

Dated the 2nd January, 2009

To
M/s Rungta Mines Limited
Rungta House, Chaibasa,
Dist-West Singhbhum-833 201,
Jharkhand
E-mail: rungtas@satyam.net.in

Subject: Expansion of Kanther Koira Manganese Ore Mining Project of M/s Rungta Mines Limited, located in Village Kanther-Koira, Tehsil Bonai, District Sundergarh Orissa—environmental clearance regarding.

Sir,

This has reference to your letter No. RML/CGM/07-08/ENV-2 dated 23.06.2007 and subsequent letter dated 20.08.2008 on the subject mentioned above. The proposal is for enhancement of production of manganese ore from 3000tonnes per annum(TPA) to 20,025TPA. The total mine lease area of the project is 73.653ha, out of which 35.839ha is forestland and 37.814ha is others Government land. Area proposed for mining is 38.788ha, an area of 6.74ha is kept for OB dumps, 8.382ha for mineral storage, 0.005ha for infrastructure, 1.642ha for roads, 6.248ha for green belt and 11.848ha is others(untouched area). The Teherai nallah, the Kundra nallah and the Karo nadi are flowing in the buffer zone of the mine at a distance of 2.8km, 6.51km and 8.56km respectively from the mine lease boundary. No diversion/modification of the existing natural drainage pattern has been proposed. No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the mine. The existing elephant corridor is reported to be located at a distance of 10.5km from the lease. In support of this, a map duly authenticated by the Divisional Forest Officer cum Wild Life Warden, Bonai Division Orissa has been provided. A part of the Bhawanipur Reserve forest falls in the core zone of the mine lease area. In addition, four reserve forests namely Kathmala RF, Mendhamaruni RF, Kahjurdihi RF and Karo RF are located in the buffer zone of the mine at a distance of 1.39km,3.07km,5.24km and 7.41km respectively from the mine lease boundary. The mine working will be opencast by semi-mechanized method involving drilling and blasting. The targetted production capacity of the mine is 20,025TPA of manganese ore

and the life of mine is 18years. Approximately 74.166TPD of mineral will be transported through road. The topography of the area is hilly at an elevation above mean sea level ranging from 576m-675m RL. The ultimate working depth of mine will be 585m RL. The ground water table in the core zone varies from 556m RL to 561m RL during the pre-monsoon and the post-monsoon. The Mine working will not intersect the groundwater table. The peak water requirement of the project is estimated as 56m³ per day, out of which 52m³ per day will be obtained from the Tehrai nallah and remaining 4m³ per day from the ground water. There is no population in the core zone, therefore, displacement of population and R&R is not involved. It is estimated that 28,35,307 m³ of waste will be generated during the life of the mine, out of which 24,46,050 m³ will be backfilled in an area of 33.3ha and remaining quantity of waste will be disposed off in the form of two external dumps namely D1 and D2 having a total area of 6.74 ha. Backfilling will start from the year 2012. Plantation will be raised in an area of 55.132ha at the end of the mine life. The public hearing of the project was held on 16.06.2007, for enhancement of manganese ore production upto 22,250TPA over an area of 73.653ha. The Indian Bureau of Mines had approved mining scheme including progressive mine closure plan of the project on 18.05.2007 for an area of 73.653ha and for production of 20,025TPA of manganese ore. The Ministry of Environment and Forest conveyed its approval under Section-2 of the Forest (Conservation) Act, 1980 for diversion of 15.95ha of already broken up forestland on 25.03.2003 subject to various conditions. The capital cost of the project is Rs.90lakhs and the capital cost for environmental protection measures is proposed as Rs.39.7Lakhs. The annual recurring cost towards environmental protection measures is proposed as Rs.11.7Lakhs.

2. The Ministry of Environment and Forests has examined the application in accordance with Section 12 of the EIA Notification, 2006 read with para 1.2 of the Circular No. J-11013/41/2006-IA.II(I) dated 13.10.2006 and hereby accords

environmental clearance under the provisions thereof to the above mentioned Kanther Koira Manganese Ore Mining Project of M/s Rungta Mines Limited for an annual production capacity of 20,025 tonnes of manganese ore by opencast semi-mechanized method involving total mine lease area of 73.653ha, subject to implementation of the following conditions and environmental safeguards.

A. Specific conditions

Environmental clearance is subject to grant of forestry clearance. Necessary forestry clearance under the Forest (Conservation) Act, 1980 for an area of 35.839ha forestland involved in the project shall be obtained before starting mining operation in that area. Till such time the mining operation shall be restricted to 15.95ha of already broken up forestland for which forestry clearance was obtained on 25.03.2003. No

mining shall be undertaken in the forest area without obtaining requisite prior forestry clearance.

The project proponent shall obtain Consent to Establish from the State Pollution Control Board, Orissa and effectively implement all the conditions stipulated therein.

The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table. In case of working below the ground water table, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained for which a detailed hydro-geological study shall be carried out.

The project proponent shall ensure that no natural watercourse and/or water resources are obstructed due to any mining operations. Adequate measures shall be taken while diverting any seasonal channels originating from the mine lease, if any, during the course of mining operation.

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.

The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and their phase-wise stabilization shall be carried out. There shall be no external over burden dumps, the maximum height of the dumps shall not exceed 10m and the over all slope of the dumps shall be maintained to 2:1. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geotextiles shall be undertaken for stabilization of the dumps. Backfilling shall start from the year 2012 onwards and an area of 33.3ha 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.

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 Teherai nallah, the Kundra nallah, the Karo nadi and other water bodies. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after the monsoon, and maintained properly.

Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and the over burden dumps to prevent run off of water and flow of sediments directly into the Teherai nallah, the Kundra nallah, the Karo nadi and other water bodies and sump capacity shall 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 shall 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.

Dimension of the retaining wall at the toe of the over burden dumps and the over burden benches within the mine shall be checked. check run-off and siltation shall be based on the rain fall data.

Plantation shall be raised in an area of 55.132ha including a 7.5m wide green belt in the safety zone around the mining lease, over burden dumps, backfilled and reclaimed area, mine benches, roads etc. 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.

Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high level of SPM and RSPM such as around crushing and screening plant, loading and unloading point and transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

Regular monitoring of water quality upstream and downstream of the Tehrai Nallah and the Kundra Nallah shall be carried out and records of monitored data should be maintained and submitted to the Ministry of Environment and Forests, its Regional Office, Bhubneswar, the Central Groundwater Authority, the Regional Director, Central Ground Water Board, the State Pollution Control Board and the Central Pollution Control Board.

The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.

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 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 shall be sent regularly to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

Appropriate mitigative measures shall be taken to prevent pollution of the Karo nadi in consultation with the State Pollution Control Board.

The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water, if any) for the project.

Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.

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 the covered trucks only and the vehicles carrying the mineral shall not be overloaded.

No transportation of ore outside the mine lease area shall be carried out after the sunset.

No blasting shall be carried out after the sunset. 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.

Drills shall either be operated with dust extractors or equipped with water injection system.

Mineral handling area 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.

Consent to operate shall be obtained from the State Pollution Control Board, Orissa prior to start of enhanced production from the mine.

Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.

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.

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.

The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely sloth bear, peacock 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 Plan 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 Regional Office, Bhubaneswar.

A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance for 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 manganese ore and the waste shall be made.

(iii) Atleast four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM, 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.

(iv) Data on ambient air quality (RSPM, SPM, SO₂ & 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 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.

(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 program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures needed.

(ix) 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.

(x) 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.

(xi) 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.

(xii) 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.

(xiii) 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.

(xiv) 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.

(xv) 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.

(xvi) 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 <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located Bhubaneswar.

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

6. 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 Act, 1997.

(SATISH C. GARKO
Additional Director

Copy to:

The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.

The Secretary, Department of Environment, Government of Orissa, Secretariat, Bhubaneswar.

The Secretary, Department of Mines and Geology, Government of Orissa, Secretariat, Bhubaneswar.

The Secretary, Department of Forests, Government of Orissa, Secretariat, Bhubaneswar.

The Chief Wildlife Warden, Government of Orissa, Bhubaneswar.

The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.

The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment and Forests, A-3 Chandrashekharpur, Bhubaneswar-75102

The Chairman, Orissa State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012.

The Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.

The District Collector, Sundergarh District, Government of Orissa.

EI Division, Ministry of Environment & Forests, EI Division, New Delhi.

Monitoring File.

Guard File.

Record File.

(SATISH C. GARKO
Additional Director