

F. No. J-11011/380/2009- 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 22nd, 2010

To,

The Director,
M/s Sky Alloys & Power (P) Limited
Supreme House, Mahadev Ghat Chowk,
Ring Road No. 1, Raipur,
Chhattisgarh

E-mail: stcdlh@yahoo.com
Fax: 0771- 2244067

Sub : Proposed Integrated Steel Plant at Village Temtema, Tehsil Kharasia, District Raigarh in Chhattisgarh by M/s Sky Alloys & Power (P) Limited - Environmental Clearance reg.

Sir,

This has reference to your letter no. nil dated 28th August, 2010 along with copies of EIA/EMP/ 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 Sky Alloys & Power (P) Limited have proposed to establish an integrated steel plant in Village Temtema, Tehsil Kharasia, District Raigarh in Chhattisgarh. No National Park / Wild life sanctuary / Bird Sanctuary is located within 10 km radius of the project site. Basnajar RF (3.0 Kms), Burha Pahar RF R.F (5.0 Kms.), Rabo RF (5.5 Kms.) are the Reserve Forests present in 10 Kms. radius of the proposed plant. Total land acquired for the project is 75.0 acres of which, green belt will be developed in 25 acres. Total cost of the project is Rs. 350 Crores. Rs. 14 Crores and Rs. 70 lakhs/annum will be earmarked towards capital cost and recurring cost for environmental pollution control measures.

3. The following are the plant configuration and production capacity:

S. No.	Details	Plant Configuration	Installation Capacity
1.	Sponge Iron through DRI kilns	4 x 100 TPD	1,20,000 TPA
2.	Billets through Induction	3 x 10 MT	1,00,000 TPA

	Furnace with Concast		
3.	Rolled products such as TMT bars/ structural steels through Rolling Mill.	1 x 300 TPD	1,00,000 TPA
4.	Ferro Alloys through Submerged Arc Furnaces (Fe-Si, Si-Mn, Fe-Mn)	2 x 9 MVA	Fe-Mn-30,000 TPA Fe-Si- 9,600 TPA Si-Mn- 21,700 TPA
5.	Power Plant (WHRB Based)	4 x 2 MW	8 MW
6.	Power Plant (FBC)	1 x 15 MW & 1 x 35 MW	50 MW
	Total Power		58 MW

4. It is noted that Iron ore, coal, dolomite for sponge iron plant, sponge iron, scrap, ferro alloy for MS Billets & Rolling mill, dolochar, coal & fines for power plant will be used as raw materials. Sponge Iron will be manufactured in coal based Direct Reduction (DR) kilns. Billets will be manufactured by melting in Induction furnace and casting in continuous casting machine. Rolled products will be manufactured in reheating furnace and coal fired rolling mill. Waste heat recovery boiler (WHRB) and AFBC boiler will be installed. The imported coal and coal from SECL mines will be used.

5. Electrostatic precipitator (ESP) will be provided to DRI kiln and AFBC boiler to control particulate emissions within 50 mg/Nm^3 . Bag filters will be installed to control emissions from induction furnace and rolling mill. Flue gases from DRI plant will be utilized in Waste heat recovery boiler (WHRB) and passed through ESP and then into atmosphere through ID fans and chimney. Hot gases from DRI plant will pass through dust settling chamber (DSC) and after burning chamber (ABC), WHRB and stack. Fume extraction system with ID fan will be provided to IF. Dust suppression will be provided to control emissions. Bag filters will be provided to material handling areas, coal handling areas, crusher, stock house, cooler discharge area, screening area etc.

6. Total ground water requirement from the river Mand will be $660 \text{ m}^3/\text{day}$. Permission to draw water from the Water Resources Department, Government of Chhattisgarh has been obtained on 13th July, 2010. To minimize the water requirement air cooled condensers will be installed. Closed loop system will be adopted so that no effluent is discharged from the proposed plants. All the treated stream will be stored in a central monitoring basin. The treated effluent will be used for ash conditioning, dust suppression and green belt development. Domestic effluent will be treated in septic tank followed by soak pit. No effluent will be discharged outside the premises and Zero discharge will be adopted. Rain water harvesting structure will be constructed. Total power requirement of 45.3 MW will be sourced from captive power plant (58 MW) and the balance power will be exported to Grid. DG sets will be installed.

7. Char from DRI process will be used in AFBC boiler as fuel. Ash and Dust from the bag filters and wet scrapper sludge will be given to the brick manufacturers. Slag from Induction Furnace will be used for road making and land filling. Bottom ash will be used for low land filling. Mill scales will be used in the steel melting shop. Slag from the ferro manganese will be used for manufacture for silico manganese. Slag from ferro silicon manufacturing will be used in cast iron foundries and from silico manganese in the road construction. Waste oil and used batteries will be sold to authorized recyclers/re-processors.

8. All the Integrated Steel Plants are listed at S.No. 4(a) under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

9. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 16th meeting held during 22nd - 24th November, 2010. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing of the project was held on 30th June, 2010.

10. Based on the information submitted by you, presentation made by you and consultant, Pioneer Enviro Laboratories and Consultants Pvt. Limited, Hyderabad, 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. 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, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ by installing energy efficient technology.
- ii. As proposed, Electrostatic precipitator (ESP) shall be provided to sinter plant, WHRB, AFBC, DRI plants; and dust catcher to control SPM levels within 50 mg/Nm³. Fume extraction system shall be provided to induction furnaces to control the emissions within the prescribed standards.
- iii. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- iv. 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 30th May, 2008 should be followed.

- v. 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.
- vi. Total water requirement shall not exceed 660 m³/d. 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.
- vii. 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.
- viii. 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.
- ix. The water consumption shall not exceed as per the standard prescribed for the steel plants.
- x. All the coal fines, char from DRI plant shall be utilized in AFBC 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.
- xi. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003/2009.

- xii. 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.
- xiii. 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.
- xiv. 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.
- xv. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xvi. 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.
- xvii. As proposed, green belt shall be developed in 33 % of plant area as per the CPCB guidelines in consultation with the DFO.
- xviii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.
- xix. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 30th June, 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.
- xx. 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.
- xxi. 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.

- xxii. 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 19th 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, SO₂, NO_x (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 31st 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.

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

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

13. 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 & Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

P. Ahujara
(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 / Record file.

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