No.J-11015/383/2005-IA.II (M) Government of India Ministry of Environment & Forests

E mail: plahujarai@yahoo.com
Tele fax: 24363973
Paryavaran Bhawan,
C.G.O. Complex, Lodi Road,
New Delhi - 110 003
Dated the December 20, 2006

To,

The Partners
M/s Doddanavar Brothers
Mine Owners and Exporters
Doddanavar compound near Fort,
Belgaum- 590 016
Karnataka

Subject:

Expansion of Hiremagi Sulebhavi Aihole Iron Ore mining project by M/s Doddanavar Brothers located at tehsil Hungud in village Hiremagi Ramthal Sulebhavi Aihole, Tehsil Hungud, District Bagalkot in Karnataka.

Sir,

The undersigned is directed to refer to your letter no nil dated 21^{st} November, 2006 and letter dated 14^{th} December, 2006 requesting for amendment in the environmental clearance order dated 9^{th} May, 2006.

- 2. It is noted that about 1.4567 million m3 of solid waste (0.88514 million m3 of OB + 0.5717 million m3 others) will be generated during the lease period i.e upto 2010. There will not be any increase in the handling of solid waste and mining activity will be confined to the mining lease area of 30.33 ha. It is also noted that there will not be any dry/wet processing of ore waste.
- 3. In view of the above, environmental clearance accorded vide this Ministry's letter of even no dated 9^{th} May, 2006 is amended for disposal of ore waste subject to stipulation of following additional conditions:
 - i. There shall be no addition to the production capacity of 0.60 million TPA of iron ore and additional handling of wastes (1.88514 million m3 of OB waste and 0.57 million m3 of ore waste) for which Ministry accorded environmental clearance on 9th May, 2006.

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- ii. The company shall not carry dry/wet processing of ore waste.
- iii. Company shall undertake measures for control of fugitive dust while loading of saleable ore by trucks/tippers.
- iv. The company shall comply with all the conditions stipulated vide Ministry's letter of even no dated 9^{th} May, 2006.

Yours faithfully,

(P.L. Ahujarai)

Director

Copy to:

1. Chairman, Karnataka state Pollution Control Board, 6,7,8 & 9th Floors, Pullity Building, MG Marg, Bangalore-560001.

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No.J-11015/383/2005.IA.II (M) Government of India Ministry of Environment & Forests

Paryavaran Bhawan, C.G.O. Complex, Lodi Road, New Delhi – 110 003

Dated the 9th May 2006

Τď,

The Partner,
M/s Doddanvar Brothers,
Doddanawar Compound,
Near Fort, Belgaum -590016.
Karnataka.

Subject:

Expansion of Hiremagi Sulebhavi Aihole Iron Ore Mining Project of M/s Doddanavar Brothers located in Village(s) Hiremagi, Sulebhavi and Aihole, Tehsil Hungund, District Bagalkot, Karnataka – environmental clearance reg.

Sir.

This has reference to your letter No. DB:HR:IOM:05-06 dated 24.10.2005 and subsequent letters dated 01.12.2005 and 17.04.2006 on the subject mentioned above. The Ministry of Environment and Forests has examined the application. It has been noted that the proposal is for increase in annual production of iron ore from 36,000 TPA to 6,00,000 TPA. The total mine lease area of the project is 30.33 which is a forestland. Area proposed for mining is 16.0 ha, 0.30 ha area is kept for storage of topsoil, 7.50 ha is for OB dump, 0.60 ha is for mineral storage, 0.30 ha for infrastructure, 1.80 ha for roads, 3.50 ha for green belt and 0.33 ha for MSP. No ecologically sensitive area such as National park/sanctuary/biosphere reserve etc. falls in the core and buffer zone. There is no human population in the core zone, therefore, no displacement of population and R&R is involved. The annual targeted production capacity of the mine is 600,000 tonnes (0.6 million tonnes) of iron ore. Working is opencast by mechanised method involving drilling and blasting. The topography of mining area is undulating and hilly, elevation ranging from 600-708m above MSL. There are two working pits in the mine area namely South Block and North Block. The present working depth of mine is 686m above MSL and 692 m above MSL and ultimate working depth will be 662 m above MSL(46m bgl) and 674 m above MSL(26m bgl) respectively. The groundwater table is in the range of 55-58m bgl (static) and 47-54 m bgl(rainy season). Working will not intersect groundwater table. Peak water requirement is 14 m³/day, which will be met from groundwater through bore wells. Approximately 9525m³/month of solid waste will be generated. A total of 0.564 million m³ of OB has already been accumulated and it is proposed that another 1.4567million m^3 of solid waste (OB-0.88514 Mm^3 + 0.5717 Mm^3 -

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others) will be generated throughout the mine life. No backfilling is proposed at this stage. There will be two external OB dumps. Consent was granted by the Karnataka State Pollution Control Board on 29.09.2005 for expansion of iron ore from 36000TPA to 6,00,000TPA in an extent of lease area of 30.33 ha. Indian Bureau of Mines (IBM) has approved modification of mining plan on 03.12.2004 and mining scheme on 28.10.2005 for lease area of 30.33 ha. Public hearing of the project held on 19.07.2005. Ministry of Environment and Forests has granted forestry clearance for diversion of 30.33 ha forestland on 20.06.2001. Capital cost of the project is Rs.325 Lakhs.

2. The Ministry of Environment and Forests hereby accord environmental clearance to the above mentioned Hiremagi Sulebhavi Aihole Iron Ore Mining Project of M/s Doddanavar Brothers for production capacity of 600, 000TPA(0.6 million tonnes per annum) of iron ore by opencast mechanised method involving total lease area of 30.33 ha under the provisions of the EIA Notification1994 and subsequent amendments issued under Environment (Protection) Act, 1986 subject to implementation of the following conditions/safeguards.

A. Specific conditions

- (i) The mining operations shall not intersect groundwater table. Prior approval of the Ministry of Environment & Forests and Central Ground Water Authority shall be obtained for mining below water table.
- (ii) Top soil, if any shall be stacked properly with proper slope with adequate measures and should be used for reclamation and rehabilitation of mined out areas.
- (iii) No dumping of over burden shall be carried out in the flow channel of the catchment of the nallahs in the area.
- Over Burden shall be stacked at earmarked dump site(s) only and should not be kept active for long period. The total height of the dumps shall not exceed 30 m having 3 stages of 15m, 10 m and 5 m each. Overall slope of the dump shall not exceed 28°. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests on six monthly basis.
 - In critical areas use of geo textiles shall be undertaken for stabilization of the dumps.

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(vi) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. Water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted, particularly after monsoon, and maintained properly.

Garland drain (size, gradient and length) shall be constructed for both mine pit and for waste dump 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.

- (vii) 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.
- (viii) Plantation shall be raised in an area of 5 ha including a green belt in an area of 3.5 ha around ML area, mineral separation plant, OB dump sites, roads etc. by planting the native species in consultation with the local DFO / Agriculture Department. The density of the trees should be around 2000 plants per ha.
- (ix) 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.
- (x) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out four times in a year pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director Central Ground Water Board.
- (xi) Permission from the competent authority should be obtained for drawal of ground water.
- (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) Blasting shall not be carried out around 200m of Jambhunatha Temple.
 Blasting operation should be carried out only during the daytime.
 Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xiv) Drills should be wet operated or operated with dust extractors.
- (xv) The higher benches of the excavated void to be converted in to water reservoir shall be terraced and afforested to stabilize the slopes. Peripheral fencing shall be done along the excavated area.
- (xvi) Consent to operate should be obtained from SPCB before enhancing the 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.

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 mineral iron ore and waste should be made.
- (iii) Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest department and experts.
- (iv) Four ambient air quality-monitoring stations should 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.
- (v) Data on ambient air quality (RPM, SPM, SO₂, NOx) 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.

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- (vi) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- (vii) Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
- (viii) 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 should be installed before discharge of workshop effluents.
- (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 program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

- (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 Organization.
- (xi) 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.
- (xii) 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 Bangalore.
 - (xiii) 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.
 - (xiv) The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should

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extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.

- (xv) 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.
- (xvi) 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.
- (xvii) 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 Bangalore.
- 3. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 4. 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.
- 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 along with their amendments and rules.

(SATISH C. GARKOTI)
Additional Director (S)

Copy to:

- Secretary, Ministry of Mines, Government of India, Shashtri Bahwan, New Delhi
- 2. Secretary, Department of Environment, Government of Karnataka, Bangalore.

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- 3. Secretary, Department of Mines and Geology, Government of, Karnataka, Bangalore.
- 4. Secretary, Department of Forests, Government of, Karnataka, Bangalore.
- 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, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- Chairman, Karnataka State Pollution Control Board, 6,7,8 & 9th Floors, Public Utility Building, M.G. Marg, Bangalore - 560001
- 8. Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 10. District Collector Bagalkot District, Karnataka.
- 11. EI Division, Ministry of Environment & Forests, EI Division, New Delhi.
- 12. Monitoring File.
- 13. Guard File.
- 14. Record File.

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