

DGM Env Engg

Adm - 401
Dt 31/12/16

F. No. J-11011/66/2014-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

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ENVIRONMENTAL ENGG. DEPT.
SAIL, RSP
AGM(CVURM)
DY. No. 905
DATE: 31/12/16

Dated: 14th December, 2016
15th

To

M/s Steel Authority of India Ltd (SAIL)
Village Rourkela, Tehsil Rourkela,
District Sundergarh, Odisha.

Subject: Modernization of Steel Plant (4.2 MTPA) by adding 3 MTPA Hot Strip Mill, 3.3 MTPA Beneficiation Plant and 2 MTPA Pellet Plant and enhancement of production of Special Plate Plant (3,000 TPA to 15,000 TPA) within the premises of Rourkela Steel Plant by M/s Steel Authority of India Ltd.(SAIL), at Village Rourkela Tehsil Rourkela, District Sundergarh, Odisha. – Environmental Clearance regarding.

Sir,

This has reference to your online application No. IA/OR/IND/22133/2014 dated 7th July, 2016 along with copies of EIA and EMP report seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The ToR's to the project were prescribed by the Ministry vide letter No. F. No.J-11011/66/2014-IA-II(I) dated 27th June, 2014, for the preparation of EIA and EMP report. The proposed project activity is listed at S.No. 3(a) "Metallurgical industries (ferrous and non ferrous)", under Category 'A' of the Schedule of EIA Notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEFCC. The project was earlier accorded environment clearance by the Ministry vide letter No. J-11011/757/2007-IA.II dated 29.01.2008.

2.0 The Ministry of Environment, Forest and Climate Change has examined the proposal in consultation with the Expert Appraisal Committee (Industry -I). It is noted that the project is for setting up of a new hot strip mill for production of 3 million tons per annum (MTPA) of Hot Rolled Strips, a new beneficiation plant (3.3 MTPA of beneficiated ore), new pellet plant (2 MTPA of pellets) and enhancement of production of special plates from 0.003 MTPA to 0.015 MTPA, within the existing plant premises. Following table shows the existing and the proposed facility:

SN.	Plant Unit/Product	As per existing EC dated 29/01/2008 (TPA)	Proposed changed after Modernisation (TPA)	Remarks
1.	Coke Ovens • No. of ovens • Gross coke	437 ovens 2,170,000	437 ovens 2,170,000	No change

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2.	Sinter Plant (Sinter)	6,760,000	6,760,000	No change
3.	Blast Furnace – Hot Metal Production	4,500,000	4,500,000	No Change
4.	Steel Melting Shops – Crude Steel	4,200,000	4,200,000	No change
5.	Rolling Mills – • Total Saleable Steel	3,880,000	3,880,000	No change
6.	Hot Strip Mill – Hot Rolled Steel	1,850,000	3,000,000	Addition of new Hot Strip Mill of 3 MTPA capacity slab input for producing Hot Rolled steel of 2.92 MTPA.
7.	Plate Mill – Plates	2,135,000	2,135,000	No change
8.	Cold Rolling Mill – Cold Rolled Steel • CR coils • CR sheets • Galv. Sheets • Tin Plates	345,000 25,000 196,000 75,000	345,000 25,000 196,000 75,000	No change
9.	Silicon Steel Mill – CRNO Steel	255,000	255,000	No change
10.	Pipe Plant – • Spiral welded pipes • ERW Pipes	55,000 75,000	55,000 75,000	No change
11.	LDBP	Lime : 414,900 Dolo : 130,000	Lime : 414,900 Dolo : 130,000	No change
12.	Beneficiation Plant	-	3,300,000	Addition of new 3.3 MTPA Beneficiation Plant.
13.	Pellet Plant	-	2,000,000	Addition of new 2 MTPA Pellet Plant.
14.	Special Plate Plant	3000	15,000	Addition
<p>Note : The capacities shown under the head "Proposed change after Modernisation "are the installed capacities of the mills. Depending on the market demand the product mix will vary and RSP's production will be limited to the following;</p> <ul style="list-style-type: none"> • 4.5 MTPA Hot Metal • 4.2 MTPA Crude Steel • 3.88 MTPA Saleable Steel 				

3.0 The total land required for the project is 90.73 ha, which comes under the category of Industrial Land under RSP's premises. No forest land involved. The entire land has been acquired way back in late 50s for Rourkela Steel Plant. No River passes through the project

area. It has been reported that no water body exists around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

4.0 The topography of the plant area is flat and reported to lie between 22°12' 0.91"N to 22° 13' 40.59"N Latitude and 84°50' 0.89"E to 84°54'11.46" E Longitude in Survey of India topo sheet No.F45G16 at an elevation of 202 m AMSL. The ground water table reported to ranges between 2-7 m below the land surface during the post-monsoon season and 2-10 m below the land surface during the pre-monsoon season. No national park/wild life sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc., are reported to be located in the core and buffer zone of the project.

5.0 The ore for the plant would be procured from captive mines at Kiriburu, Meghahatuburu, Bolani, Barsua and Gua. The ore transportation will be done by Rail. The water requirement of the project is estimated as 32,880 m³/day. No fresh water will be drawn from river/ground water table. The total water requirement will be met from recycling the treated waste water from the existing polishing treatment unit of Rourkela Steel Plant i.e., Lagoon. The power requirement of the project is estimated as 210 MW, which will be obtained from Grid Corporation of Odisha Limited (GRIDCO), Odisha Power Transmission Corporation Limited (OPTCL), NTPC-SAIL Power Company Private Limited (NSPCL) and CPP-1 of Rourkela Steel Plant.

6.0 A total of 0.960 MTPA of waste will be generated due to the project, out of which 10200 TPA will be used gainfully in ore bedding and blending plant and remaining waste (Slime filter cake from Beneficiation Plant) will be used for filling the low lying areas within the premises of RSP and used for reclaiming the slag dump areas of RSP. It has been envisaged that an area of 15.625 ha will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

7.0 The public hearing of the project was held on 16th June, 2016, for production of 3 MTPA Hot Strip Mill, 3.3 MTPA Beneficiation and 2 MTPA Pellet Plant and Special Plate Plant (3000 TPA to 15000 TPA). The issues raised during public hearing are tree plantation along the bank of the river Brahmani, employment, CSR funding for youth, health center etc.

8.0 The capital cost of the project is Rs. 4565.32 crores and the capital cost for environmental protection measures is proposed as Rs. 456.6 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 38.00 crore.

9.0 The proposal was considered by the Expert Appraisal Committee (EAC) for Industry-I during its 9th meeting held on 27th to 29th July, 2016 and recommended the project for Environmental Clearance and stipulated Specific Conditions along with other environmental conditions while considering for accord of environmental clearance.

10.0 The Ministry of Environment, Forest and Climate Change has considered the application based on the recommendations of the Expert Appraisal Committee (Industry-I) and hereby decided to grant environmental clearance to the above mentioned modernization of Steel Plant (4.2 MTPA) proposal by adding 3 MTPA Hot Strip Mill, 3.3 MTPA Beneficiation and 2 MTPA Pellet Plant and enhancement of production of Special Plate Plant (3,000 TPA to 15,000 TPA) within the premises of Rourkela Steel Plant of M/s Steel

Authority of India Ltd (SAIL), under the provision of EIA Notification dated 14th September, 2006, as amended, subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITION:

- i. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- ii. Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ and installing energy efficient technology.
- iii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- 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 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- v. Flood data for the past 100 year should be collected from the irrigation department and submitted along with the 6 monthly compliance report
- vi. Funds proposed for Wild life Management Plan should be allotted as proposed and the implementation of the project should be monitored and a report should be submitted to the Ministry every year within three months after each financial year.
- vii. Total make up water requirement of the water from Brahamani River shall not exceed 2,27,352 m³/day and prior permission shall be obtained from the concerned department. No ground water shall be used for the plant. The effluent shall be treated in the effluent treatment plant. Maximum treated wastewater shall be recycled and reused in the process for cooling, gas cleaning plant (GCP, steel making, slag granulation plant (SGP), dust suppression, green belt development etc. Zero liquid discharge criteria to be achieved within 4 years from the date of grant Environmental Clearance to the project.
- viii. Green belt in an area admeasuring 910 Ha is still to be planted with trees. The hill adjacent to the steel plant should be adopted and plantation should be carried out. The river bank should also be planted with suitable species of trees on the either side of the river.
- ix. A statement on carbon budgeting including the quantum of equivalent CO₂ being emitted by the existing plant operations, the amount of carbon sequestered annually by the existing green belt and the proposed green belt and the quantum of equivalent CO₂ that will be emitted due to the proposed expansion shall be prepared by the project proponent and submitted to the Ministry and the Regional Office of the

Ministry. This shall be prepared every year by the project proponent. The first such budget shall be prepared within a period of 6 months and subsequently it should be prepared every year.

- x. Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.
- xi. 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.
- xii. 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, SPCB and CPCB.
- xiii. A time bound action plan shall be submitted to reduce solid waste generated due to the project related activity, its proper utilization and disposal.
- xiv. A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xv. Green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines.
- xvi. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall 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.
- xvii. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xviii. The project proponent shall provide for LED lights in their offices and residential areas.
- xix. At least 2.0% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a

Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.

- xx. The proponent shall prepare a detailed CSR Plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The plan so prepared shall be based on SMART (Specific, Measurable, Achievable, Relevant and Time bound) concept. The expenditure should be aimed at sustainable development and direct free distribution and temporary relief should not be included. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xxi. 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 Odisha 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, Forests and Climate Change (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 PM₁₀, PM_{2.5}, 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 Bhubneswar 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 19th May, 1993 and 31st 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 Ministry of Environment, Forest and Climate Change (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 Bhubneswar. 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 Bhubneswar. 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.
- 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 Bhubneswar / CPCB / SPCB shall monitor the stipulated conditions.
- xiii. 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

along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEFCC at Bhubneswar 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 Ministry of Environment, Forests and Climate Change (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 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 Bhubneswar.
- 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.

11.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.


12.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

13.0 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.


15/12/2016
(Dr. Satish C. Garkoti)
Scientist 'F'

Copy to:-

1. The Secretary, Department of Environment, Government of Odisha.
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, "Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012.
4. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar – 751023.
5. Guard File / Record File/Monitoring file.


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