21/3/15

BY SPEED POST

No. J-11015/96/2012-IA.II (M)
Government of India
Ministry of Environment, Forests & Climate Change
Impact Assessment Division

3rd Floor, Vayu Wing,
Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj,
New Delhi-110 003
Tele: 011-24695304
E-mail: sridhar-mef@nic.in
Dated: the 13th March, 2015

To,

M/s Rungta Mines Limited,
Main Road, Barbil
Distt-Keonjhar
Odisha-758035
Email: rungta _bbl@yahoo.co.in
Fax: 06767-276161

Subject: **Jajang Iron and Manganese Mine of M/s Rungta Mines Limited located at Village Jajang, Joribahal, Palsa (Ka) and Bandhubeda, District Keonjhar, Orissa (666.15 ha). Production of Iron Ore from 5.5 million TPA to 16.5 million TPA (total handling including dry processing) and Installation of Wet Beneficiation Plant of 6.0 Million TPA capacity- Environmental Clearance regarding**

Sir,

This has reference to your letter No. RM/ED/ENV/2011-12/5659 dated 20.03.2012 on the subject mentioned above and subsequent letters dated 09.07.2012, 22.06.2012, 24.01.2014, 12.03.2014 and 09.09.2014. The proposal was considered by the Expert Appraisal Committee in its meeting held on 20 June, 2012 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter J-11015/96/2012-IA-II(M), dated 23.07.2012. The proposal was considered in the EAC in the meeting held during March 20-21, 2014 wherein the Committee recommended the proposal for environmental clearance.

2. The proposal is for enhancement of production of Iron ore from 5.5 MTPA to 16.5 MTPA (12.8MTPA ROM by fresh excavation + 3.7 MTPA by collection from old dumps/material stacks), installation of Wet Beneficiation Plant of 6 MTPA throughput and pelletisation plant of 2.4 MTPA capacity over an area of 666.15 ha in Jajang, Bandhuabeda, Palsa (ka) and Joribahal villages of District Keonjhar. The proposal of pelletisation plant of 2.4 MTPA capacity has been withdrawn by the PP. The Latitude and Longitude of the site is $21^0$54'43.70"N to $21^0$56'33.50"N and $85^0$24'49.68"E to $85^0$26'50.70"E.

3. The Environmental Clearance for the mine was earlier granted by Ministry of Environment and Forests, Govt. of India vide letter no. J-11015/136/2005-IA-II(M) dated 14.06.2005 for production of 5.5 million TPA of Iron Ore. The Certified Compliance Report by MoEF Regional Office, Bhubaneswar, submitted vide letter no. 101-187/05/EPE dated 18.03.2013 was also discussed during the meeting.

4. The scheme of mining for proposed expansion has been approved by IBM; vide letter No. 314(3)/2011/MCCM (CZ)/MS-49 dated 27.03.2012 for the period 2012-13 to 2016-17. The lease area of 666.150 ha consists of 67.965 ha of Khesra forest land 417.62 ha DLC forest land, 180.565 ha of non-forest land. Out of 67.965 ha of KF, 44.70 ha has received Stage-II clearance and safety zone of 23.265 ha has received Stage-I clearance. Similarly out of 417.620 ha of DLC forest, 379.846 ha (including 4.629 ha safety zone) has already received Stage-I clearance on 19.03.2012. Balance 37.774 ha of DLC forest is acquired by DKB rail line.

5. The proposed method of mining operation in Iron Ore Quarry will be opencast fully mechanized with excavation of waste and ROM Iron ore by excavators. Loading will be done by loaders. ROM ore will be processed through screening and crushing Units to get sized and fines of iron ore. Large boulders of Iron Ore will be broken by using rock breakers to avoid blasting. Dozers will be used for road development and dump development. Transportation of iron ore will be mainly through two Railway sidings within the lease, partly through Railway siding outside lease area (together 80%). The balance 20% material will be transported by road.

6. Total ROM Iron ore production of the mine or already stacked low-grade Iron ore of the mine will be processed by dry screening/crushing dry/magnetic separation/wet beneficiation. Various types of dry processing Units are already under operation in the mine. It is proposed to install (4x500TPH) iron ore wet beneficiation plant after statutory clearances, for a feed capacity of 6.0 MTPA, which will provide 4.5 MTPA of saleable ore per annum. At the proposed production capacity, life of the mine is 8 years.

7. The solid waste generation will be 66,29,129 m^3 and tailings 17,46,030 m^3 during mining scheme period. During life of the mine, waste generation will be 68,50,599 m^3 and tailings 39,68,250 m^3. Existing 92,43,072 m^3 waste is dumped in D1,D2,D3,D4 dumps. Out of 92,43,072 m^3 of dump around 16,77,819 m^3(D1 +D2) of iron ore will be produced after processing. The balance quantity shall be dumped/stacked.Out of 66,29,129 m^3 waste generated during mining scheme period 3260078 will be dumped in external dump D4, balance will be used for backfilling in Block B & C. Tailings of 17,46,030 m^3 will be filter pressed & backfilled near block C, remaining will go to tailing pond. 68,50,599 m3 waste generated during life of mine will be dumped/ backfilled in Block B & C. Tailings of 39,68,250 m^3 will be filter pressed & backfilled near block C, remaining will go to tailing pond. 1,42,33,930 m^3 of waste & tailing shall be backfilled in an area of 225.751 ha & 12.894 ha of tailing pond will be filled by 12,00,000 m3 of tailings.

8. Total Water requirement is 14,231 m^3/day. The quantity of water will be met from Surface water & Ground water. On the basis of the approval by Single Window Clearance Authority (SLSWCA), the Industrial Promotion and Investment Corporation of Orissa Limited(IPICOL) has recommended 480 m^3 of surface water/hr (11,520m^3/day) for the beneficiation plant which includes the water requirement for dust suppression , greenbelt development and miscellaneous work. The total makeup water requirement/ day for plant operation is

10,421m^3/day for which the application is being submitted to Department of Water Resources, Govt. of Odisha for allocation of the said quantity.

9. The present working is from 617 mRL and ultimate working will be up to 467mRL. The water table (Post monsoon) is at 456 mRL. Therefore, mine working will not intersect the water table. The Baitarni river flows adjacent to the mine lease area in East direction. It was reported by PP that no Wild Life Sanctuary/Tiger Reserve/National Park/ Elephant corridor/ Schedule I species occur within 10 km of the mine lease area. For conservation of wildlife in the area, site specific conservation plan is already approved by Principal CCF (Wild Life) & Chief Wild Life Warden, Odisha. However, PP has contributed proportionate amount in preparation of regional Wild Life Management Plan. The proposed fund requirement for implementation of the Plan has already been deposited (Rs. 200 Lakhs) to DFO Keonjhar. All other works within the lease area shall be undertaken by the Company under the guidance of the Monitoring Committee and DFO and a budget of Rs. 100 lakhs has been kept by the Company for implementation of the Plan within lease area.

10. Baseline studies were carried out in October, November, and December, 2012. Public hearing was held on 17.01.2014 at Exhibition ground, near Radhakrishna temple, Jajang village of district Keonjhar, Odisha. Issues raised & the action plan with budgetary allocation is given as: Environmental protection measures (Rs 30 lacs/ annum), Educational facility (Rs.9lacs/annum), Health Care (Rs. 63.5 lacs/ annum), drinking water supply (Rs. 2 lacs/annum),peripheral development(Rs. 6.3 lacs/ annum), dust suppression (Rs. 10 lacs/annum),promotion of culture & sports (Rs. 5 lacs/ annum), support to agriculture (Rs. 5 lacs/annum).

11. The cost of the project is Rs.1400 crores and environmental cost towards EMP already incurred is Rs.1520.93 lakhs & further proposed is Rs. 698.00 lakhs. Proposed recurring cost per year is Rs. 103.08 lakhs. For Peripheral development expenditure already made is Rs. 51.24 crores and proposed recurring expenditure per year is Rs. 2.72 crores. It was informed by PP that there is no court case/litigation pending against the Project and no violation of the rule.

12. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance under the provisions thereof to the above mentioned proposal of Jajang Iron Ore and Manganese Mine of M/s Rungta Mines Limited located at Village Jajang, Palsa (Ka), Joribahal and Bandhubeda, District Keonjhar, Odisha for production of Iron Ore from 5.5 million TPA to 16.5 million TPA (total handling including dry processing) and Installation of Wet Beneficiation Plant of 6.0 Million TPA capacity within mine lease area of 666.15 ha [67.965 ha (forest area for which FC is available) + 379.846 ha of DLC forest for which FC is available + 180.565 ha (non-forest area)] excluding 37.774 ha of forest land acquired by Railways subject to implementation of the following conditions and environmental safeguards.

A. Specific Conditions

(i) The dump height should be maintained upto 60 meter and overall slope of the dump shall be upto 30°.

(ii) The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated therein.

(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) The project proponent shall obtain prior approval of the competent authorities for drawl of requisite quantity of surface water and ground water for the project before commencing the mining activity.

(v) No mining activities are allowed in forest area for which the FC is not available.

(vi) The condition 3(iii)b of the the guidelines issued by the Forest Conservation Division in this Ministry vide F. No. 11-362/2012-FC dated 1st February, 2013 is not being prescribed in view of Hon'ble Supreme Court order dated 27.01.2014 and the EC is subject to the final order of the Supreme Court in the matter.

(vii) Traffic density on the route of mineral transportation shall be regularly monitored and report shall be submitted along with compliance report.

(viii) As part of ambient air quality monitoring during operational phase of the project, the air samples shall also be analysed for their mineralogical composition and records maintained.

(ix) 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.

(x) Effective safeguard measures such as conditioning of ore with water, regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

(xi) 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.

(xii) 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 installing new piezo meters during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may 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.

(xiii) The project proponent shall regularly monitor the flow rate of the natural water streams Jalpa, Kakrapani Nallah and Baitarni river and the Suna nadi flowing adjacent to the mine lease and maintain the records.

(xiv) The reclaimed and rehabilitated area shall be afforested. 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 and its Regional Office located at Bhubaneswar on six monthly basis.

(xv) Dimension of the retaining wall at the toe of temporary over burden dumps and OB benches within the mine to check run-off and siltation shall be based on the rain fall data.

(xvi) Plantation shall be raised in an specified area including a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around the higher benches of excavated void to be converted in to water body, 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.

(xvii) 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 RPM 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.

(xviii) Process water discharge and/or any waste water shall be properly treated to meet the prescribed standards before reuse/discharge. The runoff from temporary OB dumps and other surface run off shall be analyzed for iron and in case its concentration is found higher than the permissible limit, the waste water should be treated before discharge/reuse.

(xix) The decanted water from the beneficiation plant and slime/tailing pond shall be re-circulated within the mine and there shall be zero discharge from the mine.

(xx) Regular monitoring of the flow rate of the springs and perennial nallahs shall be carried out and records maintained.

(xxi) Regular monitoring of water quality, upstream and downstream of river shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment and Forests, its Regional Office, Bhubaneswar, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.

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

(xxiii) 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 from mine face to the beneficiation plant. The vehicles shall be covered with a tarpaulin and shall not be overloaded.

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

(xxv) Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bhubaneswar.

(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 undertake all the commitments made during the public hearing and effectively address the concerns raised by the locals in the public hearing as well as during consideration of the project, while implementing the project.

(xxviii) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna 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.

(xxix) 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 Iron Ore Processing/Beneficiation 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 Processing/Beneficiation of mineral iron ore and waste should be made.

(iii) At least four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10 micron i.e., PM_{10}) and 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. The data so recorded 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.

(iv) 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.

(v) There will be zero waste water discharge from the plant.

(vi) 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.

(vii) 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.

(viii) 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.

(ix) 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.

(x) 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.

(xi) 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.

(xii) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Bhubaneswar, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Bhubaneswar, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.

(xiii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

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

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

(xvi) The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and 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 at Bhubaneswar.

13. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

14. 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.

15. 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 Odhisa and any other Court of Law relating to the subject matter.

16. 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. U. Sridharan)
Scientist 'F'

Copy to:

(i) The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
(ii) The Secretary, Department of Environment, Government of Odhisa, Secretariat, Bhubaneswar.
(iii) The Secretary, Department of Mines and Geology, Government of Odhisha, Secretariat, Bhubaneswar.
(iv) The Secretary, Department of Forests, Government of Odhisha, Secretariat, Bhubaneswar.
(v) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
(vi) The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment and Forests, A-3 Chandrashekharpur, Bhubaneshwar-751023.
(vii) The Chairman, Odhisa State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneshwar-751012.
(viii) The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
(ix) The Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
(x) The District Collector, Keonjhar District, Government of Odhisa.
(xi) Record File.
(xii) MoEF Website

(Dr. U. Sridharan)
Scientist 'F'