

No.J-11015/10/2005-IA.II(M)
Government of India
Ministry of Environment and Forests

Paryavaran Bhawan,
CGO Complex, Lodi Road,
New Delhi-110003.

Dated: 9th January 2006

To
Shri Shrenik N. Baldota
Director
M/s Ramgad Minerals & Mining P. Ltd.,
Nehru Cooperative Society,
Hospet- 583 203, Karnataka.

Sub: Iyli Gurunath Iron Ore Mine (0.5 MTPA) of M/s Ramgad Minerals & Mining P. Ltd., in Ramgad RF, Tehsil Sandur, District Bellary, Karnataka - Environmental Clearance - reg.

Sir,

This has reference to your letter dated 04.01.2005 submitting the application on the aforesaid subject and subsequent letters dated 02.05.2005, 21.05.2005, 31.08.2005.2005, and 24.10.2005 in regard to the above-mentioned subject. The Ministry of Environment and Forests has examined the application. It has been noted that the proposal is for reopening the **Iyli Gurunath Iron Ore Mine** for production of iron ore in a total lease area of **20.23 ha**. The entire lease is forestland, which is part of Ramgad Reserve Forest. Forestry clearance has been obtained on 07/13.07.2003 for 20.23ha. There are no National Parks, Wildlife Sanctuaries or Biosphere Reserves located within 10km of the mine site. The project does not involve displacement of population. Of the total lease area, area to be excavated is 12.50 ha, 1 ha is for mineral storage, 1.5 ha is for infrastructure, 2 ha is for roads and 3.23 ha is for green belt. **Annual rated capacity of the mine is 0.50 million tonnes per annum (MTPA) of iron ore production.** Mining is by opencast mechanised method and involves drilling and blasting. Mineral processing by Gravity Screening Plant proposed at the mine site. Mineral transportation of 1500 TPD is by road to Railway siding covering a distance of 28 km. Present working depth is 945 mRL, ultimate working depth is 880 mRL and water table is 495 mRL. Mining will not intersect water table. Average water requirement of 43 m³/day is to be purchased. An estimated 0.257 mill.cu.m of OB will be generated over the balance life of mine. Backfilling (100%) is proposed from 6th year when OB initially dumped in external OB dump is rehandled and backfilled the exhausted pit and thereafter concurrently backfilled. Life of the mine at the rated capacity of 0.50 MTPA is 14 years. Approval of IBM for Mining Plan has been obtained on 11.12.2004. Consent to Establish of the Karnataka State Pollution Control Board has been obtained on 30.05.2005. The project is exempt form conduct of Public Hearing. Capital cost of the Project is **Rs. 4 crores.**

2.0 The Ministry of Environment and Forests hereby accords environmental clearance to **Iyli Gurunath Iron Ore Mine** of **M/s Ramgad Minerals & Mining P. Ltd..** involving a lease area of **20.23 ha** for production of iron ore at a rated capacity from **0.50 million TPA** under the provisions of the Environment Impact Assessment Notification, 1994 and subsequent amendments thereto subject to terms and conditions mentioned below:

A. Specific Conditions

- (i) No dumping of OB where natural slope is already exceeding 28° angle.

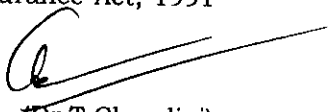
- (ii) Top soil should be stacked properly with adequate measures at earmarked sites. It should be used for reclamation and rehabilitation of the mined out areas.
- (iii) OB and other wastes should be stacked at earmarked sites only and should not be kept active for long periods of time.
Plantation should be taken up for soil stabilisation along the slopes of the dump and terraced after every 5-6 m of height and overall slope angle shall be maintained at 25-26°. Sedimentation pits shall be constructed at the corners of the garland drains. Retention/Toe walls shall be provided at the base of the dumps.
- (iv) Use of geotextiles for dump stabilisation shall be taken up in the critical areas.
- (v) Catch drains, and siltation ponds of appropriate size, gully plugs and check dams should be constructed to arrest silt and sediment flows from the mining operations. Desilting operations shall be undertaken regularly and particularly after very monsoon.
Garland drain (size, gradient & length) shall be constructed for both mine pit and for the waste dump. 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. Desilting operations shall be undertaken after very monsoon.
- (vi) Drills should be wet operated or with dust extractors.
- (vii) Controlled blasting should be practiced and only during daytime. The mitigative measures for control of ground vibrations to arrest the fly rocks and boulders should be implemented.
- (viii) Water sprinkling system should be provided to check fugitive emissions from ancillary operations such as crushing, screening plant, etc.
- (ix) 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.
- (x) Afforestation shall be done to develop a green belt of adequate width around the ML area, along roads, around crushing and screening plant, OB dumps and non-mineralised areas identified for plantation by planting suitable native species in consultation with the local DFO/Agriculture Department. The density of trees should be around 2500 plants per hectare. Substantial allocation of funds shall be made for afforestation and reclamation and details furnished to the Ministry and to the MOEF RO, Bangalore.
- (xi) The plan of mining to exhaust one pit to its ultimate working depth and move to other pit while rehandling of waste from existing OB external dumps and simultaneously backfilling the mined out pit shall be strictly implemented. Reclamation of the mined out area of 12.50 ha shall be carried out thereafter by stabilisation by proper terracing and benching and by plantation.
- (xii) Water harvesting measures should be taken up in and around mine site. Further, desiltation of water harvesting structures shall be undertaken every year before the onset of monsoon.
- (xiii) Mining shall not intersect groundwater. Prior approval of MOEF and CGWA shall be obtained for mining below water table.

- (xiv) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new peizometers at suitable locations in project area. The frequency of monitoring should be minimum four times a year - January, pre-monsoon (April/May), monsoon (August), post-monsoon (November), and winter (January) seasons for groundwater level and in May for quality, particularly for heavy metals. Data generated from groundwater regime monitoring will be submitted to CGWB, Regional Office on an annual basis.
- (xv) 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.
- (xvi) A Consent to Operate shall be obtained from the SPCB for expansion of mining operations.

B. 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 iron ore, waste dumps should be made.
- (iii) Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for monitoring RPM, SPM, NOX and SO₂. 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.
- (iv) Data on environmental 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.
- (v) 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.
- (vi) 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.
- (vii) 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 or as amended from time to time. Oil and grease trap should be installed in the mine for treatment before discharge of effluents from the Workshop. There shall be no discharge of wastewater from the mine site even during peak monsoon season.
- (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 programme of the workers should be undertaken periodically and corrective measures taken, if required.

- (ix) The data on environmental quality should be collected and analysed either through an in-house 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.
- (x) A separate environmental management cell with suitable qualified personnel should be set up under the control of a senior executive who will report directly to the head of the organisation.
- (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 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.
- (xiii) 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.
- (xiv) 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.
- (xv) 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.
- (xvi) 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>.
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 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.


(Dr.T.Chandini)
Additional Director

Copy to:

1. Secretary, Department of Environment & Forests, Government of Karnataka, Vidhana Soudha, Secretariat, Bangalore-560001.
2. Secretary (Mines, SSI & Textiles), Department of Commerce & Industries, Government of Karnataka, Secretariat, M.S.Building, Bangalore.

3. Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (SZ), E-3/240, Kendriya Sadan, IV Floor, E&F Wings, 17th Main Road, II Block, Koramangala, Bangalore-560034.
4. Secretary, Ministry of Mines, Shastri Bhawan, New Delhi.
5. The Controller General of Mines, Indian Bureau of Mines, 'Indira Bhawan', Civil Lines, NAGPUR- 440 001.
6. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi-110032.
7. Chairman, Karnataka State Pollution Control Board, Public Utility Building, M.G.Marg, Bangalore- 560001.
8. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, A-2, W-3, K.G. Marg, New Delhi-110001.
9. District Collector, Bellary, Government of Karnataka.
10. E.I.Division, Ministry of Environment & Forests, New Delhi.
11. Guard File. 12. Monitoring File. 13. Record File.