



सत्यमेव जयते

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

(Constituted vide order No. S.O. 2674 (E) Date 17<sup>th</sup> 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](mailto:seiaaorissa@gmail.com), Website - [www.orissaseiaa.gov.in](http://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

M/s Deepak Steel & Power Ltd.  
Ispat Bhawan, Post- Barbil  
758035, Dist- Keonjhar , Orissa

Sub: Environmental Clearance in favour of Deepak Steel & Power Ltd. for Khandabandh Iron Ore mine for production of 0.7 MTPA iron ore and 250 TPH crusher at Khandabandh, district Keonjhar.

Sir,

This has reference to your letter no Nil dated 04.01.2008, No Nil dated 23.06.2009, No. 12 dated 03.03.10, No. 13 dated 01.04.10 and No. DSPL/RQP/09-10 dated 04.08.10 along with the application in the prescribed format (Form-1) and Terms of Reference (TOR) for Environmental Clearance on the above mentioned subject, I am directed to say that the State EIA Authority considered the application on the proposal for Khandabandh iron ore mines production of 0.7 MTPA iron ore and 250 TPH crusher at near village Khandabandh district, Keonjhar. The proposal is for production of 0.7 MTPA iron ore and 250 TPH crusher. The ToR for this project were prescribed on dt. 18.07.2008 by the Expert Appraisal Committee of MoEF, Govt. of India. The mine located over an area of 38.687 ha is completely forest land. Mining lease was initially granted in favour of M/s. TISCO Ltd. After surrender of the lease by the erstwhile Lessee, the State Govt. granted this area in favour of Deepak Steel and Power Ltd. For a period of 25 years from the date of execution of lease. The mine has applied for forest clearance. Mining plan is approved for the production of the above mentioned quantity for which it has applied for environmental clearance. The public hearing was conducted on 18<sup>th</sup> February 2009. No National Park/ Sanctuary is located within 10 km of the mine lease area. Mine working will be opencast semi-mechanized involving drilling and blasting. Water requirement for the

project is estimated to be 150 m<sup>3</sup>/day. The source of water is Suna River. The mine working will not intersect groundwater table. Waste generation will be 98,836m<sup>3</sup> during plan period. The mine has earmarked 1.318 ha as OB dump area (Plan period). The mine has proposed garland drain, check dams and retaining wall to prevent wash out of loose materials from the dumps. Dump slope will be stabilized by putting vegetation. The proposal was placed in the SEAC meeting held during 17<sup>th</sup> & 18<sup>th</sup> August, 2009. The SEAC decided to consider grant of environmental clearance after receipt of certain clarifications/ documents from the proponent. The compliance of the proponent to the observation of SEAC was scrutinized by the SEAC.

Based on the information, documents and clarifications provided by you the State EIA Authority here by accords for grant of Environmental Clearance in favour of the project for a period of 5 (five) years for production of 0.7 MTPA iron ore and 250 TPH crusher at near village Khandabandh district Keonjhar under the provisions of the Environment Impact Assessment Notification, 2006, Notification, 2009 and subsequent amendment there to under various MOEF, Govt. of India circulars there under and subject to the following stipulated conditions.

**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.**

**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 primary socio-economic survey.
- iii) The applicant will comply to the points, concerns and issues raised by the people during public hearing on 18.2.09 in accordance with the commitments made by him thereon.
- iv) The applicant will take statutory clearance/approval/permission 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 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year.

- vi) The core zone should be monitored intensively with number of stations as prescribed by CPCB, Delhi and unit of pollutant level should be expressed as NAAQ standards of CPCB, Delhi. The detail methodology adopted for analysis of samples shall be clearly indicated and should be in accordance of NAAQs.
- vii) The proponent shall submit ground tooting baseline data on flora and 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 disposing off of low grade ores/ fines to the prospective buyers.
- x) The following shall be implemented viz. (a) dump run-off should be diverted into settling ponds (b) adequate rain water harvesting and ground water recharging facilities should be adopted 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 his own cost.
- xii) Fugitive dust generation shall be controlled and 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 the SEIAA, Orissa annually.
- 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) 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.
- xv) 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 materials, and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.
- xvi) 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.

- xvii) 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.
- xviii) 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.
- xix) Shelter belt, i.e. Wind Break of 15 m width and consisting of at least 5 tiers 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 and 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.
- xx) This Environmental clearance is subject to Forest clearance under the Forest (Conservation) Act, 1980.
- xxi) The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table. The depth of mine should be restricted to the depth mentioned in Form 1-A at the most.
- xxii) 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.
- xxiii) 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° Backfilling shall be done as per approved mining plan mine closure plan. Back-filling to start from 3<sup>rd</sup> year

onwards of the mining operation & the entire quantity of waste generated shall be backfilled and used within five years. There shall be no external over-burden dumps after the 6<sup>th</sup> 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 and management of rehabilitated areas should continue till the vegetation is established and becomes self-generating. Compliance status shall be reported to the appropriate authorities.

- xxiv) The funds earmarked for the environment protection measures shall be judiciously utilized. Under no circumstances this funds shall be diverted for other purposes like regular maintenance of vehicles/ machineries/ purchase or salary of staff. Year-wise expenditure for this fund should be reported to the SEIAA, Orissa.
- xxv) The critical parameters such as SPM, RSPM, NO<sub>x</sub> 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, the 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 the Ministry of Environment and Forests, which is available on the website of the Ministry ([www.envfor.nic.in](http://www.envfor.nic.in)) shall also be referred to in this regard for its compliance.
- xxvi) 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.
- xxvii) 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.
- xxviii) 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 the adverse impacts of mining on them.
- xxix) 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. The Collector, Dist- Keonjhar, for kind 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**