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J-11015/800/2007- IA. II (M)  
Government of India  
Ministry of Environment & Forests

Telefax: 011-24367257  
Paryavaran Bhavan, C.G.O. Complex,  
Lodi Road, New Delhi-110003.

Dated: April 21, 2008

To

M/s Gayatri Cements  
H.No.19/118, Pathapeta Dhone  
Kurnool District  
Andhra Pradesh – 518 222

**Sub: Limestone Mine (ML area 350.57 ha and production of 7.0 MTPA) at villages Bilakal and Bujunuru, in Gadivemula Mandal, in Kurnool Dist., in Andhra Pradesh – reg. environmental clearance.**

Sir,

The undersigned is directed to refer to your letter GC/EC/2008, dated 20.01.2008, on the above mentioned subject. The Ministry of Environment and Forests has examined the application.

2. It has been noted that the proposal is for production of Limestone at 7.0 MTPA, which will be used for captive consumption of its proposed cement plant adjacent to the limestone mine. The mineable reserves of the ore is 205.99 million tones. Life of the mine at proposed rate of production will be around 45 years. Method of mining will be open cast mechanized involving drilling and blasting operations. Water requirement for the project will be 607m<sup>3</sup>. Water for domestic purposes will be met from raw water treatment plant proposed in the Cement Plant premises. Water requirement for dust suppression will be met from treated wastewater from Captive Power Plant proposed in Cement Plant premises. The lease area has mainly flat terrain having gradual slope towards west. Kundurur River flows in the southwest boundary of lease area and a seasonal nallah flows towards east of the ML area. The dip of the limestone is 1° to 7° due in different directions mainly due to local disturbance, but mainly dips on the western side. The maximum and minimum RL in this area is 252.7 m & 236 m respectively. Out of the total mine lease area of 350.57 ha, 216.80 ha will be under excavations; 2.80 ha for statutory buildings; 2.00 ha for roads; 10.10ha for green belt & afforestation and 118.87 will be for future usage. The mine working will not intersect the aquifer. Gani Reserve Forest is located at about 1.4 km distance from the mine lease area. There are no national parks, wildlife sanctuaries, biosphere reserves, heritage sites etc. within 10 km of the lease boundary. No relocation and rehabilitation of population will be involved. No diversion of forest land is involved. No solid waste is expected to be generated in the mining plan period. The waste, if encountered, is proposed to be stacked on the 2.0 ha of barren earmarked area. Afforestation will be carried out to consolidate the dump slopes. Mining plan has been approved by Indian Bureau of Mines for 617.57 ha on 16.10.2007. *Modified mining plan (including progressive mine closure plan) for 350.57 ha is awaited.* Public hearing was conducted on 28.12.2007. Cost of the project will be Rs. 75.0 crores.

3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006.

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4. Based on the information submitted by you, as at para 2 above and others, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated September 14, 2006, subject to the compliance of the following Specific and General conditions:

**A. Specific conditions**

- i) The environmental clearance is subject to obtaining approved modified mining plan (including progressive mine closure plan) from the Indian Bureau of Mines for 350.57 ha.
- ii) A comprehensive conservation plan for wildlife shall be prepared and implemented in consultation with the Chief Wild Life Warden. Necessary fund for implementation of the same shall be separately allocated and undertaking submitted to the Regional Office of the Ministry along with status of implementation.
- iii) Primary survey data of flora and fauna in the core and buffer zone and also authenticated list of the same shall be submitted to the Ministry within six months.
- iv) A 50 m barrier no mining zones on the side facing the river (all along) and also on both sides of the seasonal canal running through the lease shall be demarcated and the area shall be vegetated with thick native vegetation of different species.
- v) Land-use pattern of the nearby villages shall be studied, including common property resources available for conversion into productive land. Action plan for abatement and compensation for damage to agricultural land/ common property land (if any) in the nearby villages, due to mining activity shall be submitted to the Regional office of the Ministry within six months. Annual status of implementation of the plan and expenditure thereon shall be reported to the Regional Office of the Ministry.
- vi) Need based assessment of the near by villages shall be conducted to study economic measures which can help in upliftment of poor section of society. Income generating projects/tools such as development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.
- vii) Socio economic profile and rehabilitation action plan for families affected directly or indirectly due to mining (and whose land has been acquired) shall be prepared for immediate implementation before starting mining and shall be submitted within six months to the Regional Office of the Ministry.
- viii) Water to be supplied for drinking purposes shall be treated to meet the prescribed standards. Monitoring of water quality for drinking shall be undertaken on daily basis especially for fluoride & arsenic and records maintained.
- ix) Transportation of limestone ore to the cement plant shall be through closed conveyor belt system.
- x) Rain water harvesting scheme shall be undertaken in consultation with the Regional Director, Central Ground Water Board and action plan for implementation of the scheme shall be submitted to the Regional Office of the Ministry, the Central Ground Water Board and the state Government.

- xi) Water quality both for surface as well as ground water in the core zone shall be regularly monitored and records maintained. Water supplied for drinking shall be monitored on daily basis and records maintained. In case contamination is observed, measures for control and action taken shall be reported to the state government as well as the Regional Office of the Ministry.
- xii) Measures for prevention and control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion shall be carried out with geo textile matting or other suitable material, and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls. As there are eleven other mines which are contiguous to the subject mine, total silt load shall be assessed and measures for prevention and control of silt shall be submitted to the Regional Office of the Ministry within six months.
- xiii) Trenches / garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest silt from being carried to water bodies. Adequate number of Check Dams and Gully Plugs shall be constructed across seasonal/perennial nallahs flowing through the ML area and silts arrested. De-silting at regular intervals shall be carried out.
- xiv) Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow up action wherever required.
- xv) Action taken report on issues raised and commitments made during public hearing shall be submitted to the Regional Office of the Ministry and the State Govt. within six months after mining operation begins.
- xvi) Dust fall measurement shall be periodically carried out including particle size analysis in work zone area. Results shall be submitted to the Regional Office of the Ministry and the State Govt.
- xvii) Top soil/ solid waste shall be stacked properly with proper slope and with adequate safeguards for prevention of erosion and shall be used for backfilling for reclamation and rehabilitation of mined out area.
- xviii) Over burden shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 30 m, each stage shall preferably be of 10 m and overall slope of the dump shall not exceed 28°. The OB dump shall be backfilled. The OB 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.

- xix) Garland drains shall be constructed to arrest silt and sediment flows from soil, and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly de-silted particularly after monsoon and maintained properly.

Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and for waste dump 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 de-silted at regular intervals.

- xx) Slope of the mining bench and ultimate pit limit shall be as per the mining scheme as approved by the Indian Bureau of Mines.
- xxi) Drilling and blasting shall be conducted by using dust extractors/wet drilling.
- xxii) Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO / Agriculture Department. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. Plantation shall be raised in 12.10 ha around the ML area, haul roads, OB dump sites etc. The density of the trees shall be not less than 2500 plants per ha. The company shall involve local people with the help of self help group for plantation programme. Further the company shall practice poly culture plantation instead of monoculture of plant species. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the Ministry within six months.
- xxiii) Prior permission from the competent authority shall be obtained for extraction of ground water, if any.
- xxiv) Vehicles used for transportation of ores and other mining operations shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of ores. Transporting of ores shall be done covered with a tarpaulin or other suitable enclosures so that no dust particles / fine matters escape during the course of transportation. No overloading of ores for transportation shall be undertaken.
- xxv) A final mine closure plan, along with details of Corpus Fund, shall be submitted to the Regional Office of the Ministry of Environment & Forests, 5 years in advance of final mine closure for approval.

**B. General conditions**

- (i) No change in mining technology and scope of working shall be made without prior approval of the Regional Office of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral ore and waste shall be made.

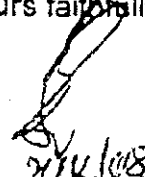
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- (iii) Conservation measures for protection of flora and fauna in the core & buffer zone shall be drawn up in consultation with the local forest and wildlife department.
- (iv) Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO<sub>2</sub>, NO<sub>x</sub> monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- (v) Data on ambient air quality (RSPM, SPM, SO<sub>2</sub>, NO<sub>x</sub>) should be regularly submitted to the Ministry including its Regional office located at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (vi) Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.
- (vii) 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 plugs / muffs.
- (viii) Industrial waste water (workshop and waste water from the mine) should be properly collected, 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. Oil and grease trap shall be installed before discharge of workshop effluents.
- (ix) Personnel working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.
- (x) A separate Environmental Management Cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (xi) The project authorities shall inform to the Regional Office of the Ministry located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xii) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bangalore.
- (xiii) The project authorities shall inform the Regional Office of the Ministry located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xiv) The Regional Office of the Ministry, Bangalore shall monitor compliance of 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.

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- (xv) A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
- (xvi) State Pollution Control Board shall display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office / Tehsildar's Office for 30 days.
- (xvii) 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 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 the Ministry located Bangalore.
5. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
6. 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 Environment (Protection) Act, 1986.
7. 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 Authority Act, 1997.
8. The above conditions will 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 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.

Yours faithfully,

  
(W. Bharat Singh)  
Deputy Director

Copy to:

1. Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment, Government of Andhra Pradesh, Hyderabad.
3. Secretary, Department of Mines and Geology, Government of Andhra Pradesh, Hyderabad.
4. Secretary, Department of Forests, Government of Andhra Pradesh, Hyderabad.
5. Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4<sup>th</sup> Floor E&F, Wings 17<sup>th</sup> Main Road, 1 Block, Koranmargala, Bangalore-560 034.
6. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.

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