

F. No. J-11011/372/2009- IA II (I)  
Government of India  
Ministry of Environment and Forests  
(I.A. Division)

EC

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

To,  
The Director  
M/s Rohit Ferro-Tech. Ltd.  
35-Chittaranjan Avenue, 4<sup>th</sup> Floor  
Kolkata-700 012, West Bengal.

Fax No.: 033-2211 4134  
E-mail: rohit.patni@rohitferrotech.com

Sub: Expansion of Ferro Alloy Plant (Submerged Arc Furnace 4x16.5 MVA (existing); 1x33 MVA (Proposed) along with Captive Power Plant (67.5 MW) at Kalinganagar Industrial Complex (Growth Centre), Village : Kanchrigaon & Chandia, Mouza Duburi, Tehsil Sukinda, District Jajpur, Orissa by M/s Rohit Ferro-Tech Limited.  
- environmental clearance req.

Sir,  
This has reference to your letter no RFPL/MOIL/10-11/014 dated 7<sup>th</sup> June, 2010 along with copies of final EIA/EMP report seeking environment clearance under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined the proposal. It is noted that M/s Rohit Ferro-Tech Ltd. have proposed to expand its Ferro Alloy Plant by installing a new Submerged Arc Furnace (1x33 MVA) along with Captive Power Plant (67.5 MW) at Kalinganagar Industrial Complex (Growth Centre), Villages : Kanchrigaon & Chandia, Mouza Duburi, Tehsil Sukhinda, District Jajpur, Orissa. The expansion will be carried in the existing plant area of 60 acres in Kalinganagar Industrial Complex (Growth Centre). About 19.8 acres of area has been earmarked for green belt. No national Park/wild life sanctuary/reserve forest is located within 10 km radius of the project site. Water bodies like Baitarani, Kani, Kharasrota, Buddha, Badagenguti, Brahmani are at a distance of 1-15 km from the proposed site. Total cost of the proposed expansion will be Rs. 416.1432 Crores Rs. 14.6 Crores and Rs. 1.5 Crores will be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures.

3. Following are the details of facilities to be installed and the corresponding products:

S. No.	Facility	Plant configuration		Proposed Products	Installed capacity (TPA)
		Existing	Proposed		
1	Submerged Arc Furnace	4x16.5 MVA (1,00,000 TPA Fe-Mn/Si-Mn/Fe-Si/ Fe-Cr)	1x33 MVA	Ferro Manganese	35,947
				Silico Manganese	25,426
				Ferro Silicon	23,833
2	Captive Power Plant	-	67.5 MW	Power	67.5 MW



4. To control particulate emissions cyclone cum bag filters will be provided to SAF and the cleaned gases will be vented to atmosphere through a chimney of adequate height. ESP will be provided to captive power plant. Dry fog dust suppression system will be provided at crushers, screens and transfer points of raw material handling yard to control fugitive emissions. Dry fog dust suppression system will also be provided at loading and unloading points

5. Total water requirement from Orissa Industrial Infrastructure Development Corporation (IDCO) for existing capacity is 125 KLD and 9,155 KLD for the proposed expansion. Effluent Treatment Plant (ETP) will be provided to proposed captive power plant. Water will be mainly used for cooling purpose only. The blow down water will be used for green belt development as sprinkling on the road. However, domestic waste will be sent to soak pit

CMB

6. Ash generated from AFBC boiler will be sold to cement plants & ash bricks manufacturing plants. Fines collected at cyclone cum bag filter will be used for making briquettes and charged into furnace. Ferro-Manganese slag will be utilized in Silico-Manganese production. Silico-Manganese slag will be used in land/area/road development. Ferro-Silicon slag will be used in slurry density applications for heavy media separation and sink float processes. Total power requirement of 100 MW will be met from NESCO and from CPP (67.5 MW). DG set (500 kVA) running on diesel (25 LPH) will be installed to meet the emergency power requirement.

7. All the Ferro Alloy plants are listed at S.No. 3(a) under Primary Metallurgy Industries under Category 'A' of the Schedule of EIA Notification 2006 and appraised at the Central level. As the project is located in the notified Kalinganagar Industrial Complex (Growth Centre), public hearing is not required as per Section (iii), Stage (3), Para (i) (b) of EIA Notification 2006.

8. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its meeting held during 26<sup>th</sup> -28<sup>th</sup> August, 2010. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions.

9. Based on the information submitted by you and presentation made your consultant Environ India, Kolkata, 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 :

1. No charcoal shall be used as fuel. Pet coke shall be used as fuel instead of charcoal from unknown sources.
2. 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/Nm<sup>3</sup>.
3. 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.

4. 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.
5. Prior permission for the drawl of 9,155 KLD water from competent authority shall be obtained. 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.
6. 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 E(P) Act 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.
7. 'Zero' effluent discharge shall be strictly followed and no wastewater should be discharged outside the premises.
8. All the ferro alloy slag shall be used for land filling inside the plant or used as building material only after passing through Toxic Chemical Leachability Potential (TCLP) test. Otherwise, hazardous substances shall be recovered from the slag and output waste and be disposed in secured landfill as per CPCB guidelines. *Ferro*
9. Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture Silico Manganese (Si-Mn). *Ferro*
10. No Ferro Chrome shall be manufactured without prior approval from the Ministry of Environment & Forests. *Ferro*
11. 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, OSPB and CPCB within 3 months of issue of environment clearance letter. *Admin*
12. As proposed, green belt shall be developed in at least 33 % of the project area. Selection of the plant species shall be as per the CPCB guidelines in consultation with the DFO. *Admin*
13. 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 (need based) 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. *Admin*
14. 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. *Admin*

**B. GENERAL CONDITIONS:**

- i. ✓ The project authorities must strictly adhere to the stipulations made by the Orissa 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 19<sup>th</sup> 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 PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub> 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 19<sup>th</sup> May, 1993 and 31<sup>st</sup> 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 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 SPCB. The criteria pollutant levels namely: PM10, 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.
  - 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 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 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.
10. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  11. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  12. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

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 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, State Department of Environment, Government of Orissa, Bhubaneswar, Orissa.
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.
3. Chairman, Orissa Pollution Control Board, Parivesh Bhavan, A/118 Neekanthhanagar, Unit-8, Bhubaneswar - 751 012, Orissa.
4. The Chief Conservator of Forests (Eastern), Regional Office (EZ), A/3 Chandrasekharpur, Bhubaneswar - 751 023, Orissa.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File.
7. Record File.

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

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CGO Complex, Lodhi Road  
New Delhi - 110 003

E-mail : [aditya.narayan@nic.in](mailto:aditya.narayan@nic.in)

Telefax : 011: 2436 549

Dated 21<sup>st</sup> September, 2012

To,

The Director  
M/s Rohit Ferro-Tech. Ltd.  
35-Chittaranjan Avenue, 4<sup>th</sup> Floor  
Kolkata-700 012, West Bengal.

Fax No.: 033-2211 4134; E-mail: [rohit.patni@rohitferrotech.com](mailto:rohit.patni@rohitferrotech.com)

Sub: Expansion of Ferro Alloy Plant (Submerged Arc Furnace 4x16.5 MVA (existing): 1x33 MVA (Proposed) along with Captive Power Plant (67.5 MW) at Kalinganagr Industrial Complex (Growth Centre), Village : Kanchrigaon & Chandia, Mouza Duburi, Tehsil Sukinda, District Jajpur, Orissa by M/s Rohit Ferro-Tech Limited. - regarding change in product mix i.e. production of ferro chrome apart from producing ferro alloys (Ferro manganese, Silico-manganese and ferro silicon) within the approved production capacity

Sir,

This is in continuation to this Ministry's earlier letter of even number dated 30<sup>th</sup> September, 2010 and your letter dated 23<sup>rd</sup> May, 2012 requesting the Ministry to manufacture ferro chrome along with other ferro alloys like ferro manganese, silico manganese and ferro silicon within the approved capacity.

2. The matter was placed before the Expert Appraisal Committee - 1 (Industry) in its meeting held during 14<sup>th</sup> - 15<sup>th</sup> June, 2012. The Committee noted that there is no change in the overall capacity of the plant and no additional land and water requirement. The Committee, therefore, recommended for change in the product mix due to manufacturing of ferro chrome within the approved capacity subject to following additional specific conditions:

- i. The company shall recover ferro chrome from the ferro chrome slag. The remaining slag shall be disposed of in the waste disposal site after carrying TCLP test.
- ii. The ground water quality monitoring around the disposal site shall be regularly monitored and the results of the monitored data shall be submitted to the SPCB and to the RO of the Ministry.
- iii. The trucks carrying the slag shall be covered with tarpaulin.

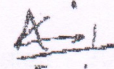
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3. The Ministry accepts the recommendations of the Expert Appraisal Committee to manufacture ferro chrome when required along with ferro manganese, silico manganese and ferro silicon within the approved capacity, for which environmental clearance was accorded by the Ministry vide letter of even number dated 30<sup>th</sup> September, 2010 subject to stipulation of following conditions:

- i. The company shall comply with all the conditions stipulated while according environmental clearance vide Ministry's letter of even number dated 30<sup>th</sup> September, 2010.
  - ii. The company shall recover ferro chrome from the ferro chrome slag. The remaining slag shall be disposed of in the waste disposal site after carrying TCLP test.
  - iii. The ground water quality monitoring around the disposal site shall be regularly monitored and the results of the monitored data shall be submitted to the SPCB and to the RO of the Ministry.
  - iv. The trucks carrying the slag shall be covered with tarpaulin.
4. In case of change in the scope of the project, the proponent shall approach the Ministry for obtaining fresh environmental clearance.
5. This issues with the approval of the Competent Authority.

  
(A N Singh)  
Dy. Director

Copy to:-

1. The Secretary, State Department of Environment, Government of Orissa, Bhubaneswar, Orissa
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.
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(A N Singh)  
Dy. Director