

F. No. J-11011/851/2008- 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: ms.industry-mef@nic.in
Tele/fax: 011 – 2436 3973
Dated: September 30th, 2010

To,
The Director,
M/s Goldstone Cements Ltd
157, G.S. Road, Christianbasti,
Dispur, Guwahati- 781 005, Assam

Fax: 0361- 2341304

Sub: Cement Plant (Clinker, 1.65 MTPA; Cement, 2.54 MTPA) along with Captive Thermal Power Plant (2x20 MW) at Village Musiang Lamare (Old), P.O. Chiruphi, District Jaintia Hills, Meghalaya by M/s Goldstone Cements Ltd. - Environmental Clearance reg.

Sir,

This has reference to your letter no. GSCL/ENV-02/2010-11 dated 9.6.2010 along with copies of final EIA/EMP and public hearing reports seeking environment clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined the proposal. It is noted that M/s Goldstone Cements Limited have proposed to set up a Cement Plant (Clinker, 1.65 MTPA; Cement, 2.54 MTPA) along with Captive Power Plant (2x20 MW) at Village Musiang Lamare (Old), District Jaintia Hills, Meghalaya. Total land required for the proposed plant will be 65 ha, of which 25 ha land has already been acquired. About 22 ha of plant area will be developed under green belt. No National Parks / Wildlife Sanctuary/Biosphere Reserves etc are located within 10 km distance. Total cost of the proposed project is Rs. 565.00 Crores. Rs. 25.00 Crores and Rs. 1.80 Crores will be earmarked towards total capital cost and recurring cost/annum towards environmental pollution control measures.

3. Installation of proposed plant will be carried out in 3 phases as per details given below:

S.No.	Facility	Production Capacity (MTPA)			Total Capacity (MTPA)
		Phase-I	Phase-II	Phase-III	
1	Clinker kiln	0.412	0.413	0.825	1.65
2	Cement Grinding Facility	0.635 (1x120 TPH)	0.635 (1x120 TPH)	1.27 (2x120 TPH)	2.54
3	Captive Power Plant FBC	1x 20 MW	-	1x 20 MW	2x20 MW



4. It is noted that fugitive dust emissions from material handling will be controlled by water sprinkling and other dust suppression measures. Mill vent gas will be de-dusted in twin cyclones followed by bag house before dispersion. ESP will be provided to Kiln, clinker cooler, FBC boiler. Bag filters will be provided to raw mill, cement mill, mixing plant, coal crushers, cement packing unit, cement/clinker silos and transfer points. Dust extraction system and water sprinklers will be provided to suppress the coal dust generated during stacking and reclaiming of coal. Dust suppression system will be provided to limestone crushing/tipping/handling section and raw material handling areas like crushers, transfer points, unloading and loading points and truck tipplers etc.
5. Total water requirement for the entire plant is about 2,370 m³/day. The company will make impoundment with check dam on the stream flowing in the project area to collect run off rain water and will develop a water harvesting reservoir in an area of 5 ha. which will meet the process & other utility requirement. Plant effluent and sewage will be properly treated in Sewage Treatment Plant (STP) and recycled/reused in greenbelt development. Hot water from kiln and condenser will be routed through oil & grease trap. Cooling tower blow down will be reused in dust suppression and greenbelt development. DM plant regeneration water will be neutralized in a neutralization pit. Noise abatement measures include: reduction of noise at source, provision of acoustic lagging for equipment and silencers, providing ear muffs/ ear plugs to workers working in noise prone areas, selection of low noise equipment, isolation of noisy equipment, acoustic enclosures to noise generating equipment. Power requirement (40 MW) will be mainly met from Captive Power Plant and from Meghalaya State Electricity Board, if required.
6. Municipal solid waste generated will be composted and used for green belt development. Limestone dust, Shale Dust, Sandstone dust, Mill scale, Gypsum dust will be recycled. Coal fines will be used in FBC based Power Plant. Fly ash will be used in Cement plant for Pozzolona Portland Cement (PPC) manufacture. Bottom ash will be partly used as bed material and the balance will be used for land filling, road construction and/or filling of deserted mines or used in raw mill grinding. Exhausted batteries and used oil will be sold to authorized buyers/recyclers.
7. All the cement plants (> 1.0 MTPA) have been kept at S.No. 3(b) under category 'A' of the Schedule of the EIA notification 2006 and appraised at the Central level. Public hearing of the project was held on 27th November, 2009.
8. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its meeting held during 26th -28th August, 2010. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions.
9. Based on the information submitted by you and presentation made by the Global Experts, Bhubneswar, Orissa, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS :

- i. Continuous stack monitoring facilities to monitor gaseous emissions from all the stacks shall be provided. After expansion, limit of SPM shall be controlled within 50 mg/Nm³ by installing adequate air pollution control system. Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill. Low NO_x burners should be provided to control NO_x emissions.
- ii. Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report shall be prepared and submitted to the Ministry and its Regional Office at Shillong within 3 months from the date of issue of the letter.
- iii. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- iv. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard should be followed.
- v. Efforts shall be made to reduce 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 should be transported in the closed containers only and shall not be overloaded. The company shall have separate truck parking area. Vehicular emissions should be regularly monitored.
- vi. Total water requirement for cement and captive power plant shall not exceed 2,370 m³/day. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge should be adopted.
- vii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.
- viii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Shillong, SPCB and CPCB.
- ix. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and

used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / reprocessors only.

- x. All the fly ash shall be utilized as per Fly ash Notification, 1999 subsequently amended in 2003. Efforts shall be made to use fly ash maximum in making Pozollona Portland Cement (PPC).
- xi. Efforts shall be made to use low-grade lime, more fly ash and solid waste in the cement manufacturing.
- xii. An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision should be made accordingly.
- xiii. As proposed, green belt shall be developed in at least 33 % area in and around the cement plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO.
- xiv. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants should be implemented.
- xv. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 27th November, 2009 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Shillong.
- xvi. At least 5 % of the total cost of the project shall be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Shillong. Implementation of such program shall be ensured accordingly in a time bound manner.
- xvii. The company shall provide housing for 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 authorities must strictly adhere to the stipulations made by the Meghalaya State Pollution Control Board and the State Government.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.

- iii. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Pollution Control Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.
- iv. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM₁₀, SO₂ and NO_x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Shillong and the SPCB/CPCB once in six months.
- v. Industrial wastewater 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. The treated wastewater shall be utilized for plantation purpose.
- vi. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) 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 EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- vii. Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- viii. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- ix. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- x. As proposed, Rs 25 Crores and Rs. 1.80 crores shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Shilong. The funds so provided shall not be diverted for any other purpose.

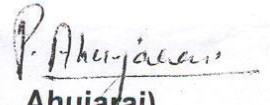
- xi. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- xii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Shillong. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xiii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Shillong/ CPCB / SPCB shall monitor the stipulated conditions.
- xiv. The environmental statement for each financial year ending 31st 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 environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Shillong by e-mail.
- xv. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Shillong.
- xvi. 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.

10. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
12. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.
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.

1
(Dr. P.L.Ahujarai)
Scientist -F

Copy to:

1. The Secretary, Forests and Environment Department, Sylvan House, Lower Lachumiere Shillong -793 001.
2. Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (NEZ), Upland Road, Laitumkhrach, Shillong - 793 003, Meghalaya.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Meghalaya State Pollution Control Board, 'Arden' Phase-III, Lumpynggad, Shillong - 793 014, Meghalaya
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File.
7. Monitoring File.
8. Record File.


(Dr. P. L. Ahujarai)
Scientist 'F'