F.NO J-11015/143/2006-IA-II (M)
Government of India
Ministry of Environment & Forests
IA Division

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M/s Kesoram Cement
Basantnagar Post
Karimnagar District-505187
Andhra Pradesh

Subject: Takkalapalli Limestone mine project of M/s. Kesoram Cement for 122.28 ha Mining lease area, at village- Takkalapalli, Tehsil-Peddapalli, District-Karimnagar, Andhra Pradesh - Environment clearence reg.

Sir,

MARTO

This has reference to your application received on 27-04-06 and subsequent letter dated 04-07-2006 and 11-11-06 on the above-mentioned subject. It has been noted that the proposal is for environmental clearence for 0.35 Million Tonnes per Annum production capacity of limestone. Life of the mine is 18 years.

The total mining lease area of the project is 122.28 ha, which is a patta land. Forestland is not involved. Area proposed for mining is 23.86 ha, 10.76 ha for overburden dump, no area is ear marked for mineral storage and infrastructure, 5.0 ha for roads, 6.12 ha for green belt development and 76.54 ha for other. There is no National Park/ sanctuary/ Biosphere reserve etc located within core and buffer zone. The targeted production capacity of the mine is 0.35 million tonnes per Annum. Mining is opencast by mechanised method. Blasting is involved. Ultimate working depth would be 50m (bg.) (140m above msl). Water table is 60 m (bgl) (120m above msl) in core zone and 15 m (bgl) (165m above msl) in buffer zone (Pre-monsoon) and 55 m (bgl) (125m above msl) in core zone and 12 m (bgl) (168m above msl) in buffer zone (Post-monsoon). Working will not intersect the ground water table. There is no population in the core zone therefore displacement of population and R/R is not involved. No power requirement is envisaged. It is estimated that 15600-cu.m/month overburden will be generated in mine life. 69.46 million tonnes will be generated is mine life, out which 55.76 million tonnes will be disposed of to dump yard and 13.7 million tonnes will be backfilled.

IBM approved mining plan and progressive mine closer plan on 2-8-2002 for lease area of 122.28 ha. The capital cost of the project is Rs.10.00 lacs.

- (2) The project was considered as per the old EIA Notification, 1994 as per Para 2.1.1(i) of the Interim operational guidelines dated 13th October 2006 issued by the Ministry of Environment and Forests under Para 12 of the EIA Notification, 2006.
- (3). The Ministry of environment and Forests hereby accords environment clearance to the above-mentioned project of Takkalapalli Limeston mine of M/s Kesoram Cement for livestons of Station (2 of Ela Notification, 2006 and its subsequent amendments issued under Environment (Protection) Act. 1986 subject to implementation of the following conditions/safeguards:

A. Specific Conditions:

- (i) Topsoil, if any, should be stacked properly with proper slope at ear marked site (s) with adequate measures and should be used for reclamation and rehabilitation of mined out area
- (ii) External OB dumps and other wastes should be stacked at earmarked sites only and should not be kept active for long period till its use for backfilling. Toe walls around the waste dumps shall be made to ensure and to prevent erosion and surface runoff. The total height of the dumps shall not exceed 30 m, each stage should preferably be of 10 m. Overall slope of the dump shall not exceed 28°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas use of geo textiles shall be undertaken for stabilization of the dumps. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment 8 Forests on six monthly basis.
- (iii) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine working. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after monscon and maintained properly.
- (iv) Garland drain (size, gradient and length) shall be constructed for both mine pit and sump capacity should 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 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 and desilted at regular intervals.
- (v) Plantation shall be raised in an area of 16.88 ha including a green belt of adequate width by planting the native species around ML area, roads and external OB dump etc in

altation with the local DFO / Agriculture Department at the end of mine life. The ensity of the trees should be around 2500 plants per ha.

- (vi) The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (vii) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new peizometers during the mining operation. The monitoring should be carried out two times in a year premonsoon (April-May), post-monsoon (November) and the data thus collected may be sent regularly to MOEF. Central Ground Water Authority and Regional Director Central Ground water Board.
- (viii) Existing ecological status of the project area shall be conserved and protected. The project proponent should take all possible precautionary measures during mining operation for conservation and protection of endangered fauna (Schedule-I), if any spotted in the project area. Action plans for the same shall be prepared with the consultation of DFO/wildlife department along with allocation of funds for this purpose and shall be submitted to R.O of the Ministry at Bangalore.
- (ix) Permission from the competent authority should be obtained for drawal of ground water if any, required for the project.
- (x) Suitable rainwater harvesting measures on long-term basis shall be planned and implemented in consultation with Regional Director, CGWB.
- (xi) The working depth of the mine shall be restricted above the ground water table. Prior approval shall be obtained from MOEF, in case, working depth of mine intersect the ground water table.
- (xii) Vehicular emissions should 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 should be covered with a tarpaulin and shall not be overloaded.
- (xiii) The voids created at the end of mining shall be converted into water body with shallow depths not exceeding 30 m. The higher benches of the excavated void/mine pit shall be terraced and plantation done to stabiles the slopes. Peripheral fencing shall be done along the excavated area
- (xiv) At the end of the mine life. The mined out area should be backfilled to the extent possible, leveled and reclaimed by plantations
- (xv) 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.

(xv:) Consent to operate should be obtained from SPCB before starting production from the mine.

(xvii) Sewage treatment plant should be installed for the colony ETP should also be provided for workshop and mineral separation plant wastewater.

(xviii) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

GENERAL CONDITIONS:

- (i) No change in mining 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 mineral and waste should be made.
- (iii) 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.
- (iv) Data on ambient air quality (RPM, SPM, SO₂, NOx) should be regularly submitted to the Ministry including its Regional office located at Bengalore and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (v) Fugitive dust emission from all the sources should be controlled regularly. Water spray Arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- (vi) Measures should be taken for control of noise levels below 85 dBA in the work.

 I wal environment. Workers engaged in operations of HEMM, etc should be provided with earplugs / muffs.

 1) The heavily or any other con
 - (vii) 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.
 - (viii) 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 program of the workers should be undertaker penodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

- (ix) 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.
- (x) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bengalore.
- (xi) The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should provide a set of filled in questionnaire EIA and EMP report and extend full co-operation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (xii) The project authorities shall inform to the Regional Office located at Bangaloris 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) A copy of clearance letter will be marked to concerned Panchayat/local NGO, if any, from whom and suggestion / representation has been received while processing the proposal.
- (xiv) 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.
- (xv) 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 may also be seen at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bengalore.
- (4) The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- (5) 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.
- (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 along with their amendments and rules

 (Harbans Singh)

Joint Director

Copy to

1. Secretary, Ministry of Mines, Shastri Bhawan, New Delhi.

2.Secretary, Department of Environment, Hyderabad Government of Andhra Pradesh

3. Secretary, Department of Forests, Government of, Hyderabad Government of Andhra Pradesh.

4. Secretary. Department of Mines and Geology Hyderabad Government of Andhra Pradesh.

5 The Chief Conservator of Forests, Ministry of Environment &

Forests, Regional Office (SZ), Bangalore

6. Chairman, Central Pollution Control Board, CBD-Cum-Office Complex,

East Arjun Nagar, New Delhi-110 032

7. Chairman, Andhra Pradesh State Pollution Control Board, Andhra Pradesh.

8. Member Secretary, Central Ground Water Authority, A2, W3 Curzon

Road Barracks, K.G. Marg, New Delhi-110001.

9 Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines,

Nagpur- 440 001.

10.District Collector, District Karımnagar, Andhra Pradesh.

11.El Division, Ministry of Environment & Forests, El Division, New Delhi.

12.Monitoring File.

13.Guard File.

14.Record File.

(HARBANS SINGH) Joint Director