



STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, (SEIAA), ORISSA.

(Constituted vide order No. S.O. 2674 (E) Date 17th Nov. 2008 of Ministry of Environment & Forest, Govt. of India, Under Environment Protection Act, 1986.) Qr. No. 5RF-2/1, Unit-IX, Bhubaneswar-751022
E-mail-seiaaorissa@gmail.com, Website - www.orissaseiaa.gov.in

Ref. No. _____

Dt. _____

From

Bhagirathi Behera, IFS
Director, Environment-cum-
Spl. Secy. to Government
Forest & Env. Deptt.
& Member Secretary, SEIAA

To

Sri K.C Pradhan (Proprietor)
Gonua Iron & Manganese Mines
Plot No-1262, Unit-IX
Bhubaneswar-751022

Sub: Environmental Clearance of Gonua Iron & manganese Ore Mines at Gonua, Bonai, Dist-Sundargarh of Sri K.C Pradhan.

Sir,

This has reference to letter no GONUA/907/2007-1200 dated 30.12.2006 and subsequent letter dated 15.05.2009, 16.05.2009, 7.12.2009, 19.03.2010, 22.03.2010, 03.06.2010 along with the applications for Terms of Reference (ToR) for grant of Environmental Clearance, on the above mentioned subject I am directed to say that the State EIA Authority, Orissa, has considered the application on the proposal for Gonua iron & Manganese ore mines at Gonua, Bonei in the district of Sundargarh.

The proposal is for enhancement of production of iron ore from 15,000 TPA to 50,000 TPA. The ToR for the project were specified on 15th October.2007 by the Expert Appraisal Committee of MOEF, Govt. of India. The mine lease area is 12.56 ha. The mining lease was granted in favour of Sri K.C Pradhan over an area of 12.56 ha and the lease deed was executed for a period of 20 years with effect from 13.03.1991. The lease area of Gonua Iron Ore mine over 12.56 ha. falls in the village Gonua of District Sundargarh. Out of the total ML area of 12.56 ha. 12.455 ha. is considered as Forest land as per DLC in 1996. The area was categories as non forest waste land prior to 1996. The State Forest Department considered the area as forest land under DLC 1996 which was challenged at the honorable court and the case was admitted and mining operation was allowed to continued till the case is finalized. Mining plan is approved for the production of 50,000 TPA. The Public Hearing was conducted on 17.06.08. No National Park/Sanctuary is located within 10 km. of the mine lease. Mine working will be opencast and semi-mechanized involving drilling and blasting. Water requirement for the project is estimated at 25 M3/day. Source of water is Kakarpani Nalla. The mine has not obtained permission for drawing ground water from concerned Authority. The mine working will

not intersect ground water table. Waste generation will be 351220m³. The mine has earmarked 1.45 ha. as OB dump area (conceptual period).

Based on the informations, documents and clarifications provided by you, the State EIA Authority here by accords for grant of Environmental Clearance in favour of the project till the ML is valid i.e. 12.03.2011 under the provisions of the EIA Notification, 2006 & 2009 and subsequent amendment thereto under various MOEF, circulars their under and subject to the following stipulated conditions:-

Stipulated Conditions:-

- i) The applicant (Project proponent) will take necessary measures for prevention, control and mitigation of Air pollution, Water pollution, Noise pollution and Land Pollution including solid waste management as mentioned by him in Form-1, Final EIA reports and Environment Management Plan (EMP) in compliance with the prescribed statutory norms and standards.
- ii) The applicant will take necessary steps for socio-economic development of the people of the area on need based assessment for providing employment, education, health care, drinking water and sanitation, road and communication facilities etc. after a detailed socio-economic survey. (primary)
- iii) The applicant will comply to the points, concerns and issues raised by the people during public hearing on 17.06.08 in accordance with the commitments made by him thereon.
- iv) The applicant will take statutory clearance /approval/permissions from the concerned authorities in respect of his project as and when required.
- v) For post environmental Clearance monitoring, the applicant will submit half-yearly compliance report in respect of the stipulated terms and conditions of this Environmental Clearance to the State Environment Impact Assessment Authority (SEIAA), Orissa on 1st June and 1st December of each calendar year.
- vi) The core zone should be monitored intensively with no. of station as prescribed CPCB, Delhi and unit of pollutant level should be expressed as NAAQ of CPCB, Delhi. The detail methodology adopted for analysis of samples shall be clearly indicated.
- vii) The proponent shall submit ground tothing base line data on flora and fauna and CSR activities already carried out within three months to the SEIAA, Orissa.
- viii) No two pits shall be simultaneously worked. After exhausting the first mine pit and before starting mining operations in the next pit, reclamation and plantation works in the exhausted pit shall be completed so as to ensure that reclamation, forest cover and vegetation should be visible during the first year of mining operations in the next pit. This process will follow till the last pit is exhausted. Adequate rehabilitation of mined pit shall be completed before any new ore body is worked.
- ix) Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.
- x) Zero waste mining concept shall be implemented either by putting up pelletisation plant or disposal of low grade ores/fines to prospective buyers.
- xi) The following shall be implemented viz. (a) dump run-off should be diverted in to setting ponds until it is clear. (b) Adequate rain water harvesting and ground water recharging facilities should be developed in the core zone; (c) attempt should be made to achieve zero water balance.
- xii) Maintenance of roads through which transportation of ores are undertaken shall be carried out by the project proponent regularly at its own cost.
- xiii) 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 shall be submitted to the SEIAA, Orissa.

- xiv) Transportation of ore shall be done by covering the trucks with tarpaulin or others suitable mechanism so that no spillage of ore/dust take place.
- xv) Rain water harvesting shall be undertaken to recharge the ground water source.
- xvi) Monitoring of ground and surface water quality shall be regularly conducted and records should be maintained and data shall be submitted regularly to the SEIAA, Orissa.
- xvii) The proponents shall ensure that no silt originating due to mining activity is transported in the surface water course. 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.
- xviii) Trenches/garland drains shall be constructed at foot of dumps to arrest silt from being carried to water bodies. Adequate number of check dams shall be constructed across seasonal/ perennial Nallahs (if any) flowing through the ML area and silts be arrested. De-silting at regular intervals shall be carried out.
- xix) 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.
- xx) Occupational health and safety measures 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 carried out. The proponent shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programmes for worker on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow of action where ever required. Occupational health centre shall be established near the mine site itself.
- xxi) Shelter belt i.e. wind break of 15 m. width and consisting of at least 5 tires around the lease facing the human habitation, school/ agricultural fields etc. (if any in the vicinity), in the safety zone /back- field and reclaimed areas around voids and roads shall be raised. Green belt development and selection of plant species shall be as per CPCB guide lines. Density of the trees has to be around 2500 plants for hectare. Herbs and shrubs shall also from part of afforestation programme besides tree plantation help and guidance of local DFO may be sought in the matter. Details of year wise affrestation programme including rehabilitation of mined out area shall be submitted to the SEIAA, Orissa, within six months.
- xxii) This Environmental Clearance is subject to Forest clearance under the Forest (Conservation) Act, 1980.
- xxiii) The mining operations shall be restricted to above ground water table and it should not intersect the ground water table.
- xxiv) The top soil shall temporarily be stored at earmarked site (s) only and it should not be kept unutilized for long (not more than three years). The topsoil shall be used for land reclamation and plantation.
- xxv) 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 its phase-wise stabilization shall be carried out. Proper terracing of OB dump shall be carried out so that the overall slope shall not exceed 28^o Backfilling shall be done as per approved mining plan. Back-filling to start from 3rd year onwards of the mining operation & the entire quantity of waste generated shall be backfilled and liquidated within five years. There shall be no external over burden dumps after the 6th year of the

- mining operation. The backfilled area shall be afforested. Back-filling has to be done in a manner that it is restored to the normal ground level. Monitoring & management of rehabilitated areas should continue till the vegetation is established & becomes self generating. Compliance status to be reported to the appropriate authorities.
- xxvi) The funds earmarked for the environment protection measures shall be judiciously utilized. Under no circumstances this funds shall be diverted for other purposes. Year-wise expenditure for this fund should be reported to the SEIAA, Orissa.
- xxvii) The critical parameters parameters such as SPM, RSPM, NOX in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain. The circular No. J-20012/1/2006-IA.II(M) dated 27.05.09 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.
- xxviii) A final mine closure plan along with details of Corpus Fund shall be submitted to the SEIAA 5 years in advance of final mine closure for approval.
- xxix) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water) required for the project.
- xxx) The above mentioned stipulated conditions shall be complied in time bound manner. Failure to comply with any of the conditions mentioned above may result in withdrawal of this environmental clearance and attract action under the provisions of Environment Protection (EP) Act, 1986.

Member Secretary

Memo No. _____

Dt. _____

Copy to:

1. Ministry of Environment & Forests Govt. of India, Paryavaran Bhawan, C.G.O. Complex, Lodhi Road, New Delhi-110003 for kind information.
2. Principal Secretary to Govt., Forests & Environment Dept. for kind information.
3. Chairman, State Pollution Control Board, Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-8, BBSR for kind information.
4. Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A-31, Chandra Sekharpur, Bhubaneswar for kind information.
5. Chairman, Central Pollution Control Board, CBD-cum-office Complex, East Arjun Nagar, New Delhi, 110032 for kind information.
6. To the Collector, Dist- Sundargarh information and necessary action.
7. Copy forwarded to the Chairman/ Member Secy./Member, SEIAA for kind information.
8. Chairman SEAC/Secretary SEAC, Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for kind information.
9. Guard file for records.

Member Secretary