

J-11015/378/2007- IA. II (M)
Government of India
Ministry of Environment & Forests

Tel no. 24363973

E mail: plahujarai@yahoo.com

Paryavaran Bhavan, C.G.O. Complex,
Lodi Road, New Delhi-110003.

Dated the June 8, 2007

To

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

Sub: Janthipuram limestone mine project (South) of M/s Madras Cements at village Jayanthipuram in Jaggaiahpet in district Krishna in Andhra Pradesh-reg environmental clearance.

Sir,

The undersigned is directed to refer to your letter no. nil dated 15.11.2006 regarding and subsequent communication dated 4.1.2007 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 for enhancement of production of limestone Production from 0.037 MTPA to 0.5 million TPA from Jayanthipuram Mine located in Jayanthipuram Village, Jaggayapeta Taluka in Krishna District in Andhra Pradesh. The mine is captive to cement plant of capacity 1250 TPD. The cement plant is located at a distance of 4.0km from the mine. Environmental clearance to the cement plant has already been accorded. The total lease area of the mine is 88.35 ha, which is private land and already acquired by M/s Madras Cements Limited. Paleru River flows adjacent to the Mining Lease at a distance of 300m in west direction and Krishna River is flowing at a distance of 4.0 km south from the mine area. Out of 88.35 ha of ML area, area for mining is 49.54 ha, 14.41 ha is for waste dump, 1.00 ha for roads, 0.02 ha for infrastructure, 19.05 ha for afforestation & green belt development and 4.33 ha is unutilized. Life of the mine is 14 years. Lease Period of the mine is 20 years, which will expire in 2024. 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. Topography of the area is undulating with surface reduced levels varying from 30m above MSL and maximum elevation is 58 m at the peak of small hill located in the north eastern corner of the lease. Method of mining will be opencast and mechanized. Drilling and blasting is involved which will be done using sequential blasting technique.

3. It is noted that present working depth of the mining is 50 m MSL (8 m bgl from top level of 58m MSL). Ultimate depth of mining would be 15 m MSL (43 m bgl from top level of 58m MSL) and water table depth in core and buffer zone is 28-36 m above MSL (22-30 m bgl from top level of 58m MSL) in the core zone and 8-10 m bgl from general level of 40-50 m above MSL in the buffer zone respectively during pre-monsoon season. Mining activity will intersect the water table. Hydrogeological study of the mine lease area has been carried. Radius of influence due to mine pit dewatering will be 141m at a pumping rate of 500m³/d. The stage of ground water development is 25%. Water requirement of 85.5 m³/d will be met from the ground water source. Paleru river is located at a distance of 300m from the ML boundary. The mine workings are planned at a distance of 100m from the HFL of the river. It is proposed to leave area of 100m as no mining zone from 100m HFL of the river. The embankment will be strengthened by plantation of shrub grass species on the slopes. Further, a bund of 5m height above the HFL all along the mine lease boundary will be constructed to prevent the wash off flowing in the river. Flood alarm system has been installed. During plan period 5,21,800 tonnes of top soil will be generated of which 800 tonnes will be used for plantation and remaining 5,21,000 tonnes will be spread in the top solid dump in the non mineralized zone. The total waste generation after plan period upto the conceptual plan is estimated at 17103170 tonnes and will be stacked in dump. Dumping is proposed in the northern part of the mine lease. 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. Capital cost of the project is Rs. 2.40 crores.

4. 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.

5. 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. Plantation shall be raised in an area of 20.17 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 with the help of local NGOs for afforestation programme.
- vi. The company shall prepare wildlife conservation plan in consultation with CWLW/State Forest Department for implementation.
- vii. 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.
- viii. 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.
- ix. Prior permission from the competent authority shall be obtained for drawl of ground water ,if any.

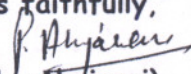
- x. Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.
- xi. A Final Mine Closure Plan, along with details of Corpus Fund, shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.
- xii. Spent oil generated from maintenance of HEMM shall be sold to the registered recyclers.

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.
6. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
7. 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.
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,

(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, 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 Wildlife Warden, Government of Andhra Pradesh, Hyderabad.
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