# No.J.11015/129/2001-IA.II(M) Government of India Ministry of Environment & Forests

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

Dated: 18th January 2005

Shri A.Roy Chowdhary, Vice-President, Chaibasa Cement Works, P.O.Jhinkpani-833215, Dist. West Singhbhum. JHARKHAND.

#### CORRIGENDUM

Sub: Expansion Project of Rajanka Limestone Mine F and F2 Blocks (0.45 MTPA to 2.11 MTPA) located in village Kondwa, Tehsil Dokata, District Chaibasa, West Singbhum, Jharkand of M/s Associated Cement Co. Ltd. -reg

Sir,

With reference to this Ministry's earlier letter dated 28.12.2004 on the above subject, the following corrections may be noted:

In the subject heading "Rajkanta" be read as "Rajanka". (i)

In the preamble sentence "Mining will be confined to 65.20 ha" be replaced with "Of (ii) the total lease of 145.37 ha, area to be excavated is 65.20 ha, 0.50 ha is for topsoil storage, 10.45 ha is for OB dumps, 1.50 ha is for infrastructure, 3.30 ha is for roads, 0.50 ha is for railways, 27.20 ha is for greenbelt, and 36.72 ha is open area."

In Specific Condition A (ix), "A and D Blocks" be replaced with "A, G and S (iii) Blocks".

All other conditions remain the same.

(Dr.T.Chandini) Additional Director

#### Copy to:

- Secretary, Department of Environment & Forests, Government of Jharkand, Ranchi. 1.
- Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office 2. (Eastern Zone), Eastern Zonal office, A/3 Chandrashekarpur, Bhubaneshwar – 7510123.
- Department of Mines & Geology, Government of Jharkand, Engineering Hostel, 3. Floor, Gol Chakker, Dhurwa, Ranchi- 02.

4. Office of the Chief Wildlife Warden, Government of Jharkand, Ranchi.

- 5. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi-110032.
- 6. Chairman, Jharkand State Pollution Control Board, T.A. Building, HEC Complex, P.O.Dhurwa, Ranchi.
- 7. Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- The Controller of Mines, Indian Bureau of Mines, 'Indira Bhawan', Civil Lines, 8. NAGPUR-440 001.



- 9. District Collector, West Singbhum District, Government of Jharkand.
- 10. Chairman, Central Ground Water Authority, A-3 W3 Curzon Road Barracks, Kasturba Gandhi Marg, New Delhi.
- 11. Director, Project Elephant, Ministry of Environment and Forests, Paryavaran Bhawan, New Delhi.
- 12. E.I. Division, Ministry of Environment & Forests, New Delhi.
- 13. Guard File. 14. Monitoring File. 15. Record File.

# No.J.11015/129/2001-IA.II(M) Government of India Ministry of Environment & Forests

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

Dated: 28th December 2004

To Shri A.Roy Chowdhary, Vice-President, Chaibasa Cement Works, P.O.Jhinkpani- 833215, Dist. West Singhbhum, JHARKHAND.

Sub: Expansion Project of Rajkanta Limestone Mine F and F2 Blocks (0.45 MTPA to 2.11 MTPA) located in village Kondwa, Tehsil Dokata, District Chaibasa, West Singbhum, Jharkand of M/s Associated Cement Co. Ltd. –reg

Sir,

This has reference to Department of Mines & Geology, Government of Jharkand's letter No.62/03-1030/M, Ranchi dated 30.07.2003, and your letters dated 29.08.2003, 06.10.2003, and 20.10.2003, in regard to the subject above. The Ministry of Environment and Forests has examined the application. It is noted that the proposal is for mining limestone in a total lease area of 145.37 ha of which 40.35 ha area is agricultural land, 29.0 is Govt. wasteland and 76.02 ha is cultivable wasteland. There is no forestland involved. No ecologically sensitive area falls within 10 km radius of the mine site. No endangered fauna are found in and around mine site. The proposal is for expansion of total annual production capacity of limestone in F and F2 Blocks from 0.45 million tonnes per annum (MTPA) to 2.11 MTPA. Mining will be confined to 65.20 ha only. An area of 34.37 ha is to be broken during the remaining life and an area of 63.92 ha will be left undisturbed. The project does not involve displacement of people. Mining is by opencast mechanised method involving blasting and drilling. Entire mineral transportation of 7045 TPD is by tube conveyors to the linked cement unit located at a distance of 2.5 km. The total water requirement is 195 m3/day of which 185 m3/d shall be recycled mine water (pit/sump) and 10m3/d for domestic consumption is to be met from groundwater. Ultimate working depth is 60 m below ground level (bgl). Average water table is 10-15m. Total waste generation over life of the mine is estimated to be about 23.584 million tonnes of which 11.915 MT will be generated during remaining period of mine life and concurrently backfilled. Approval of IBM has been obtained on 23.05.2003. Consent to Establish of the Jharkand State Pollution Control Board has been obtained on 11.01.2003. Public Hearing was held on 26.11.2002. Total life of the mine at the rated capacity is 9 years. Capital cost of the Project is Rs. 1700 lakhs.

The Ministry of Environment and Forests hereby accords environmental clearance for the proposed expansion of the above mentioned opencast limestone mine Project from 0.45 **MTPA to 2.11 MTPA** of limestone involving lease area of **145.37 ha** under the provisions of the Environment Impact Assessment Notification, 1994 as amended on 04.05.1997 and 10.04.1997 subject to terms and conditions mentioned below:

## A. Specific Conditions

- (i) Top soil should be stacked properly with proper slope at ear marked site(s) with adequate measures and should be used for greenbelt development.
- (ii) No additional external dumps are proposed. Existing OB dumps of 10.95 ha shall be provided with garland all around the excavations to prevent storm water from catchment area to come in contact with freshly excavated areas. Toe drains will be provided all along the toe of the dump to arrest any soil erosion. The dumps shall be reclaimed by plantation and the loose material slopes shall be stabilised by making contour trenches at 2m intervals and plantation done to check soil erosion.
- (iii) Check dams and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from the mining operations. 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.

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.

- (iv) Drills should be wet operated with dust extractors and rock breaker shall be used to avoid secondary blasting.
- (v) 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.
- (vi) Plantation shall be raised along the roads, dump sites etc. This includes a 30m wide green belt along the periphery of the ML area except the northern and western boundary covering a total area of 21.12 ha, 10.95 ha of OB dump and 3.61 ha area along roadside within the lease area. At least 2500 plant species/ha should be planted. Selection of native plant species shall be in consultation with local DFO/ Agriculture Department.
- (vii) In addition, a total 54.65 ha of the mining area shall be reclaimed, which includes the remaining 44.70 ha to be backfilled by planting native plant species in consultation with local DFO/ Agriculture Department. At least 2500 plant species/ha should be planted. A void of 10.55 ha shall be left as a water reservoir. The higher benches of the void shall be terraced and plantation done to stabilise the slopes. Peripheral fencing shall be done along the excavated area around the void.
- (viii) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and/or construction of peizometers at suitable locations in project area. Frequency of monitoring on quantity should be done four times in a year premonsoon (April/May), monsoon (August), post-monsoon (November), and winter (January) seasons and for quality in the month of May. Data thus generated should be submitted at regular intervals to MOEF and the CGWA.

- (ix) The existing old worked out pits from the A and D Blocks shall be used as water harvesting structures.
- (x) An ETP should be provided in the township for treatment of domestic wastes.
- (xi) 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.
- (xii) A Consent to Operate for the proposed expansion in production shall be obtained from the SPCB.

### **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) Four ambient air quality monitoring stations should be established in the core zone as well as buffer zone for SPM, RPM,  $NO_X$  and  $SO_2$ . Location of the ambient air quality stations and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- (iv) The data on environmental quality should be collected and analysed either through an inhouse environmental laboratory established with adequate number and type of pollution monitoring and analysis equipment or got analysed through an approved laboratory under the Environment (Protection) Rules, 1986 in consultation with the State Pollution Control Board.
- (v) Data on environmental quality should be regularly submitted to the Ministry including its Regional Office at Bhubaneshwar and the State Pollution Control Board/Central Pollution Control Board once in six months.
- (vi) Adequate measures for control of fugitive emissions should be taken during drilling & blasting operations, loading and transportation of mineral, etc. Fugitive dust emissions should be regularly monitored and data recorded properly. Water spraying arrangements on haul roads, loading and unloading points, and transportation of minerals, etc. should be provided and properly maintained.
- (vii) Adequate measures should be taken for control of noise levels below 85 dBA in the work environment.
- (viii) Industrial wastewater 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 and reused.
- (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 undertaked periodically and corrective measures taken, if required.

- (x) The project authorities should inform to the Regional Office located at Bhubaneshwar 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 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.
- (xii) The Regional Office of this Ministry located at Bhubaneshwar 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 <a href="http://envfor.nic.in">http://envfor.nic.in</a>.
- 3. The Ministry or any other competent authority may stipulate any further additional condition for environmental protection.
- 4. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance.
- 5. The above conditions will be enforce, inter-alia, under the provisions of Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control) of Pollution Act, 1981, Environment (Protection) Act, 1986 and Public Liability Insurance Act, 1991 alongwith their amendments and rules.

(Dr.T.Chandini) Additional Director

### Copy to:

- Secretary, Department of Environment & Forests, Government of Jharkand, Ranchi.
- Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (Eastern Zone), Eastern Zonal office, A/3 Chandrashekarpur, Bhubaneshwar –7510123.
  Department of Mines & Goology, Conservation of Mines & Goology, Conservati
- Department of Mines & Geology, Government of Jharkand, Engineering Hostel, 2<sup>nd</sup> Floor, Gol Chakker, Dhurwa, Ranchi- 02.
- 4. Office of the Chief Wildlife Warden, Government of Jharkand, Ranchi.