

No. J-11015/366/2005-IA-II(M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhavan,
CGO Complex,
Lodhi Road,
New Delhi-110003.

Dated 25th January, 2006

To,
The President,
M/s. Dalmia Cement (Bharat) Ltd.,
Hansalaya (11th & 12th Floor),
15, Barakhamba Road, Post Box 364,
New Delhi-110001.

Subject:- Periathirukonam Limestone Mining Project (M.-2) of M/s Dalmia Cement (Bharat) Ltd. located in Village(s) Periathirukonam and Alanthuraiyarkattalai, Tehsil Ariyalur, District Perambalur, Tamil Nadu- environmental clearance reg.

Sir,

This has reference to your letter No. ND/SR/4245/PTK (2)/EIA dated 18.10.2005 and subsequent letters dated 20.10.2005, 26.10.2005, 16.11.2005 and 08.12.2005 on the subject mentioned above. The Ministry of Environment and Forests has examined the application. It has been noted that the proposal is for opening of a new mine and Ministry has granted site clearance to the project on 28.03.2005. The total mine lease area of the project is 44.705 ha which is a wasteland. No forestland is involved. Area proposed for mining is 32.25 ha, an area of 9.255 ha is kept for storage of top soil, 1.20 ha for roads and 2.0 ha for green belt all along periphery. No ecologically sensitive area such as national park, sanctuary/biosphere reserve etc. located within core and buffer zone. There are 5 RFs located in the buffer zone. There is no population in the core zone therefore, the project does not involve displacement of people. The targeted production capacity of the mine is 1.0 MTPA. Mineral transportation of 3125 TPD is by road to the linked cement plant. Working is opencast by mechanized method involving drilling and blasting. Ultimate working depth is 39 m bgl. Water table is in the range of 13-14 m bgl (pre-monsoon) and 6-7 m bgl in the (post-monsoon). Working will intersect ground water table and 363 m³/day is the likely discharge from the mine during the lean period and 1474 m³/day during the monsoon period. The area has been declared as "semi-critical" by State Ground Water Department. Average water requirement of the mine is 116 m³/day, out of which 114 m³/day will be met from mine sump water and 2 m³/day from ground water. A total of 37.56 lakh m³ of solid waste comprising OB and topsoil will be generated throughout the mine life, out of which 37.22 lakh m³ will be backfilled and remaining 0.34 lakh m³ will be finally accommodated in to the external OB dump. Back filling will start from 2nd year onwards. Indian Bureau of Mines has approved mining plan on 20.07.2004 for lease area of 44.705 ha. Tamil Nadu Pollution Control Board has granted NOC on 04.10.2005 for lease area of 44.705 ha and production capacity of 10.0 LTPA. Public hearing was held on 17.06.2005. Capital cost of the project is Rs.250.0 lakhs.

2. The Ministry of Environment and forests hereby accords environmental clearance to the above mentioned Periathirukonam Limestone Mining Project (ML-2) of M/s. Dalmia Cement (Bharat) Ltd. for annual production capacity of one million tones of limestone involving total mining lease area of 44.705 ha under the provisions of the EIA Notification 1994 and its subsequent amendments issued under Environment (Protection) Act, 1986 subject to implementation of the following conditions/safeguards.

A. Specific Conditions

- (i) The project proponent should obtain prior approval of the Central Ground Water Authority (CGWA) for mining below water table.
- (ii) Top soil should be stacked with proper slope at earmarked site(s) only with adequate measures and should be used for reclamation and rehabilitation of mined out areas.
- (iii) OB dump(s) should be stacked at earmarked dump site(s) only and should not be kept active for long period. Proper terracing of OB dump should be carried out so that the overall slope shall not exceed 28 degree. Backfilling should start from 2nd year onwards. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests on six monthly basis
- (iv) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted and maintained properly.

Garland drain (size, gradient & length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains.
- (v) Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rain fall data.
- (vi) Drills should be wet operated or operated with dust extractors.
- (vii) Blasting operation should be carried out only during the daytime. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (viii) Crusher should be operated with high efficiency bag filters. Water sprinkling system should be provided to check fugitive emissions from crushing operations, haulage roads, transfer points etc.

- (ix) Water sprinkling arrangements to control the fugitive dust generation from the haulage roads and from the crusher should be provided.
- (x) Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral ore. The vehicles should be covered with tarpaulin and should not be overloaded.
- (xi) Progressive Mine Closure Plan shall be implemented to backfill and reclaim an area of 14.69 ha. The higher benches of the balance excavated void/mine pit comprising an area of 17.56 ha, which will be converted into a water reservoir, shall be terraced and reclaimed by undertaking plantation to stabilize the slopes. Peripheral fencing shall be done along the excavated area.
- (xii) Plantation should be developed in an area of 24.505 ha by planting the native species around the ML boundary, OB dumps, roads, undisturbed area etc. in consultation with the local DFO/Agriculture Department. The density of trees should be around 2000 plants per hectare.
- (xiii) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years prior to closure of mine for approval of the Ministry.
- (xiv) Consent to operate should be obtained from State Pollution Control Board before starting production from the mine.

B. General Conditions.

- (i) No change in technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of limestone, waste/OB dumps should be made.
- (iii) Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest department and experts.
- (iv) Ambient air quality monitoring stations should be established in the core zone as well as buffer zone for SPM, RPM, SO₂ and NO_x. Location of the ambient air quality stations should be decided based on meteorological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- (v) Data on air quality should be regularly submitted to the Ministry including its Regional Office at Bangalore and the State Pollution control Board, Central Pollution Control Board once in six months.
- (vi) Adequate measures for control of fugitive emissions should be undertaken such as water spraying arrangements on haul roads, loading and unloading points and transportation of minerals, etc. Fugitive dust emissions from all sources should be regularly monitored and data recorded properly

- (vii) Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operations of HEMM, etc., should be provided with ear plugs/muffs.
- (viii) Industrial waste water (workshop and wastewater 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 as amended from time to time. Oil and grease trap should be installed before discharge of effluents from the Workshop.
- (ix) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance programme of the workers should be undertaken periodically and corrective measures taken, if required.

- (x) The funds earmarked for environmental protection measures should be kept in separate account and not diverted for any other purpose. Year-wise expenditure should be reported to the Ministry of Environment & Forests.
- (xi) The project authorities should 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.
- (xii) The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated environmental conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- (xiii) A copy of the clearance letter should be marked to concerned Panchayat/Local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.
- (xiv) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the collector's/Tehsildar's Office for 30 days.
- (xv) The project authorities should advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within 7 days of issuance 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 may also be seen at web site of the Ministry of Environment and Forests at <http://envfor.nic.in>.

C. All the conditions stipulated by the Tamil Nadu Pollution Control Board vide their letter No. T6/TNPCB/F 1822-Mine/RM/PMLR/2005 dated 04.10.2005 should be complied with.

3. The Ministry or any other competent authority may alter/modify the above or stipulate any further additional condition in the interest of environment protection.

4. 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.

5. The environmental clearance accorded shall be valid for a period of 5 years for starting construction/operation of the project. In case, the project authorities fail to do so within this stipulated period, this environmental clearance shall stand lapsed automatically.

6. 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 alongwith their amendments and rules


(SATISH C. GARKOTI)
Additional Director (S)

Copy to:

1. Secretary, Department of Environment & Forests, Government of Tamil Nadu, Fort St. George, Secretariat, Chennai-600009.
2. Secretary (Industry), Industries Department, Government of Tamil Nadu, Fort St. George, Secretariat, Chennai-600009.
3. The Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office(SZ), E-3/240 Kendriya Sadan, 4th Floor, E&F Wings, 17th main Road, II Block, Koramangala, Bangalore-560034.
4. Chairmen, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi-110032.
5. Chairperson, Tamil Nadu Pollution Control Board, 76 Mount Salai, Guindy, Chennai-600032.
6. Member Secretary, Central Ground Water Authority, A-3, W-3 Central Ground Water Authority, Curzon Road Barracks, K.G.Marg, New Delhi.
7. Controller General of Mines, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440001.
8. District Collector, Perambalur, Govt. of Tamil Nadu.
9. EI Division, Ministry of Environment & Forests, New Delhi.
10. Guard File.
11. Monitoring File.
12. Record File.