# No. J-11015/57/2010-IA.II (M) Government of India Ministry of Environment & Forests Impact Assessment Division

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Paryavaran Bhavan, C.G.O. Complex, Lodi Road, New Delhi-110 003

Dated: 22<sup>nd</sup> May, 2013

To

## Shri M.D. Rustagi

Executive Director Rungta Mines Limited Rungta Office, Main Road, Barbil District-Keonjhar, Orissa, Pin-758035

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Subject: Ghatkuri Iron Ore Mine of M/s. Rungta Mines Ltd. for enhancement of production capacity from 1.80 million TPA to 7.552 million TPA in Ghatkuri Reserve Forest, Noamundi Tehsil, Singhbhum (W) District, Jharkhand (ML area 138.848 ha.)-Environmental Clearance regarding.

Sir,

This has reference to your letter no. RM/ED/Geo/2012-13/4350, dated 07.01.2013 and subsequent letters dated 11.03.2013 on the subject mentioned above.

- 2. The Ministry has earlier accorded the environmental clearance vide letter No. J-11015/198/2006-IA.II (M), dated 15.04.2008 for a production of 1.80 MTPA of iron ore. Further, the Ministry had prescribed TORs for enhancement of production capacity from 1.80 million TPA to 7.552 million TPA to the project on 22.06.2010. The Proponent after conducting public hearing on 23.11.2012 submitted EIA/EMP report for seeking environmental clearance. The proposal was considered in the  $5^{\rm th}$  Meeting of the Reconstituted Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal), which was held during March  $13^{\rm th}$   $-15^{\rm th}$ , 2013.
- 3. The proposal is for enhancement of production of iron ore from 1.80 million tonnes per annum (TPA) to 7.552 million TPA. The total mine lease area of the project is 138.848ha which is forest land. Out of 138.848ha, 112.775ha is to be excavated for mining activity, 8.72ha is for over burden dumps, 1.636ha is for mineral storage, 0.02ha is for infrastructure, 7.52ha is for roads and 8.177ha is for a green belt.
- 4. The project is located in Ghatkuri Reserve Forest, Noamundi Tehsil, Singhbhum (W) District, Jharkhand. The coordinates of the lease area are  $22^{\circ}$  20'– $22^{\circ}$  40' N and  $85^{\circ}$  22'  $85^{\circ}$  50' E. No National Park/Sanctuary is reported within

- 10 km radius. Ghatkuri, Latua and Henua Reserve/Protected Forests are located within 10 km radius of the Project site. No court case is reported relating to the project.
- 5. The mine working will be opencast by mechanized method involving drilling and blasting. Life of the mine is 10 years. The requirement of water will be 153 kld and will be withdrawn from the Karo River. Total 9.9 lakh  $m^3$  of wastes will be generated and dumped in Dump  $D_1$ ,  $D2 \& D_3$  during first 5 years of operation. The product will be transported from mines to three railway sidings-Gua, Barajmda and Noamundi through trippers. Some amount of material will be dispatched through trucks to various plants as would be required. Karo River is 1.75 km in east & Koina River is 6.4 km in the west direction. No National Park/Sanctuary is reported within 10 km radius. Ghatkuri, Latua and Henua Reserve/Protected Forests are located within 10 km radius of the Project site.
- 6. The public hearing of the project was held on 23.11.2012. The Indian Bureau of Mines had approved mining plan along with progressive mine closure plan of the project on 13.11.2009 for lease area of 138.848 ha. Forest clearance over 31.319 ha of broken-up forest land has been accorded by the MoEF on 18.06.2001. The proposal for diversion of 99.352 ha including safety zone area has been submitted and under consideration of the State Government.
- 7. The capital cost of the project is Rs. 2800.00 Lakhs. It is reported that expenses of Rs. 194.51 lakhs has already been incurred and a budget for environmental protection measures is Rs. 97.35 lakhs towards capital cost and Rs. 52.90 lakhs/annum towards recurring cost have been made. An amount of Rs. 22.95 lakhs/year earmarked towards welfare measures for the nearby Villages other than R&R plans.
- 8. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance for 31.319 ha for which Forest Clearance has been obtained out of total lease are of 138.848 ha to the Ghatkuri Iron Ore Mining project of M/s. Rungta Mines Ltd. for an annual production capacity of 7.552 million tonnes of iron ore under the provisions thereof subject to implementation of the following conditions and environmental safeguards.

### A. Specific Conditions

- (i) No mining activities will be allowed in forest area for which the Forest Clearance is not available.
- (ii) The project proponent will seek and obtain approval under the FC Act, 1980 for diversion of the entire forest land located within the mining lease within a period of two years from the two years from 01.02.2013 i.e. the date of issue of guidelines by FC vide there letter F. No. 11-362/ 2012-FC, failing which the mining lease area will be reduced to the non forest area plus the forest area for which the project proponent has been able to obtain the FC at the end of this time period. In the case of reduction in mine lease area, the project proponent will need to get a revised mining plan approved from the competent authority for reduced area and enter into

- a new mining lease as per reduced lease area. The EC will be construed to be available for the mining lease area as per the revised mining lease deed.
- (iii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- (iv) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for workshop and wastewater generated during mining operation within one year.
- (v) There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis in consultation with Regional Director, Central Groundwater Board.
- (vi) There shall be installation of conveyor belt system in future for transportation of ore from mine to Gua Railway siding.
- (vii) All the conditions stipulated by the Jharkhand State Pollution Control Board in their NOC shall be effectively implemented.
- (viii) The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment and Forests and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.
- (ix) The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. The Betlata nallah shall be left undisturbed and protected.
- (x) The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.
- (xi) The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time there shall be two OB dumps at the end of the mine life in an area of 2.25 ha for dump D-1 and 3.92ha for dump D-3. The maximum height of the dumps shall not exceed 60m in five terraces for D1 dump and 48m in four terraces for D3 dump. The overall slope of the dumps shall be maintained to 28°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on six monthly basis.
- (xii) Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water

and flow of sediments directly into the Betlata nallah and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the Betlata nallah and other water bodies 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 shall be constructed at the corners of the garland drains and desilted at regular intervals.

- (xiii) Dimension of the retaining wall at the toe of over burden dumps and OB benches within the mine to check run-off and siltation shall be based on the rain fall data.
- (xiv) The green belt of 8.177 ha shall be maintained by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.
- (xv) Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (xvi) Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintained.
- (xvii) Regular monitoring of water quality upstream and downstream of Betlata nallah shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment and Forests, its Regional Office, Bhubneswar, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- (xviii) 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.
- (xix) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall 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 Ministry of Environment and Forests and its Regional Office, Bhubaneswar, Central Ground Water Authority and Regional Director, Central Ground Water Board.

- (xx) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water for the project. Ground water shall not be used for the mining operations.
- (xxi) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.
- (xxii) Vehicular emissions shall 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 mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded.
- (xxiii) Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xxiv) Drills shall either be operated with dust extractors or equipped with water injection system.
- (xxv) Mineral handling plant shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (xxvi) Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- (xxvii)The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely leopard, elephant etc. spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the Wildlife Conservation Pan so prepared specific to the project site shall be effectively implemented. A copy of action plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar.
- (xxviii) Provision shall be made for the housing of construction labour 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.
- (xxix) The proponent shall complete all the tasks as per the action plan submitted with the budgetary provisions during the public hearing held on 23.11.2012.

(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.

#### **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) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM, SPM, SO $_2$  & 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.
- (iv) Data on ambient air quality (RSPM, SPM, SO<sub>2</sub> & NOx) should be regularly submitted to the Ministry including its Regional office located at Bhubaneswar and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (v) 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.
- (vi) 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.
- (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 should be installed before discharge of workshop effluents.
- (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.
- (ix) 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 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 Bhubaneswar.
- (xii) The project authorities should inform to the Regional Office located at Bhubaneswar 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 Bhubaneswar shall monitor compliance of the stipulated 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) The project proponent shall submit six monthly report on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Bhubaneswar, Central Pollution Control Board and State Pollution Control Board.
- (xv) The project proponent shall submit six monthly report on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Bhubaneswar, Central Pollution Control Board and State Pollution Control Board.
- (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 the proposal.
- (xvii) 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.
- (xviii) 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 also at web site of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same should be forwarded to the Regional Office of this Ministry located Bhubaneswar.
- 9. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 10. 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.
- 11. 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 there

under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Jharkhand and any other Court of Law relating to the subject matter.

12. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

(Dr. Saroj) Director

# Copy to:

- 1. The Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- 2. The Secretary, Department of Environment, Government of Jharkhand, Secretariat, Ranchi.
- 3. The Secretary, Department of Mines, Government of Jharkhand, Secretariat, Ranchi.
- 4. The Chief Wildlife Warden, Government of Jharkhand, Secretariat, Ranchi.
- 5. The Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (EZ), A/3, Chandra Shekar, Bhubneshwar-751 023.
- 6. The Chairman, Central Pollution Control Board, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 7. The Chairman, Jharkhand State Pollution Control Board, T.A. Division Building (Ground Floor), HEC Campus, P.O. Dhurwa, Ranchi 834004, Jharkhand.
- 8. The Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 9. The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 10. The District Collector, West Singhbhum District, State of Jharkhand.
- 11.Guard File.
- 12.MoEF website

(Dr. Saroj) Director