

Department of Environment  
Government of West Bengal  
Block G, 2<sup>nd</sup> Floor, Writers Building  
Kolkata : 700001

No. EN/674/T-II-1/150/2007

Date : 24/03/2008

To  
M/S Bravo Sponge Iron Pvt. Ltd  
P-41, PrincepStreet, 5<sup>th</sup> Floor  
Room No. 509  
Kolkata 700072

*Subject: Environmental Clearance for the proposed Expansion of Sponge Iron Plant of M/s. Bravo  
Sponge Iron Pvt. Ltd. at Vill. Mahuda, P.O. Rukni, District- Purulia, West Bengal".*

Sir,

This has a reference to your application no .BSI/07-08/185 dated 9<sup>th</sup> November, 2007 and subsequent communications in this regard, praying for Environmental Clearance for the Expansion of Sponge Iron Plant of M/s. Bravo Sponge Iron Pvt. Ltd. at Vill. Mahuda, P.O. Rukni, District- Purulia, West Bengal". The proposal has been examined and processed in accordance with EIA Notification, 2006

It is noted that the salient features of the project, for which for Environmental clearance has been considered are as follows :

1. This is a proposal for expansion of capacity of the existing Sponge Iron Plant from 100 TPD to 195 TPD by installation of one 95 TPD DRI Kiln.
2. Salient features of the proposed expansion project are :
  - i. Location of the Site - Existing premises at Vill.-Mahuda, P.O.-Rukni, Dist. - Purulia, West Bengal.
  - ii. Land Area - The proposed expansion shall be carried out within the existing premises of area 6.095 acres, no additional land will be acquired.
  - iii. Installed Production Capacity - Proposed for capacity enhancement of Sponge Iron Plant from 100 TPD to 195 TPD by installation of one additional 95 TPD DRI Kiln.
  - iv. Raw Materials – Iron Ore, Non-coking Coal and Dolomite.
  - v. Emission Sources – DRI Kiln, Raw Material Preparation Plant, Cooler Discharge, Stock House, Product House, transfer Points, etc.
  - vi. Total Water Requirement - 436 KLD from Bore Wells (Fresh water requirement – 107 KLD). Ground Water abstraction is subject to approval from Competent Authority.
  - vii. Additional Power Requirement - 350 KVA, WBSEB.

The State Level Environment Impact Assessment Authority (SEIAA), examined the proposal and also perused the recommendations of the State Level Environment Appraisal Committee (SEAC).

After due consideration of the project proposal, and after considering the recommendations of the State Level Expert Appraisal Committee (SEAC), the State Level Environment Impact Assessment Authority accords Environmental Clearance to the project as per provisions of the EIA notification no. S.O. 1533 dt. 14<sup>th</sup> September, 2006 of Ministry of Environment & Forests, GOI, subject to strict compliance of terms and conditions as mentioned below: -



## A. SPECIFIC CONDITIONS :

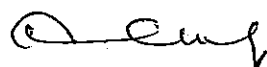
- i. The gaseous emissions from various process units should conform to the load / mass based standards prescribed by the Ministry of Environment & Forests and the State Pollution Control Board from time to time. At no time the emission level should go beyond the prescribed standards.
- ii. DRI Kiln should be provided with Post Combustion Chamber, Gas Conditioning Tower (GCT) and Electrostatic Precipitator (with minimum 3 field) followed by stack of adequate height. Stack emission shall not exceed 100 mg/Nm<sup>3</sup>. Stack emissions shall be monitored at regular intervals and records maintained.
- iii. Provision of dust extraction and pollution control system consisting of highly efficient Bag Filters, ID Fan and stack of height 30m from G.L. should be made for Raw Material Preparation Plant, Stock House, Product House. As proposed Cooler Discharge to be provided with Cyclone and bag filter as pollution control device followed by stack of height 30m from G.L. Stack emissions shall be monitored at regular intervals and records maintained.
- iv. Regular monitoring of the air quality shall be carried out in and around the plant and records shall be maintained.
- v. The unit should install dedicated energy meter for emission control equipments.
- vi. Online monitoring system for stack attached to DRI kiln to be installed to monitor SPM.
- vii. Conveyors carrying raw material, finished product etc. are to be completely enclosed from all sides for controlling fugitive emission. Conveyor belt tightening area/column also to be enclosed.
- viii. Raw material handling section to be enclosed from all sides. Platform of raw material feeding chute to be enclosed from all sides. Intermediate bins are to be fully enclosed.
- ix. Collection hoppers of all the Bag houses to be enclosed all sides with opening door for removal of bag filter dust.
- x. Product house area to be fully enclosed along with movable curtain at entry point.
- xi. Water sprinkler at different location of the industry to be provided.
- xii. Storing of iron ore, coal & coal-char to be done strictly within covered area. Under no circumstances the industry shall store any dust, coal-char, coal fines etc. in open space.
- xiii. The dust collection system in the ESP should be provided with pneumatic control system along with silo and pug mill.
- xiv. The industry must provide 'Dry Fog Dust Suppression System' for controlling fugitive emission.
- xv. At least two tankers must be provided by the industry for ensuring continuous water spraying within and outside the factory premises. Contract agreement or documentary proof to be submitted to WBPCB for the same.
- xvi. At least 6 to 8 nos. bag houses shall be provided at different transfer points.
- xvii. Groundwater shall not be abstracted without prior permission of competent authority as per The West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.
- xviii. Process effluent discharge is not permitted. The cooling water will be reused in the process after settling. Domestic effluent to be treated through septic tank and soakpit.
- xix. The unit must develop water body with adequate capacity to harvest rain water so as to use the stored water for plantation, firefighting, washing and cleaning etc. Recharging of Groundwater is not permitted.
- xx. Green belt shall be developed within and around the plant premises. Green belt to be developed at least 33% of the project area. Selection of appropriate species for the plantation programme may be done in consultation with the Forest Department of the respective area.
- xxi. The unit should utilize the gases in WHRB for generation of power.
- xxii. Solid wastes viz. Coalchar, ESP dust, etc to be disposed off in environment friendly manner. The unit should utilize the char material in FBC boiler.



- xxiii. Ambient noise level should not exceed the permissible limit. The overall noise levels in and around the plant area shall be kept well within the standards 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 dB(A) Leq (daytime) and 70 dB(A) Leq (nighttime) and its subsequent amendments.
- xxiv. All internal roads should be concrete / pitched. Proper lighting and proper pathway inside the factory premises should be constructed to ensure safe vehicular movement. Provision of separate pathway for entry and exit of vehicles should be considered. Vehicles should conform to pollution under control (PUC) norms. Proper house keeping shall be maintained within the premises. Solar lighting should be used as far as practicable.
- xxv. Health and safety of workers should be ensured. Workers should be provided with adequate personnel protective equipment and sanitation facilities. Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xxvi. Adequate measures to be adopted to ensure industrial safety.
- xxvii. The implementation and monitoring of Environmental Management Plan should be carried out, as proposed.

#### **B. GENERAL CONDITIONS:**

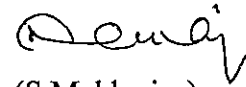
- i The project proponent shall comply with all the environmental protection measures and safeguards recommended. Further, the unit must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care, etc.
- ii All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity.
- iii Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers to be engaged for construction works should be screened for health and adequately treated before issue of work permits.
- iv The project proponent should make financial provision in the total budget of the project for implementation of the environmental safeguards. The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the SEIAA along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.
- v No further expansion or modifications in the plant should be carried out without prior approval of the State Environmental Impact Assessment Authority.
- vi The West Bengal Pollution Control Board, who would be monitoring the implementation of environmental safeguards, should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to the WBPCB regularly. A complete set of all the documents should also be forwarded to the State Environmental Impact Assessment Authority.
- vii In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA.
- viii The State Environmental Impact Assessment Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act. 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.
- ix The Project Proponent should inform the public that the project has been accorded environmental clearance by the SEIAA and copies of the clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the SEIAA (<http://enviswb.gov.in>). This should 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.

- x The environmental clearance accorded shall be valid for a period of 5 years for the proposed expansion project.
- xi The above stipulations would be enforced along with those under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Wastes (Management and Handling) Rules, 1989, the Public Liability Insurance Act, 1991, the Environment Impact Assessment Notification 2006 and their amendments.

Yours faithfully,



(S Mukherjee)

Member Secretary, SEIAA

&

Chief Environment Officer