

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

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Dated: 6<sup>th</sup> November, 2019

To

Shri Surendra Nath Xess,  
Dy. General Manager,  
Steel Authority of India Limited,  
Rourkela Steel Plant,  
Rourkela – 769011.  
Odisha.

**Email:** [surendranath.xess@sailrsp.co.in](mailto:surendranath.xess@sailrsp.co.in); Tel: 0661-2510183

**Subject:** Modernization of Rourkela Steel Plant by addition of new slab caster#4 within existing SMS-II to achieve production of M/s SAIL Rourkela Steel Plant located at village and tehsil Rourkela, District Sundergarh, Odisha – **Environmental Clearance under para 7(ii) of EIA Notification, 2006 – reg.**

Sir,

This refers to the application of M/s. SAIL Rourkela Steel Plant made vide proposal no. **IA/OR/IND/75723/2018** dated 9<sup>th</sup> November 2018 seeking environmental clearance under para 7(ii) of EIA Notification, 2006 for change in the product mix at the Rourkela Steel Plant by addition of new slab caster#4 within existing SMS-II to achieve production of M/s SAIL Rourkela Steel Plant as per EC vide letter no J-11011/66/2014-IA.II (1) dated 15/12/2016” located at SAIL Rourkela Steel Plant Rourkela Orissa. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category “A” EIA Notification, 2006 and the proposal is appraised at Central level.

The proposal cited above was considered during the 1<sup>st</sup> meeting of Reconstituted Expert Appraisal Committee [REAC] (Industry-I) held on 26-28<sup>th</sup> November, 2018. The EAC proceedings of the proposal cited above is given as below. -

**Details submitted by the project proponent**

2. M/s SAIL obtained environmental clearance for expansion of Steel Plant (4.2 MTPA) from MoEF&CC vide File No. J-11011/757/2007-IA.II dated 29/01/2008. Further, the environmental clearance for the modernization of Steel Plant by adding 3 MTPA Hot Strip Mill, 3.3 MTPA Beneficiation Plant, 2 MTPA Pelletisation Plant & Enhancement was obtained vide File No. J-11011/66/2014-IA.II(I) dated 15/12/2016.



3. The certified Compliance Report regarding earlier EC was obtained vide Regional office letter no 101-964/EPE/3414 dated 05/11/2018.

4. After recent Modernization & Expansion of 4.2 MTPA RSP, the liquid steel production capacity in SMS-1 is 0.5 MTPA and SMS-II has gone up to 3.7 MTPA, whereas Caster capacity of SMS-II remains at 3.3 MTPA, as up-gradation of Caster#1 & #2 of SMS-II could not be taken up. So the present combined capacity of Casters- 1 & 2 in SMS-II is 1.8 MTPA as against the requirement of 2.2 MTPA to produce Total Crude Steel of 4.2 MTPA for which EC granted. To bridge this gap and enhance the flexibility in operation, it is envisaged to install a new Slab Caster #4 in SMS-II in extended portion of SMS-II shop. The project will be commissioned in 37 months. Caster 4 is a shaping devise and having physical operation only. Commissioning and stabilization of the proposed Caster#4 in SMS#2 will reduce the overall energy & water requirements of SMS#2, as Caster#1 & #2 will be operated at reduce loads which are highly energy and water intensive

5. Change in Product Mix after incorporating new unit are as given below:

SN.	Plant Unit/Product	As per existing EC dated 29/01/2008 and 15th Dec., 2016	Present Proposal & change considering this proposal	Remarks
1	Coke Ovens • No. of ovens • Gross coke	437 ovens 2,170,000	437 ovens 2,170,000	No change
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 SMS#1 : 1 Caster SMS#2 : 3 Casters	4,200,000 SMS#1 : 1 Caster SMS#2 : 3 Casters + Caster#4	No change in Crude Steel Production.  Caster#4 Addition for achieving the Crude Steel Capacity for which EC granted
5	Rolling Mills – • Total Saleable Steel	3,880,000	3,880,000	No change
6	Hot Strip Mill – Hot Rolled Steel	3,000,000	3,000,000	No change
7	Plate Mill – Plates	2,135,000	2,135,000	No change
8	Cold Rolling Mill – Cold Rolled Steel • CR coils	345,000	345,000	No change



SN.	Plant Unit/Product	As per existing EC dated 29/01/2008 and 15th Dec., 2016	Present Proposal & change considering this proposal	Remarks
	<ul style="list-style-type: none"> <li>CR sheets</li> <li>Galv. Sheets</li> <li>Tin Plates</li> </ul>	25,000 196,000 75,000	25,000 196,000 75,000	
9	Silicon Steel Mill – CRNO Steel	255,000	255,000	No change
10	Pipe Plant – <ul style="list-style-type: none"> <li>Spiral welded pipes</li> <li>ERW Pipes</li> </ul>	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	3,300,000	No change
13	Pellet Plant	2,000,000	2,000,000	No change
14	Special Plate Plant	15,000	15,000	No change
15	Sulphuric Acid Plant*	60TPD	125 TPD*	*7 <sup>th</sup> EAC dated 17-18/05/2018 recommended for grant of EC. Process of formal EC is under progress.

6. The Maximum ground level concentration due to proposed change in the product mix is found as  $0.11158 \mu\text{g}/\text{m}^3$  at a distance of 2 km in the North-East Direction. This ground level concentration of  $\text{PM}_{10}$  when superimposed on the Ambient Air  $\text{PM}_{10}$  data of February 2018, i.e.  $68 \mu\text{g}/\text{m}^3$  (Highest value) the resultant concentration is  $68.112 \mu\text{g}/\text{m}^3$ . This air quality study shows that there is insignificant increase in the concentration of  $\text{PM}_{10}$  due to the implementation of LHF in the proposed Caster#4 project.

7. The plant management has committed to reduce the fresh makeup water through recycling of water from existing plant units. The various methods have been proposed to conserve water by utilizing waste water generated within plant by treating it suitably and recycling for lower grade use.

8. The solid wastes generated from the proposed project will be gainfully utilised back in steel making process.

9. RSP has already installed 4 no of on-line ambient air quality monitoring stations to monitor ambient air quality of surrounding ambient air. The monitoring data is uplinked with the servers of SPCB and CPCB



10. To offset the pollution, RSP has created a green canopy by planting around 45 lakhs trees since inception. RSP is expanding this Green Cover every year by planting samplings under the guidance of DFO, Dept. Of Forests, Govt. of Odisha and also distributing the samplings free of cost to NGO, Educational Institutions, Villagers etc. Greening efforts of RSP in the last 4 years is given below;

SN.	Year	Saplins planted	Free Distribution
1	2015-16	1,44,000	2,00,000
2	2016-17	70,000	1,00,000
3	2017-18	1,62,400	1,00,000
4	2018-19	88,500	1,05,000

11. Water Consumption in Casters: Overall water consumption shall be reduced by about 20% from existing level due to Dynamic spray cooling and sparing use of older caster require more specific water consumption.

12. Total cost of the project is INR. 782.53 Crores. An amount of INR 3.913 crores is earmarked for the implementation of CER related activities. Additional employment of 73 Nos would be generated due to the project activity.

13. The committee observed that the instant proposal is for installation of 1 MTPA Caster#4 in existing SMS#2 without increasing the permitted hot metal production of 4.5 MTPA and crude steel production of 4.2 MTPA.

14. After detailed deliberations, the committee recommended for environmental clearance for installation of 1 MTPA slab caster in SMS#2 without increasing the permitted hot metal production of 4.5 MTPA and crude steel production of 4.2 MTPA subject to certain conditions:

15. 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 decides to accord environmental clearance for installation of 1 MTPA Caster#4 in existing SMS#2 without increasing the permitted hot metal production of 4.5 MTPA and crude steel production of 4.2 MTPA under para 7(ii) of the EIA Notification, 2006 subject to following additional conditions:

- i. The maximum hot metal production of 4.5 MTPA and crude steel production of 4.2 MTPA shall remain unchanged.
- ii. The specific water consumption shall not be more than 3.6 m<sup>3</sup>/tonne of crude steel production.
- iii. The specific energy consumption shall be reduced by 10% below 2017-18 value.
- iv. The greenbelt shall be developed in an area 35% of the total project area with native, broad leaved tree species @ 1500 plants/ha.
- v. The project proponent shall install bio-digester for kitchen waste.
- vi. The project proponent shall develop master plan for solarization indicating the maximum potential for switching over to solar power. This should include township as well. This plan will be executed fully within 5 years.
- vii. Emissions from the bag filter attached to LHF shall not be more than 30 mg/Nm<sup>3</sup>.



- viii. The project proponent shall ensure and take all necessary efforts in consultation with the Regional Office of the MoEF&CC for the compliance of the observations raised in the certified compliance report dated 5/11/2018 of Regional Office, MoEF&CC.
- ix. All other terms and conditions prescribed in environmental clearance vide File No. J-11011/757/2007-IA.II (I) dated 29/01/2008 and File No. J-11011/66/2014-IA.II (I) dated 15/12/2016 shall remain unchanged.
16. The PP shall obtain fresh environmental clearance in case of change in scope of the project if any.

This issues with the approval of Competent Authority.

  
(A.K. Agrawal)  
Director

**Copy to:-**

1. Secretary, Department of Environment, Government of Odisha, Secretariat Bhubaneswar.
2. Deputy Director General (C), Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandersekharapur, Bhubaneswar – 751023.
3. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
4. Chairman, Odisha State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneshwar-751012.
5. Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
6. District Collector, Sundergarh District, State of Odisha.
7. Guard File / Record file / Monitoring file.
8. MOEF&CC Website.

  
(A.K. Agrawal)  
Director