



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
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Ref. No. _____

Dt. _____

SEIAA – 66/10

From

Bhagirathi Behera, IFS
Director, Environment-cum-
Special Secretary to Gov.
& Member Secretary, SEIAA

To

Shri Prabodh Mohanty
Mines Owner
Weigh Bridge Road
Post Box No. 21, Po. Barbil
Dist. Keonjhar - 758035

Sub: Environmental Clearance for Nuagaon Iron & Manganese Mines over an area 29.257 ha. to increase iron ore production upto 4,00,000 TPA, manganese ore up 25000 TPA with screening plant 350 TPH at Nuagaon in the district of Sundargarh.

Sir,

This has reference to letter no. PM/BBL/130/04/2009 dated 08.01.2009 along with application for Terms of Reference (TOR) and subsequent application no. nil dtd. 10.01.10 no. PM/BBL/10-11/959 dated 23.06.10 and PM/BBL/BOI/69/2010 dated.01.09.10 on the above mentioned subject. The State EIA Authority, Orissa has considered the application.

The proposal is for production of iron ore upto 4,00,000 TPA, manganese ore production upto 25,000 TPA with screening plant 350 TPH. The mine lease area is 29.257 ha. is predominantly hilly (23.815 ha) devoid of vegetation. There is no forest land in mining lease area. Mine working will be opencast semi-mechanized involving drilling and blasting. Water requirement is 100 KLD and source will be ground water and surface water. The iron ore pit going to the depth of 15m from the top. It is proposed to go upto 22m. The drainage is towards Karo nala flowing in the NE at about 100m. There are about 26 mines located in the area. The mining plan for the proposed production capacity for the year 2009-10 to 2013-14 is approved by IBM vide letter dated 02.03.2010. The life of the mine will be 9 years for iron ore and 28 years for manganese ore. Thus over all life of the mine will be 28 years. The TOR has been duly issued by SEAC to the project proponent vide letter No. 71 dt. 11.09.09. The public hearing was conducted on 06.05.2010. Representative of M/s Geomin Consultants made a presentation for

along with a screening facility of 350 TPH in the SEAC meeting held on 19th & 20th July, 2010. The committee decided to consider environmental clearance for the proposal after getting certain information /document from the project proponent. The project proponent furnished the desired information/document.

Based on the information /documents and clarifications provided and as recommended by the SEAC, the State EIA Authority, Orissa hereby accords environmental clearance in favour of the projects for a period of 5(five) years under the provisions of the Environment Assessment Notification 2006 and 2009 and subsequent amendment thereto and under various MoEF, Government of India circulars thereunder and subject to the following stipulated conditions specified below:

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 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 primary socio-economic survey.
- iii) The applicant will comply to the points, concerns and issues raised by the people during public hearing on 06.05.10 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 Environmental Clearance to the State Environmental 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 stations as prescribed by CPCB, New Delhi and unit of pollutant level should be expressed as NAAQ of CPCB, New Delhi. The detailed methodology adopted for analysis of samples shall be clearly indicated.
- vii) The proponent shall submit baseline data on flora & fauna and CSR activities already carried out within three months to the SEIAA.
- viii) Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.
- ix) Zero waste mining concept shall be implemented either by putting up pelletisation plant or dispose of low grade ores /fines to prospective buyers.
- x) The following shall be implemented viz. (a) dump run-off should be diverted into setting ponds (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.
- xi) Maintenance of roads through which transportation of ores are undertaken shall be carried out by the project proponent regularly at its own cost.
 - xii) Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of be 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.
 - xiii) Transportation of ore shall be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore /dust takes place.
 - xiv) Rain water harvesting shall be undertaken to recharge the ground water source.
 - xv) 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.
 - xvi) The proponent 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.
 - xvii) 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.
 - xviii) Provision shall be made for the housing of 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.
 - xix) 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 programme for workers 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 up action wherever required. Occupational Health Centre shall be established near the mine site itself.
 - xx) Shelter belt i.e. Wind Break of 15 m width and consisting of at least 5 tires around lease facing the human habitation, school /agricultural fields etc. (if any in the vicinity), in the safety zone /back-filled & reclaimed areas. Around voids & roads shall be raised. Green belt development and selection of plant species shall be as per CPCB guidelines. Density of the trees has to be around 2500 plants per hectare. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. Help

- and guidance of local DFO may be sought in the matter. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the SEIAA, Orissa within six months.
- xxi) The Environmental Clearance is submitted to Forest Clearance under the Forest (Conservation) Act, 1980.
 - xxii) The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table.
 - xxiii) The top soil shall temporarily be stored at earmarked site (s) only and it should not be kept unutilized for long (not more than 3 years). The topsoil shall be used for land reclamation and plantation.
 - xxiv) The over burden (OB) generated during the mining operation shall be stacked at earmarked dump sites (s) only and 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. Back-filling 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 & 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 area should continue till the vegetation is established & becomes self-generating. Compliance status to be reported to the appropriate authorities.
 - xxv) 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.
 - xxvi) The critical 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 27.05.2009 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.
 - xxvii) 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.
 - xxviii) 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.
 - xxix) The project proponent shall prepare wild life conservation plan in consultation with DFO and adequate safety and mitigation measures should be incorporated to protect the wild life, flora, fauna to mitigate adverse impact.
 - 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) Act, 1986.

2. This Environment clearance is subject to the grant/approval/sanction of mining lease by the competent authority as required under law. The Environment Clearance will stand automatically cancelled if mining lease is not sanctioned or is cancelled.

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., Orissa for kind information.
3. Chairman, State Pollution Control Board, Paribesh 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, Government of India, 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. The District Collector & Magistrate, Sundargarh for kind information and necessary action.
7. Copy forwarded to the Chairman/ Member Secy. / Member, SEIAA for kind information.
8. Chairman, SEAC/Secretary, SEAC, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for kind information.
9. Guard file for records.

Member Secretary