

**F. No. J-11011/55/2011-IA-II (I)**  
**Government of India**  
**Ministry of Environment and Forests**  
**(I.A. Division)**

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**Dated: 14<sup>th</sup> August, 2012**

To,  
The Head (Project Management)  
M/s Tata Steel Limited  
2-B, Fortune Towers, Chandrashekharapur,  
Bhubaneswar, Odisha

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**Sub:** Proposed 55,000 TPA High Carbon Ferro-Chrome Plant, 4,00,000 TPA Rebar Mill & Desalination Plant at Gopalpur Villages Chamkhandi, Sindhigaon Jagannathpur, Tehsil Chatrapur, District Ganjam, Odisha by **M/s Tata Steel Limited - regarding Environmental Clearance**

Sir,

This has reference to your letter no. TSLDEL/413/2011 dated 8.11.2011 along with copies of EIA/EMP and public hearing reports seeking environmental clearance and subsequent communications dated 23.03.2012 and 14.05.2012 under the provisions of EIA Notification, 2006.

2. The Ministry of Environment and Forests has examined your application. It is noted that M/s Tata Steel Limited have proposed to set up a High Carbon Ferro Chrome Plant of 55,000 TPA capacity, Rebar Mill of 400,000 TPA capacity along with Sea Water Desalination (SWD) Plant of 5.5 MLD (about 1.2 MGD) capacity at Chamkhandi, Sindhigaon, Jagannathpur Villages, Chatrapur Tehsil, Ganjam District, Orissa. Total land requirement for the project is 347 acres and green belt will be developed in 33% of the total area. The land was allotted by the Government of Odisha for industrial purpose and is already in the possession of M/s Tata Steel Limited. There are no rehabilitation and resettlement issues in this project. No National Parks / Wildlife sanctuaries / Biosphere reserves are located within 10 km radius of the plant area. No forest land is involved. Billets from Tata Steel Plant, Jamshedpur, chrome ore from Sukinda Mine, Odisha, Coke, Coal, Quartzite and Lime from the open market are the raw materials that will be used. Total cost of the proposed project is Rs. 800.0 Crores and the cost towards environmental protection is Rs. 33.5 Crores.

3. Details of the products along with the production capacities area as follows:

Sr. No	Facilities	Products	Production
1	Rebar Mill	Re-bars	4,00,000 TPA
2	Ferro Chrome Plant	High Carbon Ferro Chrome	55,000 TPA
3	Sea Water Desalination (SWD) Plant	Make up water	1.2 MGD

4. The ferro chrome plant will be designed with adequate air pollution control measures comprising of dust extraction system, and submerged arc furnace (SAF) gas cleaning plant to control emissions within the permissible limits. Particulate matter will be kept below 50 mg/Nm<sup>3</sup> in rebar mill by installation of bag filters in Ferro Chrome Plant. Air pollution due to emission of fugitive dust in the raw material handling and in the SAF shop will be controlled by dry fogging. Bag filters will be provided to control the fugitive emission in the raw material handling system. There will be three stacks of 35 m each for the adequate dispersion of

gaseous emissions. All the internal roads will be paved with concrete / black topped for control of fugitive dust and extensive green belt will be developed.

5. The water requirement for plant will be 5.5 MLD (about 1.2 MGD). The water requirement will be met from the sea and also through rain harvested water. The liquid effluent will be treated in separate effluent treatment plant (ETP) for separation of solids, oil and grease. The treated effluent would be reused for various non production areas. The plant will be designed on the basis of "zero" discharge concept. The brine water from the desalination plant will be discharged into the sea at about 1000 m off-shore. The power requirement of the plant is 50 MW and will be met from State Power Grid.

6. The Ferro-chrome plant would produce about 60,000 tonnes/annum of slag. 25% of slag will be processed for metal recovery. Balance slag will be temporary stored for subsequent use such as road making and brick industry. This slag is a hard mass reported to be non leachable. An open area of 20 x 70 m will be provided inside the plant boundary for locating the dump yard for slag, muck and debris. The area will be paved and provided with rain water drainage in all sides connecting to a collection cum settling tank for treatment before re-circulation. About 4,000 - 5,000 TPA of mill scale would be produced. The mill scale and scrap will be 100% recycled or will be sold. Ferro chrome plant dust would be recycled and will be used in briquetting plant and remelt.

7. The Ferro Alloy Plants are listed at S.No. 3(a) in Primary Metallurgical Industries under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

8. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 31<sup>st</sup> meeting held during 22<sup>nd</sup> - 23<sup>rd</sup> December, 2011. The Committee sought additional information for reconsideration of project. On receipt of additional information, the Committee reconsidered the project in its 35<sup>th</sup> meeting held during 26<sup>th</sup> - 27<sup>th</sup> April, 2012. 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 20.09.2011.

9. Based on the information submitted by you, presentation made by you and consultant, M/s. Vimta Labs, Hyderabad, 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. The proponent shall obtain necessary CRZ clearance under the provision of CRZ Notification, 2010.
- 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/Nm<sup>3</sup>.
- 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. 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.

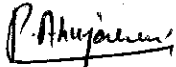
- vi. The total water requirement shall not exceed 5.5 MLD. 'Zero' effluent discharge shall be strictly followed and no wastewater should be discharged outside the premises.
- vii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources.
- viii. 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 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.
- ix. All the ferro chrome 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.
- 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 3 months of issue of environment clearance letter.
- xi. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 20<sup>th</sup> September, 2011 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 Bhubaneswar.
- xii. 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.
- xiii. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on 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 Bhubaneswar. Implementation of such program shall be ensured accordingly in a time bound manner.
- xiv. 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.
- xv. The Company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/ procedure to being 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 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 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; PM<sub>10</sub>, 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. 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:-**

1. The Secretary, State Department of Environment, Government of Orissa, Bhubaneswar, Orissa.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.
3. The Chairman, Orissa Pollution Control Board, Parivesh Bhavan, A/118, Neelkanthhanagar, 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 / Record File.

  
(Dr. P.L. Ahujarai)  
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