

F. No. J-11011/325/2010-IA-II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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Dated: 22nd December, 2011

To,
The Executive Director,
M/s Prakash Sponge Iron & Power Pvt. Limited
No. 2/5, 2nd Floor, East Park Road, Kumar Park East,
Off South End Street, Bangalore- 560 001, Karnataka

Ph: 080-40945023 Fax: 080-40945024
E-mail: psipl@hotmail.com

Sub: Expansion of Sponge Iron unit to Mini Integrated Steel Plant along with Captive Power Plant (45 MW; 12 MW WHRB & 33 MW FBC) at Heggere & Kaparahalli Villages, Challakere Tq. and Chitradurga Dist., Karnataka by **M/s Prakash Sponge Iron & Power Pvt. Limited - regarding Environmental Clearance**

Sir,

This has reference to your letter no. PSI&PPL/MoEF/2011 dated 8.07.2011 along with copies of EIA/EMP and public hearing reports and subsequent communications dated 30.10.2011 and 30.11.2011 seeking environmental clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined your application. It is noted that M/s Prakash Sponge Iron & Power Pvt. Ltd. have proposed for the Mini Integrated Steel Plant along with Captive Power Plant (45 MW; 12 MW WHRB & 33 MW FBC) at Sy. No. 42/1-5, 43/1-2, Heggere & Kaparahalli Villages, Challakere Taluka and Chitradurga Dist., Karnataka. Total project area is 200 acres of which 70 acres (33%) has been earmarked for green belt. No National Park/Wild life sanctuary/Reserve Forest is located within 10 Km radius of the project. Total project cost is Rs. 586.80 Crores and Rs. 5 Crores has been earmarked towards recurring cost/annum for environmental pollution control measures.

3. Details of the plants configuration and production capacity are given below:-

S.No.	Unit	Facility	Annual production (Tons per annum)
1	Sponge Iron Plant	6 x 100 TPD	1,80,000 TPA
2	Induction Furnace	3 x 30 T	2,96,200 TPA
3	Ladle Furnace	1 x 35 T, 5,000 KW	
4	a. Billet Caster b. Bloom Caster	1 x 3 Strand 1 x 2 Strand	Billets-100mm & 130mm sq. Blooms of size upto 250mm
5	Bar & Rod Mill	1,50,000 TPA	Bars & Rods
6	Light Structural Mill	1,20,000 TPA	Structural up to 400mm
7	Captive Power Plant WHRB : 12 MW FBC : 33 MW	45 MW	Power - 291.6 million units/year

4. It is noted that Iron ore (3,24,000 TPA), Coal (2,34,000 TPA for Sponge Iron Plant, 1,27,300 TPA for CPP & 6,200 for Coal gas plant), Limestone (7,200 TPA), Steel Scrap/Pig Iron (1,45,750 TPA), Ferro Alloys (4,440 TPA), Petcoke (5,330 TPA) and Fuel oil

(1,730 TPA) will be used as raw materials. Coal will be sourced from Bhatia Global Trading Ltd. Iron ore will be obtained through e-auction and pallets from the nearby industries.

5. Electrostatic precipitator (ESP) and bag filters will be provided to DRI, WHRB and AFBC, CFBC boilers to control pollution to control the particulate emissions. Hot gas from the sponge iron plant will pass through dust settling chamber (DSC) and after burning chamber (ABC) and dispersed through ID fan and stack of adequate height. Fume extraction system will be provided to SMS. Chimney of adequate height will be provided to re-heating furnace. Bag filters will be provided to control fugitive dust from conveyor transfer points. Water spraying will be done on raw materials and road for controlling flying dust during unloading and loading.

6. Total ground water requirement (make-up water) from bore well and rain water harvesting will be 111 m³/hr. The water from the cooling system will be recycled/reused.. 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/ sewage treatment plant and used for green belt development. No effluent will be discharged outside the premises and zero discharge will be adopted.

7. Solid wastes from the plant comprise steel melt shop slag, mill scale, dust, sludge, used refractories, scrap and miscellaneous trash and debris and fly ash from power plant boiler. The steel melt shop slag will be removed to a slag dump area and disposed off for use in road laying etc. Other waste materials such as used refractories which are inert will be stored in the plant site in an area specially earmarked for the purpose. Scrap will be reused in the process or commercially disposed. Fly ash will be sold to brick making units or to cement plants and char from the sponge iron unit will be used as fuel in FBC Boiler.

8. Personal protective equipments like ear muffs will be provided to employees working in high noise prone areas. Acoustic lagging/silencers will be provided to noise generating equipment. Total power requirement of unit will be 55 MW which will be met from Captive Power Plant and additional power will be procured from nearest KPTCL Substation. DG set (1,000 KVA) will be installed. Light Diesel oil will be used for initial start-up and for intermittent use during operation.

9. The Integrated Steel plants are listed at S.No. 3(a) under category A of the Schedule of EIA Notification, 2006 and appraised by the Expert Appraisal Committee in the Ministry.

10. The proposal was considered by the Expert Appraisal Committee-1 (Industry) in its 27th meeting held during 26th - 27th August, 2011. 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 6.07.2011.

11. Based on the information submitted by you, presentation made by you and consultant, M/s Remedy Environmental Consultants, Bellary, Karnataka, 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. 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's Regional Office at Bangalore/SPCB.
- ii. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks should be provided and sufficient air pollution control devices viz.

Electrostatic precipitator (ESP), and bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ by installing energy efficient technology.

- iii. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 should be followed.
- iv. Gaseous emission levels including secondary fugitive emissions from all the sources should be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB should be followed.
- v. Dust suppression system and bag filters shall be installed to control the fugitive dust emissions at conveyor and transfer points, product handling, loading and unloading points.
- vi. Hot gases from the 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 dispersion out into the atmosphere through ID fan and stack. ESP shall be installed to control the particulate emissions from the WHRB.
- vii. Total water requirement shall not exceed 111 m³/hr. The water consumption shall not exceed as per the standard prescribed for the sponge iron plants.
- viii. 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.
- ix. All the char from DRI plant shall be utilized in FBC boiler of power plant and no char shall be disposed off anywhere else. FBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning.
- x. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. All the fly ash should be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding should be submitted to the Ministry's Regional Office at Bangalore.
- xi. Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bangalore, SPCB and CPCB within three months of issue of environment clearance letter.
- xii. As proposed, green belt shall be developed in 33 % of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xiii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Sponge Iron Plants should be implemented.
- xiv. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 6th July, 2011 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Bangalore.

- xv. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment (ESC) based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program should be ensured accordingly in a time bound manner.
- xvi. 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.

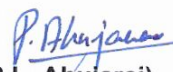
B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Karnataka State Pollution Control Board 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. 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.
- iv. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM₁₀, SO₂ and NO_x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bangalore and the SPCB/CPCB once in six months.
- v. 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 from time to time. The treated wastewater shall be utilized for plantation purpose.
- 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 (nighttime).
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- 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. 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.
- x. Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An

implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bangalore. The funds so provided shall not be diverted for any other purpose.

- xi. 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.
 - xii. 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 at Bangalore. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, 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.
 - xiii. 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 Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bangalore/ CPCB / SPCB shall monitor the stipulated conditions.
 - xiv. 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 Office of the MOEF at Bangalore by e-mail.
 - xv. 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 SPCB 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 should be forwarded to the Regional office at Bangalore.
 - xvi. 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.
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 and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.


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

Copy to:

- i. The Secretary, Department of Environment & Forests, Government of Karnataka, Bangalore, Karnataka.
- ii. The Chairman, Karnataka State Pollution Control Board, Parisar Bhavan, No. 49, 4th & 5th Floor, Church Street, Bangalore - 560 001, Karnataka.
- iii. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -110032.
- iv. The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F Wing, 17th Main Road, Koramangala, Bangalore-560034, Karnataka.
- v. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
- vi. Guard file/Monitoring file/Record file.


(Dr. P.L. Ahujarai)
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