

F. No. J-11011/355/2004- IA II (I)
Government of India
Ministry Environment and Forests
(IA Division)

Paryavaran Bhawan,
CGO Complex, Lodhi Road
New Delhi – 110 003

E-mail: pb.rastogi@nic.in

Telefax : 011-24367668

Dated : February 21, 2006

To,

✓ The Managing Director
M/s Sunflag Iron & Steel Co. Ltd.
Village Warthi
District Bhanadara - 441 905
Maharashtra.

Fax No. : 07197- 285570

E-mail : admin@sunflagsteel.com

Subject : Expansion of Iron & Steel Plant at Warthi, Bhanadara, Maharashtra by M/s Sunflag Iron & Steel Co. Ltd. - Environmental clearance reg.

Sir,

This has reference to your letter no. SF:MOEF-05-06 dated 1st October, 2005 alongwith application, EIA/EMP and related project documents in CD and subsequent clarifications furnished by you vide your letter dated 29th November, 2005 for environmental clearance on the above mentioned project. The Ministry of Environment and Forests has examined your application. It is noted that proposal involves expansion of existing Iron & Steel plant from existing 2,50,000 MTPA to 5,00,000 MTPA capacity at the existing site at Warthi, Bhanadara, Maharashtra. During expansion, Coke Oven Plant, Mini Blast Furnace (MBF), Captive Power Plant (CPP), Wire Rod Block Mill (WRBM), 3 strand Continuous Casting Machine (CCM), Sinter Plant, Pellet Plant, Coal dust injection facility, Direct Reduction Iron (DRI) Plant, Oxygen Plant etc. shall be installed. No additional land shall be required due to location of the expansion plant on the existing 200 ha. land.

2.0 Gaseous emissions shall be controlled by installing dust extraction system, bag filters, two stage ventury system, ESPs etc. at appropriate places and dust extraction system at all the transfer points. Total water requirement of 11,520 m³/d (6,000 m³/d for existing and 5,520 m³/d for the expansion) will be met from Wainganga river (surface water) and permission for 12,000 m³/d has already been accorded by the State Govt. Approximately, 2400 m³/d treated waste water will be recycled back to into the process and 576 m³/d treated waste water will be discharged into the lagoon and will be used for irrigation purpose leading to zero discharge. The solid waste generated will be in the form of ash, slag, mill scale, dust, sludge and iron scrap and shall be either reused in the process or sold to others entrepreneurs (i.e. slag and cement) or used for filling low lying areas. Used spent oil will be sold to authorized reprocessors. Green belt will be developed in 71.5 ha. Public hearing was held on 2nd

September, 2005 and 'NOC' has been accorded by the Maharashtra Pollution Control Board vide letter no. BO/RO (P&P)/CE/CC-07 dated 20th September, 2005. Total cost of the project is Rs. 264.17 Crores.

3.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 27th January, 1994 as amended subsequently subject to strict compliance of the following specific and general conditions:

A. SPECIFIC CONDITIONS :

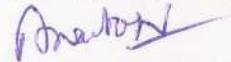
- i) The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. At no time the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit. Coke oven (non-recovery type) shall be used for power generation. Emissions from the Coke oven plant shall be within permissible limits of CPCB.
- ii) In-plant control measures for checking fugitive emissions from all the vulnerable sources like spillage/raw materials/coal handlings etc. shall be provided. Further, specific measures like provision of dust suppression system consisting of water sprinkling, suction hoods, fans and bag filters etc. shall be installed at material transfer points, blast furnace stock house and other enclosed raw material handling areas. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed height conforming to the standards for induction furnaces existing in the industry and proposed induction and arc furnaces. Fugitive emissions shall be regularly monitored and records maintained.
- iii) The company shall install Waste Heat Recovery Boilers (WHRB) to recover the waste heat and generate power from the steam produced by the WHRB. Char shall be used in the power plant. The particulate emissions from the WHRB and Direct Reduction Iron (DRI) plant shall be controlled by installation of ESP as per the CPCB specifications and particulate emissions shall not exceed 50 mg/Nm³. Further, the company shall install bag filters to control gaseous emissions from the coke oven, wet scrubbers, suction hoods, dust extraction devices and fume extraction system at appropriate places to control gaseous emissions.
- iv) Total requirement of water shall not exceed 12,000 m³/d as per agreement signed with the Govt. of Maharashtra. Out of 3,000 m³/d waste water generated, 2,400 m³/d treated waste water shall be recycled and reused in the process and excess shall be used for gardening and irrigation purpose. The domestic waste water after treatment in STP shall be used for green belt development.

- v) The solid waste generated shall be in the form of ash, slag, mill scale, dust, sludge and iron scrap. Mill scale, coke breeze, iron ore fines, dust and sludge from Mini blast furnace (MBF), Gas cleaning plant (GCP) shall be reused in the Sinter plant. Iron sponge, iron scrap and grinder waste shall be recycled to SMS section for melting and reuse. DRP ash and dust collected from ESP of gas cleaning system of DRP shall be used in the boiler of CPP whereas bed ash and MBF slag shall be either used for land filling or sold to cement plants. The entire quantity of fly ash, mill scale and DRP sludge from the scrubber shall be utilized for making bricks in company's own brick manufacturing plant. Non-granulated slag shall be used for road making. Dust from dust extraction system shall be recycled to the Sinter plant for reuse. Dust collected from DRI plant shall be reused in sinter plant. Used/spent oil generated shall be used as anti-rusting agent and excess sold to authorized reprocessors.
- vi) Solid waste shall be generated in the form of char, kiln accretions, fly ash from ESP and bottom ash etc. Char generated shall be used in the FBC boiler having sufficient capacity to utilize the char expected to be generated after the expansion. Kiln accretions generated presently and the quantity further enhanced during expansion project, shall be utilized for filling low lying areas. ETP sludge shall be used in Sinter plant.
- vii) Mill Scale shall be reused in Sinter plant. ESP fly ash shall be made available to the cement plants and brick making plants whereas 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. Solid waste generated in the form of Iron ore fines, blast furnace slag, BF scrap scales from slab caster and scales from steel mill will be sold to the scrap dealers except for BF slag which will be sold to the cement manufacturers.
- viii) The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- ix) Green belt shall be developed in at least 71.5 ha. area within and around the plant premises 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.
- xi) The project authorities shall undertake eco-development measures including community welfare measures in and around the project site. An action plan indicating proposed activities under this shall be performed and submitted to the Maharashtra Pollution Control Board (MPCB) within three mnths from the date of issuing this letter.
- xii) Recommendations made in the Corporate Responsibility for Environment Protection (CREP) for the steel plants shall be implemented and report submitted o the Ministry/CPCB/MPCB.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Maharashtra Pollution Control Board (MPCB) and the State Government.
- ii. No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.
- iii. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO₂ and NO_x are anticipated in consultation with the MPCB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhopal and MPCB/CPCB once in six months.
- iv. Industrial waste water 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 from time to time. The treated wastewater shall be utilized for plantation purpose.
- v. The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals etc. The project authorities must also strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collection/treatment/storage/disposal of hazardous wastes.
- vi. 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 (night time).
- vii. 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.
- viii. As committed, Project authorities shall provide funds of Rs. 20.54 Crores both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.
- ix. The Regional Office of this Ministry at Bhopal/MPCB/CECB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.

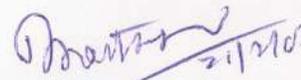
- x. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the MPCB/Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. 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 and a copy of the same should be forwarded to the Regional office.
- xi. 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.



(Dr. P. B. Rastogi)
Additional Director

Copy to:

1. The Secretary, Department of Environment and Forests, Govt. of Maharashtra, Mumbai - 400 001, Maharashtra.
2. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (West), Link Road No. 3, E - 5, Arera Colony, Bhopal - 462 016, M.P.
3. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar New Delhi - 110 032.
4. The Chairman, Maharashtra Pollution Control Board, Shri Chatrapati Shivaji Maharaj Municipal Market Building, 4th Floor, Mata Ramabai Ambedaker Road, Mumbai - 400 001, Maharashtra.
5. Joint Secretary (CCI-I) Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi - 110 032.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi - 110 032.
7. Guard File.
8. Monitoring File.
9. Record File.



(Dr. P. B. Rastogi)
Additional Director