

J-11015/446/2006- 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 15, 2007

To

Shri K. Gowrappan
Advisor(Mining Operation)
M/s Madras Cements Ltd
Auras Corporate Centre
V- Floor 98-A, Dr. Radhakrshnan Road
Mylapore Chennai 600 004

Sub: Tular and Manakudayan Limestone Mining Project by M/s Madras Cement Ltd., District Perambalur in Tamilnadu - reg environmental clearance.

Sir,

This has reference to letter no. nil dated 13.12.2006 and subsequent communication dated 9.1.2007 on the above mentioned subject.

2. The Ministry of Environment and Forests has examined the application. It has been noted that proposal is for environmental clearance of proposed captive limestone mine with production capacity of 1.50 Million TPA to supply limestone to the cement plant. Environmental clearance for 2.574 MTPA cement plant was granted on 10.10.2002. The plant is located at a distance of 5.0 km from the mine. The mine is located in district Perambalur in Tamilnadu. Total lease area of the project is 136.11 ha, which is a agricultural land. The area to be excavated is 27.70 Ha . About 12.86 ha has been earmarked for O.B dumps, 0.2 ha for infrastructure, 0.85 ha for roads, 35.21 ha for green belt and 33.09 ha has been kept as virgin area. The undisturbed area of 33.09 ha will be utilized for future mining purpose after detailed exploration. At the post mining stage about 25.01 ha will be backfilled and an area of 22.69 ha of void will be converted into water body. Topography of the area is flat and gentle rolling. Vellar river is located at a distance of 4.5 Kms from the mine boundary. No ecologically sensitive areas, such as national park/sanctuary /biosphere reserve is located within 10 Km of the core and buffer zone. The project does not involve displacement of people. Life of the mine is 20 years. Method of mining will be opencast and mechanized by surface miners. No drilling and blasting will be involved except as a contingency measure. No mineral beneficiation is involved. Water requirement of 21.5 m³/d will be met from the ground water source. Present working depth will be 0 m bgl (55 m msl) and ultimate working depth will be 32.0m bgl. (23 m msl) and ground water table depth is 16 m bgl.(39 m msl) . Mine workings will intersect the ground water table. Water table depth in pre monsoon and post monsoon is 20 m bgl and 13 m bgl respectively. As per the hydrogeological study carried for the area indicates that total recharge is

56.25 million m³. The net ground water draft is 19.85 million m³ and ground water availability is 36.40 million m³. Net annual ground water availability is 54.52%. Total quantity of OB to be generated will be 3.61 Million m³. Back filling is proposed. At the end of the mine about 25.10 ha of area will be backfilled and afforested and 35.21 ha will be under the green belt in the virgin area. It is noted that public hearing of the project was held on 22.08.06. IBM has approved mining plan including progressive mine closure plan on 21.04.06. Cost of the project is Rs. 9.90 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 13th 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 14th 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. 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 over all slope of the dump shall not exceed 28°. The mine pit area shall be reclaimed by back filling the OB in a phased manner. 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. Compliance status shall be submitted to the Ministry of Environment & Forests on six monthly basis.
- iii. 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.

- iv. Drilling and blasting shall be by using dust extractors/wet drilling.
- v. The void left shall be converted into water body and developed into pisciculture. The company shall organize a fishermen cooperative society by involving the local villagers. The revenue generated through pisciculture shall be shared among the members of the society.
- vi. Plantation shall be raised in an area of 62.34 ha including 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 involve local people especially women self help group.
- vii. The company shall plant local fruit bearing species by involving local people especially women with the help of self help group.
- viii. 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.
- ix. 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.
- x. Prior permission from the competent authority shall be obtained for drawl of ground water ,if any.
- xi. 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.
- xii. 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

- i. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.
- ii. No change in the calendar plan including excavation, quantum of mineral, limestone 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, NO_x 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, SO₂, NO_x) 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.

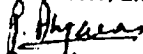
- x. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
- xi. A separate environmental management cell with suitable qualified personnel shall be set-up under the control 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.

Yours faithfully,


(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 Tamilnadu, Chennai.
3. Secretary, Department of Mines and Geology, Government of Tamilnadu, Chennai.
4. Secretary, Department of Forests, Government of Tamilnadu, Chennai
5. The Secretary (Environment), Govt. of Tamil Nadu, Fort. St. George, Chennai-560560.
6. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
7. The Chairman, Tamil Nadu Pollution Control Board, 100, Anna Salai, Guindy, Chennai - 600032.
8. The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F Wings, 7th Main Road, IInd Block, Koramangala, Bangalore-560034.
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 Karur, Tamilnadu.
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