J-11015/377/ 2006- IA. II(M) Government of India Ministry of Environment & Forests

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Paryavaran Bhavan, C.G.O. Complex,

Lodi Road, New Delhi-110003.

Dated the May 18, 2007

To

The Sr. General Manager(Projects)
M/s Madras Cements Ltd
Auras Corporate Centre
V- Floor 98-A, Dr. Radhakrshnan Road
Mylapore Chennai 600 004

Sub: Jayanthipuram Limestone Mine (North Band) Project of M/s Madras Cements Ltd. at Village Jayanthipuram, Jaggayapeta Taluka in Krishna District in Andhra Pradesh- environmental clearance reg.

Sir,

The undersigned is directed to refer to your letter no. nil dated 15.11.2006 on the above mentioned subject. The Ministry of Environment and Forests has examined the application.

It has been noted that proposal is for environmental clearance for enhancement of Limestone and Clay Production from 1.4 Million TPA to 2.0 million TPA from located in Jayanthipuram Village, Jayanthipuram Limestone Mine (North Band) Jaggayhapeta Taluka in Krishna District in Andhra Pradesh. The mine is captive to existing 7250 TPD clinker capacity cement plant. The company has already acquired the land. The total lease area of the mine is 256.54 ha, which is a private land. Palleru river flows in west and meets Krishna River flowing at a distance of 4.0 km south from the mine area. Out of 256.54 ha of Mining lease area, area to be excavated is 122.53 ha. About 18.95 ha of area has been earmarked for waste dumps, 4.34 ha for bund, 1.50 ha for infrastructure, 4.06 ha for roads, 62.39 ha for afforestation & green belt development and 42.77 ha area will be reclaimed. Life of the mine is 8 years. No ecologically sensitive area such as National Park / Wild Life Sanctuary / Biosphere Reserve is located within core and buffer zone. No endemic and endangered species of flora has been reported from the area. Water requirement of 306m3/d will be met from pit water source. Present working depth of the mine is 24m (pit-I) and 45m (Pit-2) and ultimate working depth will be 80 bgl (-47 m msl). Mining activity will intersect the water table. Ground water table is 45 m bgl (28 m msl). Water table depth in premonsoon and post monsoon is 45 m bgl and 36 m bgl respectively. Hydro geological study carried for the Jayanthipuram watershed indicates that influence due to mine dewatering could extend upto a radius of 776 meters for the maximum pumpage of water. The stage of water development is 25%. Since the area is far from the coast, there is no sea water intrusion. Method of mining will be opencast and mechanized. Drilling and blasting is involved which will be done using sequential blasting technique. Already 13.58 million m^3 of OB and 0.275 million m^3 of top soil have been accumulated and during the life of mine. About 18.37 million m^3 of OB will be handled of which 54.81% will be used for backfilling. It is noted that public hearing of the project was held on 4.07.2006. IBM has approved the mining plan including progressive mine closure plan on 07.04.2006. Cost of the project is Rs. 4.50 crores.

- 3. The project has been considered in accordance with the para $2.2 \{2.2.1(i) (a)\}$ interim operational guidelines of the Ministry issued on 13^{th} October 2006 by the Ministry of Environment and Forests under Para 12 of the EIA Notification 2006.
- 4. Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14^{Th} September 2006 subject to the compliance of the following Specific and General conditions:

A. Specific conditions

- (i) Top soil shall be stacked properly with proper slope with adequate safeguards and shall be backfilled for reclamation and rehabilitation of mined out area.
- (ii) 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 desilted particularly after monsoon and maintained properly.

Garland drain (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 desilted at regular intervals.

- (iii) Drilling and blasting shall be by using dust extractors/wet drilling.
- (iv) Plantation shall be raised in an area of 195.54 ha including a green belt of adequate width by planting the native species around the ML area, roads, OB dump sites etc. in consultation with the local DFO / Agriculture Department. The density of the trees shall be around 2500 plants per ha. The company shall avoid plantation of mono culture species. Further green belt shall be developed in the North to NE direction of mine to protect the temple from dust emission. Fruit bearing species shall be planted by involving local people especially women with the help of self help groups.

- (v) The company shall develop 50m wide green belt barrier along the mine lease since distance between the last point of the mine and river is 1.0 km.
- (vi) The company shall prepare conservation plan for implementation in consultation with CWLW as reserve forest is nearby.
- (vii) There shall be no advancement of mine benches laterally. Orientation of mine benches shall be across the strike to minimize the decline in the ground water level.
- (viii) Risk assessment study shall be undertaken for entire north band and report submitted to the Ministry.
- (ix) The company shall develop pisciculture in the water body(s) after the mining activity is over. A fisherman cooperative society shall be formed with the affected people as members and initial financial support by the company. The company shall involve local people in the afforestation programme.
- (x) The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (xi) Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year - pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- (xii) The company shall obtain forestry clearance under the Forest (Cons.) Act, 1980.
- (xiii) Prior permission from the competent authority shall be obtained for drawl of ground water, if any.
- (xiv) 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. The vehicles shall be covered with a tarpaulin and shall not be overloaded.
- (xv) A 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.

B. General conditions

- 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 mineral iron ore and waste shall be made.
- 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, SO2, NOx 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 (RPM, SPM, SO_2 , NOx) 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 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.
- ix. 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.

- x. 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.
- xi. 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.
- xii. The project authorities shall inform to the Regional Office 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.
- xiii. The funds earmarked for environmental protection measures shall be kept in separate account and should not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bangalore.
- xiv. The project authorities shall inform to the Regional Office 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.
- xv. The Regional Office of this Ministry located at Bangalore 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.
- xvi. 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.
- xvii. State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/Tehsildar's Office for 30 days.
- xviii. The project authorities should 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 this 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. 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. 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.

(Dr. P.L. Ahujarai)
Director

Copy to:

- 1. Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- 2. Secretary, Department of Environment, Government of Andhra Pradesh, Bangalore.
- 3. Secretary, Department of Mines and Geology, Government of Andhra Pradesh, Bangalore.
- 4. Secretary, Department of Forests, Government of Andhra Pradesh, Bangalore.
- 5. Chief Wildlife Warden, Government of Andhra Pradesh, Bangalore
- 6. Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4th Floor E&F, Wings 17th Main Road, 1 Block, Koranmangala, Bangalore-560 034.
- 7. Chairman, Central Pollution Control Board, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 8. The Chairman, Andhra Pradesh State Pollution Control Board, 2nd Floor, HUDA Complex, Maitrivaram, S.R.Nagar, Hyderabad-500 038.
- 9. Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 10. Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 11. District Collector, district Krishna, Andhra Pradesh.
- 12. EI Division, Ministry of Environment & Forests, EI Division, New Delhi.
- 13. Monitoring File.
- 14. Guard File.
- 15. Record File.

(Dr. P.L. Ahujarai) Director