

**F. No. J-11011/780/2008- IA II (I)**  
**Government of India**  
**Ministry of Environment and Forests**  
**(I.A. Division)**

**Paryavaran Bhawan**  
**CGO Complex, Lodhi Road**  
**New Delhi – 110 003**  
**E-mail: ms.industry-mef@nic.in**  
**Tele/fax: 011 – 2436 3973**  
**Dated: December 30<sup>th</sup>, 2010**

To,  
The Director,  
M/s Satya Power and Ispat Limited  
1<sup>st</sup> Floor, V.R. Plaza, Link Road, Bilaspur,  
Chhattisgarh

**Fax: 07752- 231 737**  
**E-mail: [spilpl@hotmail.com](mailto:spilpl@hotmail.com)**

**Sub: Expansion of Sponge Iron Plant from 2,40,000 TPA to 3,00,000 TPA and installation of Steel Plant (2,16,000 TPA of Induction Furnace, 90,000 TPA of Rolling mill and 30,000 TPA of Ferro Alloys) along with coal washery of 14,40,000 TPA capacity and Captive Power Plant (44 MW: 22 MW of WHRB and 24 MW of AFBC) at Village Gatori, Block Bilha, District Bilaspur, Chhattisgarh by M/s Satya Power and Ispat Limited. - regarding Environmental Clearance**

Sir,

This has reference to your letter no. 071/SPiL/MEF/01-11 dated 28<sup>th</sup> October, 2010 received in the Ministry on 29<sup>th</sup> October, 2010 along with a copy of EIA/EMP and public hearing reports seeking environment clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined the application for the above project. It is noted that M/s Satya Power and Ispat Pvt. Ltd. have proposed to expand its existing Sponge Iron plant, setting up of Steel Plant along with coal washery and captive power plant at Village Gatori, Tehsil Bilha, District Bilaspur in Chhattisgarh. Proposed expansion will be taken up within the existing plant premises having area of 60 acres. Green belt will be developed in 19.8 acres of plant area. No national Park/wild life sanctuary/reserve forest is located within 10 km radius of the project site. Total cost of the proposed expansion is Rs. 375.0 Crores. Rs 15.65 Crores and Rs 0.5 Crores are earmarked towards capital cost and recurring cost/annum for environment pollution control measures.

3. Following are the details of existing and proposed facilities along with production capacity:

S.No.	Plant	Existing Capacity	Proposed Capacity	Total Capacity after expansion
1	Sponge Iron	60,000 TPA	2,40,000 TPA	3,00,000 TPA (1,000 TPD)
2	Induction Furnace with LRF & Concast	--	2,16,000 TPA (6x12 MTPH)	2,16,000 TPA
3	Rolling Mill	--	90,000 TPA (1x300 TPD)	90,000 TPA
4	Ferro Alloys	--	30,000 TPA (2x9 MVA)	30,000 TPA /
5	Coal Washery	--	14,40,000 TPA (200 TPH)	14,40,000 TPA
6	Captive Power plant WHRB FBC	--	20 MW 24 MW	20 MW 24 MW

4. It is noted that iron ore, coal, dolomite will be used in Sponge Iron Plant. Sponge Iron, end cuttings/MS/CI scraps, Ferro alloys will be used in SMS. Raw materials required for Ferro alloy plant will be manganese ore, Quartz, Slag, Metcoke / Char. Steel Ingots/billets and Furnace oil will be used for induction furnace. ROM coal will be washed in Coal washery. Coal and dolochar/washery rejects will be used in Power Plant. About 14,40,000 TPA of coal will be required for the coal washery which will be sourced from Dipka and Gevra Mines of SECL at Korba in Chhattisgarh. A coal supply agreement has been signed between SECL and M/s Satya Power and Ispat Limited to meet the requirement for the sponge iron plant.

5. To control particulate emissions, ESPs and bag filters will be provided to DRI kilns and Power plant. Flue gases from DRI kilns will be passed through WHRB and treated in ESP before dispersion into the atmosphere through stacks of adequate height. Flue gases from AFBC boilers will be treated in ESP to achieve particulate matter emission below 50 mg/Nm<sup>3</sup>. Fume extraction system comprising of suction hood and wet scrubber will be provided to induction furnace. Waste gases from rolling mill will be vented to atmosphere through a stack of adequate height. Bag filters will be provided to ferro alloy plant. Fugitive dust will be generated from coal and ash handling. Dust extraction system with bag filters will be provided in material handling areas and transfer points.

6. Total water requirement after expansion will be 2361 m<sup>3</sup>/day which will be met from River Arpa. There will be no effluent generation from Sponge Iron kilns, IF and SEAF as closed circuit cooling water system will be adopted in the proposed expansion. Effluent (163 KLD) from power plant such as boiler blow down, DM plant regeneration wastewater will be neutralized in a neutralization tank. After neutralization, these streams will be mixed with cooling tower blow down in a Central Monitoring Basin (CMB). Treated water from CMB/ETP will be utilized for dust suppression, ash conditioning and for greenbelt development. Zero discharge will be adopted. Sanitary wastewater (2 KLD) will be treated in septic tank followed by soak pit.

7. Char/Dolochar from DRI plant will be used in FBC boiler as fuel for power generation. Accretion slag will be used for road construction instead of landfill. SMS slag will be utilized in road construction after removal of metallic contents. Ash from AFBC boiler and WHRB will be given to cement plant/brick manufacturers/in-house brick making. Crushed induction furnace slag after passing through magnetic separator, from where the magnetics will be recycled and non-magnetics will be used as sub-base material for road making and filling low lying area. Ferro-manganese slag will be utilized in the manufacture of Silico-manganese. Silico-manganese slag will be utilized in road construction. Ferro Silicon slag will be used in Cast Iron foundries. Waste Lube oil, used Lead-acid batteries, waste drums etc. will be disposed off to approved vendors. Washery rejects will be consumed within plant for power generation and given to nearby power generating units.

8. Low noise generating equipments will be installed. Noise enclosures will be provided to Turbines. Ear plugs will be provided to workers working in the noise prone areas. Power required (44 MW) for operation of proposed expansion will be met from the CPP. Start-up power for power plant and other units will be drawn from Chhattisgarh State Electricity Board (CSEB) Grid.

9. All the Integrated Steel plants are listed at S.No. 3(a) under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

10. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 16<sup>th</sup> meeting held during 22<sup>nd</sup> - 24<sup>th</sup> November, 2010. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing for the project was held on 13<sup>th</sup> April, 2010.

11. Based on the information submitted by you, presentation made by you and consultant, M/s J.M. Environet Pvt. Ltd., Gurgaon, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006 subject to strict compliance of the following Specific and General conditions:

**A. SPECIFIC CONDITIONS :**

- i. Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Government shall be ensured and regular reports submitted to the Ministry and its Regional Office at Bhopal.
- ii. Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning plant, venturi scrubber, bag filters etc. shall be provided to keep the emission levels below  $50 \text{ mg/Nm}^3$  by installing energy efficient technology.
- iii. As proposed, Electrostatic precipitator (ESP) shall be provided to sinter plant, WHRB, FBC, DRI plants; and dust catcher followed by venturi scrubbers to control SPM levels within  $50 \text{ mg/Nm}^3$ . Fume extraction system shall be provided to induction furnaces to control the emissions within the prescribed standards.
- iv. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 shall be followed.
- v. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414(E) dated 30<sup>th</sup> May, 2008 should be followed.
- vi. Hot gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB). The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack.
- vii. Total water requirement shall not exceed  $2361 \text{ m}^3/\text{d}$ . The permission from the competent authority shall be obtained for water drawl. Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by soak pit.
- viii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

- ix. Regular monitoring of influent and effluent surface, sub-surface and ground water (including chromite) should be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhopal, Chhattisgarh Environment Conservation Board (CECB) and CPCB.
- x. The water consumption shall not exceed as per the standard prescribed for the steel plants.
- xi. All the coal fines, char from DRI plant and washery rejects shall be utilized in FBC boiler of power plant and no char shall be used for briquette making or disposed off anywhere else. AFBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning. Scrap shall be used in steel melting shop (SMS) and SMS slag and kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.
- xii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and its subsequent amendments.
- xiii. Vehicular pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.
- xiv. Transportation of raw coal during the initial phase shall be by 40-T mechanically covered or tarpaulin covered trucks from the coalmines to the washery. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within sheds/stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored minerals do not catch fire.
- xv. Hoppers of the coal crushing unit at the crushing shed and washery unit shall be fitted with high efficiency bag filters/Dust extractors and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of belt conveyor systems which shall be closed and from transportation roads.
- xvi. All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.



- xvii. The washery unit shall be a zero-discharge facility and no wastewater shall be discharged from the washery into the drains/natural watercourses. Recycled water shall be used for development and maintenance of green belt and in dust suppression from Plant operations.
- xviii. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhopal, CECB and CPCB.
- xix. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xx. Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhopal, CECB and CPCB within 3 months of issue of environment clearance letter.
- xxi. As proposed, green belt shall be developed in 33 % of plant area as per the CPCB guidelines in consultation with the DFO.
- xxii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.
- xxiii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 13<sup>th</sup> April, 2010 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.
- xxiv. At least 5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.
- xxv. Rehabilitation and Resettlement Plan for the project affected population including tribals, if any shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Chhattisgarh. Compensation paid in any case should not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy, 2007.
- xxvi. The company shall provide housing for construction labour 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.

**B. GENERAL CONDITIONS:**

- i. The project authority shall adhere to the stipulations made by Chhattisgarh Environment Conservation Board (CECB) and State Government.
- ii. No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.
- iii. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19<sup>th</sup> May, 1993 and standards prescribed from time to time. The CECB 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. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.
- iv. 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 shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. All the environment management measures given in the EIA/EMP shall be implemented and complied with.
- vii. Proper house keeping and adequate occupational health programmes shall be taken up as per the Factory Act.
- viii. The company shall undertake eco-development measures including community welfare measures in the project area.
- ix. A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.
- x. The requisite funds shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures and used judiciously 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.

- xi. The Project Authorities shall 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.
- xii. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- xiii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xiv. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the CWCB. The Regional Office of this Ministry at Bhopal/CPCB/CECB shall monitor the stipulated conditions.
- xv. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.
- xvi. 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 CECB and may also be seen at the 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 shall be forwarded to the Regional office at Bhopal.



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

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

14. The above conditions shall 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, Handling & trans boundary ) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

  
(Dr. P.L. Ahujarai)  
Scientist-F

**Copy to:**

1. The Secretary, Department of Environment, Govt. of Chhattisgarh, Chhattisgarh.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Chhattisgarh Environment Conservation Board, Nanak Niwas, Civil Lines, Raipur, Chhattisgarh.
4. The Chief Conservator of Forests (Eastern), Regional Office (Western Zone), E-3/240, Arera Colony, Bhopal - 462 016, M.P.
5. Adviser (IA-II), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard file.
8. Record file.

  
(Dr. P.L. Ahujarai)  
Scientist-F