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. Vehicular emissions should be regularly monitored.
- ix). Fly ash shall be utilized as per the provisions of Fly Ash Notification, 1999, subsequently amended in 2009. Fly ash shall be stored in ash silo and 100% used in the cement manufacturing.
- x). The company shall make the efforts to utilize the high calorific hazardous waste in the cement kiln and necessary provisions shall be made accordingly. The company shall keep the record of the waste utilized and shall submit the details to Ministry's Regional Office at Bangalore, CPCB and SPCB.
- xi). Rainwater harvesting measures shall be adopted for the augmentation of ground water at cement plant, colony including check dams at mine site. The company must also collect rain water in the mined out pits of captive lime stone mine and use the same water for the various activities of the project to conserve fresh water and reduce the water requirement from the ground water. An action plan shall be submitted to Ministry's Regional Office at Bangalore within 3 months from date of issue of this letter. Efforts should be made to make use of rain water harvested. If



needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

- xii). Total requirement shall not exceed 2,000 m<sup>3</sup>/day. The water stored in the artificial reservoir made in the mine pit shall be used maximum to reduce ground water consumption. No effluent should be discharged from the mine to any water body or nearby river.
- xiii). Top soil, if any, shall be stacked with proper slope at earmarked site(s) only with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.
- xiv). The project proponent shall ensure that no natural water course shall be obstructed due to any mining and plant operations. The company shall make the plan for protection of the natural water course passing through the plant and mine area premises and submit to the Ministry's Regional Office at Bangalore.
- xv). The inter burden and other waste generated shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The total height of the dumps shall not exceed 30 m in three terraces of 10 m each and the overall slope of the dump shall be maintained to 28°. The inter burden dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office, Bangalore on six monthly basis.
- xvi). The void left unfilled shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation to be done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.
- xvii). Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, inter burden and mineral dumps to arrest flow of silt and sediment. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after monsoon and maintained properly.
- xviii). Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter burden dumps and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.
- xix). Dimension of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run-off and siltation shall be based on the rain fall data.
- xx). Regular monitoring of ground water level and quality shall be carried out by



establishing a network of existing wells and constructing new piezometers at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board. The frequency of monitoring shall be four times a year- pre-monsoon (April / May), monsoon (August), post-monsoon (November), and winter (January). Data thus collected shall be sent at regular intervals to Ministry of Environment and Forests and its Regional Office at Bangalore, Central Ground Water Authority and Central Ground Water Board.

- xxi). Wet drilling sequential and controlled blasting method and provision for the control air emissions during blasting using dust collectors etc. shall be used. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented.
- xxii). Bench height, width and slope for individual bench shall be properly assessed and implemented. Adequate measures should be adopted to stabilize the slope before abandonment. The fencing around the reservoir should be provided to prevent accidents.
- xxiii). Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area and mine closure should be submitted to the Ministry and its Regional Office at Bangalore.
- xxiv). As proposed, green belt shall be developed in 33% of the plant and mine area as per the CPCB guidelines in consultation with DFO.
- xxv). All the recommendations of the Corporate Responsibility or Environmental Protection (CREP) for the cement plants shall be strictly followed.
- xxvi). The company shall adopt well laid down corporate environment policy and identified and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with environmental clearance, environmental laws and regulations.
- xxvii). Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral.
- xxviii). Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bangalore, KSPCB and CPCB within 3 months of issue of environment clearance letter.
- xxix). Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure, for approval.
- xxx). The company shall comply with the commitments made during public hearing held on 2<sup>nd</sup> March, 2012 and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Bangalore.
- xxxi). At least 5 % of the total cost of the project should be earmarked towards the



Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program should be ensured accordingly in a time bound manner.

- xxxii). 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

## **B. GENERAL CONDITIONS:**

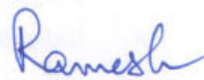
- i. The project authority shall adhere to the stipulations made by Karnataka State Pollution Control Board (KSPCB) and State Government.
- ii. No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.
- iii. At least four ambient air quality monitoring stations shall be established in the down wind direction as well as where maximum ground level concentration of PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emissions shall be regularly submitted to this Ministry including its Regional Office and SPCB / CPCB once in six months.
- iv. Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May, 1993 and 31<sup>st</sup> December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.
- v. The overall noise levels in and around the plant area shall be kept well within the standards 85 dB(A) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dB(A) (day time) and 70 dB(A) (night time).
- vi. Proper housekeeping and adequate occupational health programmes shall be taken up. Occupational Health Surveillance programme shall be done on a regular basis and records maintained properly for at least 30-40 years. The programme shall include lung function and sputum analysis tests once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.
- vii. The company shall undertake eco-development measures including community welfare measures in the project area.
- viii. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP.
- ix. A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of Senior Executive.
- x. Adequate fund shall be allocated to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. Time bound implementation schedule for implementing all the conditions stipulated herein shall be submitted. The funds so provided shall not be diverted for any other purpose.



- xi. The Regional Office of this Ministry / CPCB /KSPCB shall monitor the stipulated conditions. The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports. A six monthly compliance report and the monitored data alongwith statistical interpretation shall be submitted to them regularly.
- xii. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both on hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the KSPCB.
- xiii. The Project Authorities 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 and the date of commencing the land development work.
- xiv. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests. No change in the calendar plan including excavation, quantum of limestone and waste shall be made.
- xv. Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM etc. shall be provided with ear pluggs/ muffs.
- xvi. Industrial waste water (workshop and waste water from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.
- xvii. Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
- xviii. The project authorities shall inform to the Regional Office located regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- xix. A copy of clearance letter shall be marked to concerned Panchayat / local NGO, if any, from whom suggestion/representation, if any, was received while processing the proposal.
- xx. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations if any were received while processing the proposal. The clearance letter shall also put up on the website of the Company by the proponent.
- xxi. The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the Karnataka State Pollution Control Board and also at web site of the Ministry of Environment and Forests at "<http://envfor.nic.in>" and a copy of the same shall be forwarded to the Regional Office of this Ministry.




- xxii. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the Company alongwith the status of compliance of EC conditions and shall also be sent to the respective regional Office of the MoEF by e-mail.
11. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
12. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
13. 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 Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

  
(Dr. M. Ramesh)  
Scientist 'C'

**Copy to:**

- i. The Secretary, Department of Environment & Forests, Government of Karnataka, Bangalore, Karnataka.
- ii. The Chairman, Karnataka State Pollution Control Board, Parisar Bhawan, No. 49, 4<sup>th</sup> & 5<sup>th</sup> Floor, Church Street, Bangalore - 560 001, Karnataka.
- iii. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -110032.
- iv. The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IV<sup>th</sup> Floor, E&F Wing, 17<sup>th</sup> Main Road, Koramangala, Bangalore-560034, Karnataka.
- v. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, New Delhi- 110003.
- vi. Guard file/Monitoring file/Record file.

  
(Dr. M. Ramesh)  
Scientist 'C'