F. No. J-11011/372/2006- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
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Dated 29th March, 2007

To,

Shri R.P. Goyal
Director
M/s Bhushan Power & Steel
N-3/28, Nayapalli, I.R.C. Village
Bhuvaneshwar
Orissa –751 015

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Subject : Expansion of Integrated Steel Plant (1.20 MTPA to 2.20 MTPA) and Captive Power Plant (330 MW) at Thelkoloi, Rengali, Sambhalpur, Orissa by M/s Bhushan Power & Steel.

Sir,

This has reference to your letter no. nil dated 8th December, 2006 alongwith application and EIA/EMP and subsequent clarifications furnished vide letters dated 27th November, 2006, 8th December, 2006, 21st December, 2006 and 5th January, 2007 for environmental clearance on the above mentioned project. The Ministry of Environment and Forests has examined your application. It is noted that M/s. Bhushan Power & Steel Ltd. has proposed for the expansion of Integrated Steel Plant (1.20 MTPA to 2.20 MTPA) and Captive Power Plant (330 MW) at Thelkoloi, Rengali, Sambhalpur, Orissa as per details given below :

Name of Products, Byproducts and Intermediates products	Existing	Proposed activity	Total
Main Products : Steel	1.2 MTPA	1 MTPA	2.2 MTPA
By products : Co-generation	140 MW	290 MW	430 MW
Intermediate Products : Sponge Iron	1.3 MTPA	0.4 MTPA	1.7 MTPA

The expansion project will be located within 1,721 acres land. No national park, sanctuary, biosphere reserves and monuments of heritage site are located within 20 km. No Rehabilitation and Resettlement is involved in the expansion project. 146.18 acre (59.16 ha.) forest land involved in the project has been approved by the Ministry vide letter no. 8-58/2004 FC dated 26th May, 2005.

2.0 Fugitive emissions will be controlled through dust suppression system to coal / raw material stockpiles. ESP, bag house, bag filters and dry fog system will be provided to control gaseous emissions. Total water requirement from Hirakud Reservoir will be 93,262 m^3/day as

per the permission accorded by the Department of Water Resources, Govt. of Orissa. All the treated wastewater will be recycled and reused and no water will be discharged outside the premises. BF slag will be granulated and sold to cement plants. SMS slag from IF, EAF and LF will be used as landfill. Scrap from SMS will be recycled in the steel plant. Scale and debris from CPP and rolling mill will be reused in the sinter plant. Fly ash will be sold to cement and brick manufacturers and bottom ash will be used for filling low lying areas. Dust from DRI, pellet plant and SMS will be recycled to sinter plant. No char will be disposed off and efforts will be made to use char in AFBC boiler only.

3.0 Public hearing meeting was held on 21st April, 2006. 'Consent for Establishment' has been accorded by the OSPCB vide letter no.24551/Ind-II-NOC-4041 dated 5th October, 2006 Total cost of the project is Rs. 5,500.00 Crores.

4.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 subject to strict compliance of the following specific and general conditions:

A. **SPECIFIC CONDITIONS :**

i) The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous stack emission monitoring for all the major stacks will be carried out and reports submitted to the OSPCB & CPCB. The emission levels from all the sources shall be kept below 100 mg/Nm^3. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.

ii) Continuous on-line ambient air quality monitoring stations shall be setup at three locations around the project site and reports submitted to the OSPCB & CPCB.

iii) In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Dust suppression system shall be provided to coal / raw material stockpiles. Bag house shall be provided to BF-dry gas cleaning system. Bag filters shall be provided to Fume extraction system, RMP crusher etc. ESP shall be provided to Pellet Plant, DRI kilns, BF stock house, Sinter plant, DRI – WHRB stacks, AFBC, CFBC, Lime plant kiln, Dolo plant kiln and Ferro-Alloy plant. Dry fog dust suppression system shall be provided to BF cast house. Further, specific measures like water sprinkling shall be carried out at the coal yard, wagon tippler and truck tippler etc. Fugitive emissions shall be controlled, regularly monitored and records maintained.

iv) Total requirement of the water from Hirakud Reservoir shall not exceed 93,252 m^3/day as per permission accorded by the Department of Water Resources, Govt. of Orissa. All the treated wastewater shall be recycled & reused either in the process or for green belt development. No effluent shall be discharged outside the premises and 'Zero' discharge shall be adopted. Domestic wastewater shall be treated in septic tank followed by soak pits.

m^3/hr.

v) Ground water monitoring around the solid waste disposal site / secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhuvaneshwar, CPCB and OPCB.

vi) Slag from BF shall be granulated and sold to cement plants. SMS slag from IF, EAF and LF shall be used for internal road making and filling low-lying areas. Scrap from SMS shall be recycled in the steel plant. Scale and debris from CPP and rolling mill shall be reused in the sinter plant itself. Dust from DRI, pellet plant and SMS shall be recycled to sinter plant. No char shall be disposed off and efforts shall be made to use char in AFBC boiler.

vii) Possibilities shall be explored regarding use of Fly ash from AFBC, CFBC boilers of CPP by the cement and brick manufacturing units in the nearby areas. Ash shall be utilized as per the 10 years action plan submitted. Bottom ash shall be disposed off in a suitably designed landfill as per CPCB guidelines to prevent leaching to the sub-soil and underground aquifer.

viii) The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.

ix) Green belt of adequate width and density shall be provided to mitigate the effects of fugitive emissions in at least 462 acres out of total 1,721 acre land in and around the plant as per the CPCB guidelines in consultation with DFO.

x) Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act. The company shall install CO detectors to detect leakage of CO from the BF. Cardiopulmonary Resuscitation facilities and mediated Oxygen cylinder facilities shall be provided.

xi) All the recommendations of the Charter on Corporate Responsibility for Environmental Protection (CREP) issued for the Integrated Iron and Steel Sectors shall be implemented.

B. **GENERAL CONDITIONS:**

i. The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OSPCB) and the State Government.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.

iii. At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO_2 and NO_x are anticipated in consultation with the OSPCB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhopal and the OSPCB/CPCB once in six months.

iv. Industrial wastewater shall 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 form time to time. The treated wastewater shall be utilized for plantation purpose.

v. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).

vi. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.

vii. As mentioned in the EIA/EMP, Rs. 440.00 Crores and Rs. 55.00 Crores earmarked towards the capital cost and recurring cost/annum for environmental pollution control measures shall be judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.

viii The Regional Office of this Ministry at Bhuvaneshwar / CPCB / OSPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.

ix The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the OSPCB/Committee and may also be seen at Website of the Ministry of Environment and Forests at http./envfor.nic in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.

x. Project authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

5.0. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

6.0. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.

7.0. 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, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules

13/07

(Dr. P. B. Rastogi)
Additional Director

Copy to -

1. The Secretary, State Department of Environment, Govt. of Orissa, Bhubaneswar, Orissa.
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi – 110 032.
3. Chairman, Orissa Bengal Pollution Control Board, Parivesh Bhavan, A/118, Neelkanthhanagar, Unit-8, Bhuvaneswar - 751 012, Orissa.
4. The Chief Conservator of Forests (Eastern), Regional Office (EZ), A/3, Chandrasekharpur, Bhuvaneswar - 751 023, Orissa.
5. Joint Secretary (CCI-I). Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Monitoring Cell
8. Guard File.
9. Record File.

29/3/07

(Dr. P. B. Rastogi)
Additional Director