## J-11015/384/2006- IA. II (M) Government of India Ministry of Environment & Forests

Telefax: 011-24367257 e-mail: w.bharat@nic.in Paryavaran Bhavan, C.G.O. Complex, Lodi Road, New Delhi-110003. Dated: January 21, 2008.

To

M/s Jaykaycem Ltd. Kailash Nagar Nimbahera Distt. Chittorgarh Rajasthan – 312 617

Sub:

Halki Limestone Mine (ML area 124.24 ha and 2.0 MTPA of limestone production) of M/s Jaykaycem Ltd., at village Halki, in Mudhol Taluk, Bagalkot Distt. in Karnataka- reg. environmental clearance.

Sir,

The undersigned is directed to refer to your letter dated 07.09.2007, on the above mentioned subject. The Ministry of Environment and Forests has examined the application.

- It has been noted that the proposal is for limestone mining at production capacity of 2.0 MTPA. The mine is located at village Halki in Mudhol Taluk, in Bagalkot Distt., in Karnataka, Method of mining will be open cast mechanized. The reserves of limestone at this mine is 8.55 MT. Life of the mine at proposed production will be 25 years. The Mine is located on an elevated terrain having altitude of 590 m MSL to 606 m MSL. Mining is proposed in an area of 124.24 ha, out of which area to be excavated is 91.10 ha. Area under overburden dump will be 2.00 ha; area under infrastructure and roads will be 1.74 ha; area for green belt development will be 5.0 ha, and 21.30 ha will remain unutilized. At conceptual stage the workings will go upto 548 m MSL, which is well above the ground water table. Reserve forest is located at a distance of about 5.0 km from the lease area. A canal passes through the ML area and to protect the canal from siltation, a 50 m barrier of no mining zone on both the sides is being proposed, which will be afforested with thick native vegetation. There are no wild life sanctuary, national park, archaeological sites, biosphere reserve within 10 km of the lease boundary. Peak water requirement will be about 185 m<sup>3</sup>/day, which will be utilised for dust suppression, domestic purpose and green belt development. Water will be sourced from ground water through existing open wells and rivers. Solid waste generated will be about 1023 T/month. These will be initially dumped on the area ear marked which is 2.0 ha and later will be used for backfilling of pits. Public hearing of the project was held on 04.07.2007. Approval from IBM for mining plan along with mine closure plan was obtained on 01.12.2006. Cost of the project will be about Rs. 0.45 crore.
- 3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006 and its interim operational guidelines issued on October 13, 2006.
- 4. Based on the information submitted by you, as at para 2 above, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated September 14, 2006, subject to the compliance of the following Specific and General conditions:

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## A. Specific conditions

- i) Land-use pattern of the nearby villages shall be studied and action plan for abatement and compensation for damage to agricultural land / common property land (as applicable) due to mining activity shall be submitted to the Regional Office of the Ministry within six months. Annual status of implementation of the plan and expenditure thereon shall also be reported to the Regional Office of the Ministry.
- ii) Need based assessment for the near by villages shall be conducted to study economic measures which can help in upliftment of poor section of society such as development of fodder farm, fruit orchards, vocational training etc. Year wise allocation of funds for implementation of these economic measures shall be reported to the Regional Office of the Ministry within six months.
- iii) A no mining zone barrier of 50 m from the canal passing through the lease area on both sides, all along, shall be demarcated and the area shall be afforestated with thick species of native vegetation.
- iv) Recommendations of NEERI, Nagpur, as mentioned in their report on "Status of Environment Action Plan" for the State of Karnataka, as may be applicable to this project, shall be implemented and status of implementation shall be submitted to the Regional Office of the Ministry.
- v) Conservation plan for wildlife shall be prepared in consultation with the Chief Wild Life Warden and shall be implemented within six months. Necessary allocation of fund for implementation of the same and the status of implementation of the plan shall be reported to the Regional Office of the Ministry.
- vi) Measures for control and prevention of soil erosion and management of silt shall be prepared and submitted to the Regional Office of the Ministry within six months.
- vii) Water quality both for surface as well as ground water in the core zone shall be regularly monitored for contamination due to mining activity and records maintained. In case contamination is observed, measures for control and action taken shall be reported to the state government as well as the Regional Office of the Ministry.
- viii) Water bodies shall be developed and utilized to develop pisciculture. Fishermen cooperative society shall be established with the land losers (if any) and specially the poorer section as members of such Society. Initial financial assistance either in the form of share money or otherwise and managerial assistance shall be provided so that the members themselves can run the affairs of the society in due course. The project proponent shall arrange marketing tie up so that the Society gets fair price of their produce and the profits are equitably shared by the members of the Society as regular source of income.
- ix) Action taken report on issues raised during public hearing shall be submitted to the Ministry and the State Govt. within six months.
- x) Occupational health and safety measures for the workers including training on malaria eradication, HIV, health effects on exposure to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is trained in occupational health surveillance. Records of the health of the workers shall be maintained.

- xi) Top soil / solid waste (if any) shall be stacked properly with proper slope and adequate safeguards and shall be backfilled for reclamation and rehabilitation of mined out area.
- xii) Over burden (OB), if any, 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 overall slope of the dump shall not exceed 28°. The OB dump shall be backfilled. 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.
- xiii) 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 de-silted particularly after monsoon and maintained properly.

Garland drain of appropriate 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. Check dams and gully checks shall be constructed across nallahs (if any) flowing through the lease area.

- xiv) Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.
- Solution of plant species and in consultation with the local DFO / Agriculture Department. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. Plantation shall be raised in 22.0 ha around the ML area, haul roads, OB dump sites etc. The density of the trees shall be not less than 2500 plants per ha. The company shall involve local people with the help of self help group for plantation programme.
- xvi) Details of year wise afforrestation programme already undertaken as well as proposed to be taken up including rehabilitation of mined out area shall be submitted to the Ministry within six months.
- xvii) 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. Status of implementation shall be reported to the regional Office of the Ministry from time to time.
- xviii) Prior permission from the competent authority shall be obtained for extraction of ground water, if any.
- xix) Drilling and blasting (if any) shall be conducted by using dust extractors/wet drilling.

- vx) Vehicles used for transportation of ores and other mining operations shall have valid permission as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. Transporting of ores shall be done covered with a tarpaulin or other suitable enclosures so that no dust particles / fine matters escape during the course of transportation. No overloading of ores for transportation shall be undertaken.
- xxi) Village roads through which transportation of ores are being carried out shall be regularly maintained by the company at its own expenses.
- A final mine closure plan, along with details of Corpus Fund, shall be submitted to the Ministry of Environment & Forests within six months, 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 and waste shall 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, SO<sub>2</sub>, NO<sub>x</sub> monitoring. Lócation 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 (RSPM, SPM, S0<sub>2</sub>, NO<sub>x</sub>) 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.
- (v) 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.
- (vi) 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.
- (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 19<sup>th</sup> May, 1993 and 31<sup>st</sup> 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 shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.
- (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 project authorities shall inform to the Regional Office of the Ministry 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.
- (xi) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bangalore.
- (xii) The project authorities shall inform the Regional Office of the Ministry 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 Regional Office of the Ministry, Bangalore shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (xiv) 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.
- (xv) State Pollution Control Board shall display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office / Tehsildar's Office for 30 days.
- (xvi) The project authorities shall 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 the 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. Concealing factual data or submission of false/fabricated data and 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

(W. Bharat Singh)
Deputy Director

## Copy to:

- 1. Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- 2. Secretary, Department of Environment, Government of Karnataka, Bangalore.
- 3. Secretary, Department of Mines and Geology, Government of Karnataka, Bangalore.
- 4. Secretary, Department of Forests, Government of Karnataka, Bangalore.
- 5. Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4<sup>th</sup> Floor E&F, Wings 17<sup>th</sup> Main Road, 1 Block, Koranmangala, Bangalore-560 034.
- 6. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 7. Chairman, Karnataka State Pollution Control Board, Parisara Bhawan, 4<sup>th</sup> & 5<sup>th</sup> Floor, 49, Church Street, Bangalore 560 001.
- 8. Member Secretary, Central Ground Water Authority, A2, W 3 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, Bagalkot, Government of Karnataka.
- 11. El Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
- 12. Monitoring File.
- Guard File.
- 14. Record File.

(W. Bharat Singh)
Deputy Director