## F. No. J-11011/22/2013-IA II (I)

Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

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Dated: 15<sup>th</sup> September, 2015

To

M/s Tata Steel Ltd.
Golmuri-cum-Jugsalai,
Jamshedpur, Dist- Puribi Singhbhum
Jharkhand-831001

Email: chiefenvironment.management@tatasteel.com; Fax No.- 0657-2427819

Subject: Capacity Expansion (0.3 MTPA to 0.8 MTPA) (Ph-II) of Cold Rolling Mill of M/s Tata Steel Ltd. at Bara, Golmuri-cum-Jugsalai, Jamshedpur, Dist Purbi Singhbhum, Jharkhand – Environmental Clearance regarding.

Sir,

This has reference to your letter dated 1/09/2014 along with copies of EIA/EMP report seeking environment clearance under the provisions of the EIA Notification, 2006. The project was granted TOR by Ministry vide letter dated 10.09.2013. Subsequently the validity of the ToR was extended for a period of 1 year. Base line data collection was done during March-May 2013. Public Hearing was held on 08.05.2014. Certified monitoring report on compliance of earlier EC was received from MOEFCC, RO dated 24.01.2014.

All the steel plants are listed at S.No. 3(a) in primary metallurgical industry under Category 'A'of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry-1) of MoEFCC.

2.0 The Ministry of Environment, Forest and Climate Change (MoEFCC) has examined the application for the project cited above. It is noted that M/s Tata Steel Limited (TSL) proposes capacity expansion of Cold Rolling Mill Complex at Bara from 0.3 Million Tonnes Per Annum to 0.8 Million Tonnes Per Annum (MTPA) at Jamshedpur, East Singhbhum, Jharkhand State. Project coordinates are Latitude: 22° 48' 44" N and Longitude: 86° 14' 20" E. Nearest town is Jamshedpur located at 3km W and Tatanagar is 5.9kim SW. Eco Sensitive Zone of Dalma Wildlife Sanctuary is located at a distance of 2.7 km. Nearest water bodies are: River han Chatani RF (5.3km), Bhelaipahar RF (5.9km), Barabanki RF (7.1km), Bonth RF (7.8km), Baridih RF (8km). Subarnarekha

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(0.5 km NE), Dimna Reservoir (4.9Km N) and River Kharkal (6.8km W). A number of Reserved Forests/Protected Forests exist within the 10km study area: Environmental Clearance (EC) was accorded for the existing CRM capacity of 0.3 MTPA vide MOEFCC letter No. J-11011/199/2007-IA.II(I) dated 07.08.2007. The total project cost is Rs 126 crores of which Rs 11.8 crores has been spent on Ph.I towards costs of EMP measures and recurring costs of Rs 1.46 crores. During construction phase approximately 600 persons would be required for construction work. During operation phase 500-700 people shall be employed.

3.0 The project site is generally plain with an average site elevation of about 133m MSL. No additional land required for the proposed capacity expansion. The land required 8.312 ha is available within the existing CRM Bara complex as per details given below:

S.N.	Description	Land area (ha)
1.	Plant facilities (under existing project)	2.83
2.	Plant facilities under proposed expansion 0.558	
3.	Road	1.36
4	Water reservoir	0.011
5.	Green Belt 2.76	
6.	Future expansion (after achieving 0.8 MTPA)	0.796
	TOTAL	8.312

- 4.0 TSL proposes to increase the capacity of present pickling facility from 0.3 MTPA to 0.8 MTPA by:
- i. Installation of 2<sup>nd</sup> set of entry equipment consisting of Uncoiler, Leveller, Side Trimmer & Pinch Roll with Auto coil tracking.
- ii. Installation of one additional Pickling Tank with Acid Circulation facilities with adequate instrumentation
- iii. 2 nos. of 100 cu. M. FRP lined Acid Storage Tanks in Tank Farm Area of ARP
- iv. Separate PDB for Pickling line and ARP.
- In this operation hot rolled (HR) strip is passed through a set of rolls to get 1% to 3% elongation. Fuel requirement of propane is about 4232TPA and will be sourced from IOCL/IPPL/any other approved supplier. The total water requirement of entire project will be 1723 m³/day, of which the additional water requirement will be 11m³/d. The water will be supplied from JUSCO (A Hundred percent subsidiary company of Tata Steel). Raw material for the proposed expansion will be Hot Rolled Coils. This will be pickled and subsequently skin passed. The skin passing operation is to improve the quality with respect to strip flatness, elongation and surface roughness of the hot rolled pickled coils. The products are Hot Rolled Skin Passed Pickled and Oiled (HRSPO) coils and Hot Rolled Pickled & Oiled (HRPO) coils.

Following are the features of proposed expansion plant:

Sr.	Features	Details
No	2	
1	Mill Type	4Hi Non-Reversing Skin Pass Mill
2	Material to be Skin passed	HR Pickled Low Carbon Steel
3	Incoming strip temperature	< 50°C uniform through coil length.
4	Tensile strength	90 kg/sg.mm max upto 3.0 mm, 75 kg/sq.mm max above 3.0 mm
5	Yield Strength	20-80 kg/ sq.mm.
6	Strip Width	1650 mm max. / 700 mm min.
7	Thickness of strip	1.0 to 6.0 mm for Skin passing
8	Coil Weight	32,000 Kg max.
9	Specific coil weight	18 kg / mm20kg/mm
10	Incoming coil I.D.	762 mm
11	Incoming coil O.D	2200 mm max.
12	Outgoing coil I.D.	610 mm / 762 mm
13	Outgoing coil O.D	2200 mm max.
14	Work Roll	350 dia. x 2000 mm barrel ; 600 dia x 2000 mm barrel
15	Back-up roll	800 dia1200dia x 1950 mm barrel.
16	Mill speed	500mpm max

- 6.0 The Skin Pass Mill, sludge cake from WWTP, solid wastes generated from various processes include trimmings and scrap from pickling line, Reversing Mill which will be recycled back into the plant works. Used oils and oily scum would be sold be authorised recyclers and iron oxide from ARP will be given to Tata pigments or to paint manufacturers.
- 7.0 The details of compliance of EC conditions of earlier EC for existing project was presented, and were found to be compliant. With reference to condition No (v), PP has furnished a letter No. 2614 dated 02.09.2014 of the Office of PPCF (WL), Jamshedpur providing details of distance of the project from the nearest RFs and also stating that there is no impact of the proposed project on the RFs.
- 8.0 Public Hearing was conducted on 8<sup>th</sup> May 2014 and the public was generally supportive of the proposed expansion. The PP committed to address the issues of local needs such as road widening/improvement, and issues of dumping of wastes, discharge of effluents, employment to locals, skill development to locals, especially tribals, etc through a joint committee.
- 9.0 The matter was considered in the 23<sup>rd</sup> EAC meeting held during 18<sup>th</sup> -19<sup>th</sup> September, 2014. The Committee sought details regarding status of WL Clearance from the Standing Committee on Wildlife vis-à-vis SC Order dated 04.12.2006 in view of the fact that Dalma Wildlife Sanctuary is located at a distance of 2.7 km.

- 10.0 It was noted that an application vide letters No. EMD/C-38/206/13 and EMD/C-38/207/13 dated 08.11.2013 has been made to DFO, Jamshedpur. A response was received from DFO vide letter dated 02.09.2014 that the proposed expansion project of Cold Rolling Mill is located in non-forestland with no possibility of impacts on the Dalma WL Sanctuary. A letter was thereafter submitted to PCCF (WL) vide letter No. EMD/C-38/167/14 dated 18.10.2014 for NBWL clearance. It was further stated that the MOEFCC had notified vide Notification dated 29.03.2012 an area of upto 5km from the boundary of the Dalma WL Sanctuary as Eco-sensitive Zone. The project site is located outside the boundary of the Dalma Eco Sensitive Zone at a shortest aerial distance of 2.7km in the North direction. In all other directions it is beyond 2.7km outside the ESZ. Therefore, the project does not come in the ambit of the NBWL clearance.
- 11.0 The matter was again considered in the  $31^{st}$  EAC meeting held during  $8^{th} 9^{th}$  January, 2015. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions.
- 12.0 The Ministry of Environment, Forest and Climate Change has considered the application based on the recommendations of the Expert Appraisal Committee (Industry) and hereby decided to grant Environmental Clearance to the above mentioned proposal under the provisions of EIA Notification dated 14<sup>th</sup> September 2006, subject to strict compliance of the following Specific and General conditions:
- i. The PP shall prepare a WL Conservation Plan in and around the project site drawn up in consultation with the PCCF(WL), Government of Jharkhand. Separate Funds shall be earmarked for the various activities identified and details of the expenditure made thereon shall be submitted as part of the Compliance Report to RO, Ranchi.
- ii. 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), and bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm<sup>3</sup> by installing energy efficient technology.
- iii. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.
- iv. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30<sup>th</sup> May, 2008 and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed.
- v. The water consumption shall not exceed as per the standard prescribed for the sponge iron plants and steel plants.

- vi. Efforts shall further be made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other 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.
- vii. All the effluents shall be treated and used for dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Domestic wastewater will be treated in the Sewage Treatment Plant.
- 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 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 Ranchi, SPCB and CPCB.
- ix. 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 shall be submitted to the Ministry's Regional Office at Ranchi, SPCB and CPCB.
- x. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xi. 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 shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office at Ranchi.
- xii. Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Ranchi, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xiii. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xiv. 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.
- xv. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.
- xvi. At least 5 % of the total cost of the expansion project shall be earmarked towards the Enterprise Social Commitment (ESC) based on locals need and item-wise

details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Ranchi. Implementation of such program shall be ensured accordingly in a time bound manner.

- xvii. All the commitments made to the public during the Public Hearing / Public Consultation meeting 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 Ranchi.
- xviii. Provision shall be made for the housing of 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 Jharkhand 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 MoEFCC.
- iii. 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>, PM<sub>2.5</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 Ranchi and the SPCB/CPCB once in six months.
- iv. 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 form time to time. The treated wastewater shall be utilized for plantation purpose.
- v. 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).
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.

- viii. 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.
- ix. Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the MoEFCC 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 Ranchi. The funds so provided shall not be diverted for any other purpose.
- x. 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.
- xi. 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 MOEFCC at Ranchi. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM<sub>10</sub>, SO<sub>2</sub>, NOx (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.
- xii. 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 MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Ranchi / CPCB / SPCB shall monitor the stipulated conditions.
- xiii. 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 along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEFCC at Ranchi by e-mail.
- xiv. 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 MoEFCC 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

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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 Ranchi.

- xv. 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.
- 13. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 14. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 15. 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. Satish C. Garkoti) Scientist 'F'

## Copy to:-

1. The Secretary, Department of Environment, Govt. of Jharkhand.

2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.

3. The Chairman, Jharkhand State Pollution Control Board, Town Administrative Building, HEC Dhurwa, Ranchi-824004

4. Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi – 834002

5. Guard File / Record File/Monitoring file.

(Dr. Satish C. Garkoti) Scientist 'F'