



F.No.J-11015/1140/2008- IA. II (M)
Government of India
Ministry of Environment & Forests

Tel no. 24363973

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

Dated: December 10th, 2009

To,

M/s Ramgad Minerals & Mine P. Ltd
Baldota Enclave, Abheraj Baldota Road
Hospet-583 203, Karnataka

Sub: Sangli Gold mine and Gold Extraction Plant (ML area 39.70 ha and production of 1000 TPD of Gold ore) at village Jelligeri, in Shirahatti Taluka, in Gadag District in Karnataka of M/s Ramgad Minerals & Mining (P) Ltd. - Environmental Clearance regarding.

Sir,

This has reference to your letter no. GGP/ENV/2009 dated 10.8.2009 along with a copy of EIA/EMP and public hearing reports, on the above mentioned subject seeking environmental clearance under the provisions of EIA Notification, 2006.

2. It has been noted that the proposal is for setting up of Sangli Gold mine and Gold Extraction Plant (ML area 39.70 ha and production of 1000 TPD of Gold Ore) at village Jelligeri, in Shirahatti Taluka, in Gadag District in Karnataka. The lease area is 39.70 ha, which is in Kappatgudda Range Reserve Forest. A seasonal nallah passes near the gold processing plant area and will be diverted and adequate protection from mine runoff will be undertaken. The proposed production is 0.3 MTPA of Gold Ore. Water requirement will be 550 KLD which will be met from the ground water source. About 9.94 MT of OB will be generated. Life of the mine is 6 years. Average grade of the mineral is 2.48 gm/tonne of ore. There are no wildlife sanctuaries, national parks, heritage sites etc. within 10 km distance from the mine lease boundary. The Gold Extraction plant will be established at a distance of 4 km from the mine in an area of 40.60 ha for which revenue land has been acquired. There will be about 45 land losers. No displacement of people is involved. Hydrogeological study of the area has been carried. The ground water depth varies from 1.86m to 15.82m in the buffer zone. Stage of ground water development is 30% after withdrawal by mine and plant. The mine will not intersect the ground water. Public hearing of the project was held on 7.7.2009.

3. The proposal has been considered by the Expert Appraisal Committee -2 (Mining) in its 1st meeting held during 29th - 30th September, 2009. The Ministry of Environment & Forests hereby accords environmental clearance to the said project

under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:-

A. Specific conditions:

- i. Prior clearance for diversion of 39.60 ha of forest land under Forest (Conservation) Act, 1980 from the Competent Authority shall be obtained before start of the work on the project.
- ii. The company shall pay compensation for acquisition of private land as per the Central Government/State Government norms. The compensation to be paid to the land loses shall not be less than the norms/package as per the Policy on National Resettlement and Rehabilitation Rules, 2007.
- iii. Hydro-geological study of the area shall be reviewed annually. In case adverse effect on ground water quality and quantity is observed mining shall be stopped and resumed only after mitigating steps to contain any adverse impact on ground water is implemented.
- iv. Primary survey of flora and fauna shall be carried out and data shall be submitted to the Ministry within six months.
- v. Conservation plan for wildlife shall be prepared in consultation with the Chief Wild Life Warden for implementation within six months and before start of expansion activity. The plan shall consist of in-built monitoring and evaluation mechanism. Necessary fund for implementation of the same shall be separately allocated and shall not be diverted for any other activity.
- vi. Land-use pattern of the nearby villages shall be studied, including common property resources available for conversion into productive land. Action plan for abatement and compensation for damage to agricultural land/ common property land (if any) in the nearby villages, due to mining activity shall be submitted to the Ministry within six months.
- vii. Need based assessment for the nearby villages shall be conducted to study economic measures which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.
- viii. Cultivable waste land shall be identified and fodder farming shall be taken up in phased manner.

- ix. Maintenance of village roads through which transportation of ores are undertaken shall be carried out by the company regularly at its own expenses. The roads shall be black topped.
- x. Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of nearest human habitation (including schools and other public amenities located nearest to sources of dust generation as applicable) and records submitted to the Ministry.
- xi. Transportation of ore shall be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore / dust takes place. Transportation shall be done only during day time.
- xii. Rain water harvesting shall be undertaken to recharge the ground water source. Status of implementation shall be submitted to the Ministry within six months.
- xiii. Permission from the competent authority for extraction of ground water (if any) shall be obtained.
- xiv. Monitoring of ground and surface water quality shall be regularly conducted and records maintained and data submitted to the Ministry regularly. Further, monitoring points shall be located between the mine and drainage in the direction of flow of ground water and records maintained.
- xv. Measures for prevention and control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion shall be carried out with geo textile matting or other suitable material, and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.
- xvi. Provision shall be made for the housing the labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- xvii. Trenches / garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest silt from being carried to water bodies. Adequate number of Check Dams and Gully Plugs shall be constructed across seasonal/perennial nallahs (if any) flowing through the ML area and silts arrested. De-silting at regular intervals shall be carried out.
- xviii. Status of tailing pond waste disposal and its management (including leachate) shall be regularly submitted to the Ministry. The bottom of the tailing pond shall

be made impervious to prevent contamination of ground water. Water quality monitoring outside the tailing pond area shall be monitored and data submitted regularly to the MoEF/CPCB/SPCB.

- xix. Waste water from the gold extraction plant shall be regularly tested for all relevant parameters (especially for cyanide) and the results submitted to the Ministry. It may be ensured that Cyanide levels remain within the prescribed limits all the time. Finally treated effluent will be stored in the guard pond before disposal to avoid any adverse impacts on the environment including on aquatic life.
- xx. Electrical conductivity for tailing concentrate shall be regularly tested and the results submitted regularly to the Ministry.
- xxi. Adequate air monitoring stations shall be installed in areas of human habitation near the mine and the plant and the result of ambient air quality shall be regularly submitted to the Ministry.
- xxii. All the preventive measures for storage and handling of cyanide should be undertaken. Properly trained people should be appointed in this regard.
- xxiii. Hazards of accidental Arsenic poisoning in the Gold Extraction Unit, ground water contamination and impacts of respirable dust around the drilling and blasting and ore handling sites are the most important aspects of Occupational health in such a Gold mine. Every possible occupational health and safety measure for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to mineral dust etc. shall be undertaken. The company shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to chemicals (particularly cyanide) and respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like maintaining personal equipment (including Kits for First Aid in the event of cyanide poisoning) etc. shall be taken and monitored periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow up action wherever required.
- xxiv. Green belt development and selection of plant species shall be as per CPCB guidelines. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the Ministry within six months.
- xxv. Top soil / solid waste shall be stacked properly with proper slope and adequate safeguards and shall be utilized for backfilling (wherever applicable) for

reclamation and rehabilitation of mined out area. Top soil shall be separately stacked for utilization later for reclamation and shall not be stacked along with over burden.

- xxvi. Over burden (OB) 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.
- xxvii. Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.
- xxviii. The waste water from the mine shall be treated to conform to the prescribe standards before discharging in to the natural stream. The discharged water from the Tailing Dam (if any) shall be regularly monitored and report submitted to the Ministry of Environment & Forests, Central Pollution Control Board and the State Pollution Control Board.
- xxix. Action plan with respect to suggestions/improvements and recommendations made during public consultation/hearing shall be submitted to the Ministry and the State Government within six months.
- xxx. A final mine closure plan, along with details of Corpus Fund, shall be submitted to the Ministry of Environment & Forests, 5 years in advance of final mine closure for approval.
- xxxi. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of ores and others shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. Transportation of ore shall be done only during day time. The vehicles transporting ores shall be 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 committed. The trucks transporting ore shall not pass through wild life sanctuary.
- xxxii. The environmental clearance is subject to the condition, if any, stipulated by the IBM on the mining scheme submitted by the project proponent for its 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 and waste shall be made.
- (iii) 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.
- (iv) Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, PM10 / PM2.5, SO₂, NO_x 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.
- (v) Data on ambient air quality (RPM, PM10 / PM2.5, SO₂, NO_x) 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. The monitored data of criteria pollutants mentioned above shall be regularly uploaded on the company's website and also displayed at project site.
- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) Provision shall be made for the housing the labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

- (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 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 located at 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) The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Bangalore, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests, Bangalore.
- (xv) The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality, / office of Municipal Corporation/Gram Panchayat concerned and on the company's web site within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>.
- (xvi) A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing

(Dr. P.L. Anurag)
Director

the proposal. The clearance letter shall also be put on the website of the company.

(xvii) State Pollution Control Board shall display a copy of the clearance letter at the Regional office, District Industries Centre and Collector's office / Tehsildar's Office for 30 days.

(xviii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and shall also be put on the website of the company along with the status of compliance of environmental clearance conditions. The same shall also be sent to the Regional Office of Ministry by e-mail.

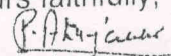
5. The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. MOEF may impose additional environmental conditions or modify the existing ones, if necessary.

6. In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.

7. 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.

8. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.

9. 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 made thereunder and also any other orders passed by the Hon'ble Supreme Court of India / High Court of Karnataka and any other Court of Law relating to the subject matter.

Yours faithfully,

(Dr. P.L. Ahujarai)
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, 4th Floor E&F, Wings 17th 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, 4th & 5th 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, Hassan Government of Karnataka.
11. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
12. Monitoring File.
13. Guard File.
14. Record File.

(Dr. P.L.Ahujarai)
Director