

F. No. J-11011/384/2010-IA-II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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Tele/fax: 011 – 2436 3973
Dated: 31st October, 2011

✓ To,
The Director,
M/s Bihar Foundary and Casting Limited
Main Road, Ranchi- 834 001

Ph: 0651- 2202699

E-mail: consafescience@gmail.com / bfclgfa@gmail.com

Sub: Expansion of Ferro Alloy Plant by installing SAF (9 MVAx1= 40 TPD) for manufacture of Ferro Silicon/Ferro-Manganese at Plot No. 1405, Ramgarh Industrial Area, Marar Village, Ramgarh District in Jharkhand by **M/s Bihar Foundary and Casting Limited- regarding Environmental Clearance**

Sir,

This has reference to your letter no. nil dated 10.04.2011 along with copies of EIA/EMP reports and subsequent communication dated 30.06.2011 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 Bihar Foundary and Casting Limited have proposed for expansion of Ferro Alloy Plant by installing SAF (9 MVAx1= 40 TPD) to manufacture Ferro Silicon/Ferro-Manganese at Plot No. 1405, Ramgarh Industrial Area, Marar Village, Ramgarh District in Jharkhand. The proposed expansion will be in the existing plant area of 14 acres and green belt will be developed in 33% of the project area. No additional land is required for the proposed expansion. No R&R is involved. No national park / wildlife sanctuary and reserve forests are located within 10 km radius of the project site. Mn ore, Dolomite, Quartz and Coke will be used as raw materials. Total cost of the project is Rs. 20.0 Crores and the budget for Environment Management and Pollution Control measures is Rs. 2.0 Crores.

3. Following are the details of existing and proposed expansion facilities:

S.No	Name of the project	Existing	Proposed Expansion
1	Ferro Alloy (2x5 MVA)	26 TPD (Silico / Manganese)	----
2	Ferro Alloy (7.5 MVA)	30 TPD (Silico / Manganese)	----
3	Ferro Alloy (9 MVAx1)	----	40 TPD (Ferro Silicon/Ferro-Manganese)

4. Fume extraction system followed by bag filter to control the emissions from the submerged arc furnace and crushing house will be installed. The emissions will be dispersed

through stack of adequate height as per the CPCB / SPCB standards. Total water requirement will be 35m³/day, which will be sourced from bore wells. There will be no generation of wastewater from the process. Domestic effluent will be treated in septic tank followed by soak pit. Rain water harvesting system to recharge the ground water and reduce the fresh water consumption will be installed. Presently slag is collected and sent for crushing where the crushed slag is segregated through screen into the metallic and non metallic. The silica waste is sold for road works for filling and the metallic parts are reused in the process.

5. The Ferro Alloy Plants are listed at S.No. 3(a) in Primary Metallurgy Industry in Category 'A' under the schedule of EIA Notification, 2006 and appraised by the Expert Appraisal Committee -1 (Industry).

6. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 24th meeting held during 19th - 20th May, 2011. The Committee sought additional information for reconsideration of project. On receipt of additional information, the committee reconsidered the project in its 26th meeting held during 21st - 22nd July, 2011. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing is not required as per Para 7(i) III (b) of EIA Notification, 2006 as the project is located in notified industrial area.

7. Based on the information submitted by you, presentation made by you and consultant, M/s Consafe Science (India), 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. 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 Bhubaneswar/SPCB.
- ii. No charcoal shall be used as fuel. Pet coke shall be used as fuel instead of charcoal from unknown sources.
- iii. Continuous monitoring facilities for all the stacks and sufficient air pollution control equipments viz. fume extraction system with bag filters, ID fan and stack of adequate height to submerged arc furnace shall be provided to control emissions below 50 mg/Nm³.
- iv. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- v. 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.
- vi. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis should also be regularly carried out and report submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.

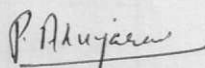
- vii. The total water requirement shall not exceed 35m³/day. Permission to draw the water from the Competent Authority shall be obtained. 'Zero' effluent discharge shall be strictly followed and no wastewater should be discharged outside the premises.
- viii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources.
- ix. Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture of Silico Manganese (Si-Mn). All the other ferro alloy slag shall be used in the preparation of building materials.
- x. Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB within three months of issue of environment clearance letter.
- xi. As proposed, green belt should be developed in at least 33 % of the project area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xii. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program shall be ensured accordingly in a time bound manner.
- xiii. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, 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.
- xiv. The Company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/ procedure to bring into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

A. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Jharkhand 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 Bhubaneswar 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 should 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 Bhubaneswar. 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 Bhubaneswar, the respective Zonal Office of CPCB and the CECB. 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 Bhubaneswar/ 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 Bhubaneswar 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 Bhubaneswar.
- 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.
8. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
9. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
10. 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. Ahujara)
Scientist -F

Copy to:-

1. The Secretary, Department of Forest, Govt. of Jharkhand, Nepal House, Ranchi.
2. The Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office, (EZ) A-3, Chandrashekharpur, Bhubaneswar-715023.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar New Delhi – 110 032.

4. The Chairman, Jharkhand State Pollution Control Board, T.A Division Building (Ground Floor) HEC Campus, Dhurwa, Ranchi -834004.
5. Guard File/Monitoring File/Record File.

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