F. No. J-11011/230/2016-IA.II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

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Dated: 7th August, 2019

To

Shri. Hirak Mazumder,
Director,
M/s. Rungta Mines Limited,
Main Road, Barbil,
Keonjhar,
Odisha – 758035.

Tel: 0676-276157.; E-mail: rml.forest@gmail.com

Subject: Enhancement of production in the Steel Melting Shop [105600 TPA to 126720 TPA], billet/bloom/slab caster [103488 TPA to 124186 TPA] and Rolling Mill [TMT/Flat Round/ Wire Rod/Structural Mill/ Others] (102418 TPA to 121702 TPA] **by M/s Rungta Mines Limited** at Karakhendra Steel Plant located at village Karakhendra, District Keonjhar, **Odisha – Environmental Clearance under para 7(ii) of EIA Notification, 2006 – regarding.**

Sir,

1. This refers to the application of M/s. Rungta Mines Limited made vide proposal no. IA/OR/IND/100635/2019 dated 29th March, 2019 along with Form – 2 seeking environmental clearance under para 7(ii) of the EIA Notification, 2006 for the project mentioned above. 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 project is appraised at the Central level.

2. The proposal cited above was considered during the 6th meeting of Reconstituted Expert Appraisal Committee [REAC] (Industry-I) held on 29-30th April, 2019 and further reconsidered in the 7th meeting of Reconstituted Expert Appraisal Committee [REAC] (Industry-I) held on 29-31st May, 2019. The EAC proceedings of the proposal cited above is given as below.

Details submitted by the project proponent:

3. The proposal is for enhancement in the production of Steel Melting Shop [105600 TPA to 126720 TPA], billet/bloom/slab caster [103488 TPA to 124186 TPA] and Rolling Mill [TMT/Flat Round/ Wire Rod/Structural Mill/ Others] (102418 TPA to 121702 TPA] at Karakhendra Steel Plant at village Karakhendra of District Keonjhar, Odisha of M/s

Rungta Mines Ltd. along with Form-I and Pre-Feasibility Report. The proposed enhancement in production falls under category 'B'. But it is treated as Category 'A' due to its proximity to interstate boundary of Odisha-Jharkhand (1.7 km). Environmental clearance has been obtained from MOEF&CC vide letter no. J-11011/230/2016-IA. II(I) dated 15.01.2018. The sanctioned facilities and production along with present status of implementation are given below:

UNITS SANCTIONED IN EC LETTER DATED 15.01.2018

Sl.	Facilities	Production Capacity TPA	Present Status of implementation
1	Steel Melting Shop comprising: Induction Furnace (2X15T) with CCM (2 strand)	105,600	• 33 nos. foundation completed out of 36 nos. • Order placed for IF • Civil works for IF underway
	Billet / Bloom/ Slab caster	103,488	Order placed
2	TMT/ Flat/Round/ Wire Rod/ Structural Mill	101,418	Order yet to be placed, quotations invited

4. Now it is proposed to have the following enhancement in production:
   i. Amendment by addition of further refining facility i.e. 1X20 T LRF to process 1,26,720 TPA in consonance with the proposed enhancement of 2X15 T IF.
   ii. Capacity enhancement of SMS, Billets/ bloom/ slab casters and Rolling mill for Flat/ Round/ Wire rod/ Structural as follows:

PRODUCTION AS PER EC & PROPOSED EXPANSION IN PRODUCTION

S. No.	Plant Facilities	Production as per EC dated 15.01.2018 TPA	Proposed Production, TPA	Total Production, TPA	%tage increase
1.0	**Steel Melting Shop comprising:** Induction Furnace 2x15 T, LRF 1x20T (proposed in above amendment)	105,600	21,120	126,720	20%
2.0	Billets/ Bloom Caster/Slab Caster CCM (2 strand)	103,488	20,698	124,186	20%
3.0	Rolling Mill (TMT/ Flat/ Round/ Wire Rod/ Structural Mill/ others)	101,418	20,284	121,702	20%

5. The above expansion is possible because of following:

   - In Induction Furnace, by using alumina based neutral lining (life-100 heats) instead of the conventionally used silica based acidic lining (life- 20 heats), the downtime is reduced. Furthermore, 100 heat life of neutral lining can be further increased to 350 heats by hot patching. The longer life of lining will reduce

downtime and increase availability of 96 working hours. Hence, increase of production by 20% is easily feasible by utilizing the extra working time available to operate a standby furnace in addition to the operational furnaces above. For operation of a standby furnace simultaneously, additional electrical, bush bars and panel shall be installed.

- Billets/ Bloom Caster/Slab Caster CCM (2 strand) capacity will be increased by increasing the operating hours to cater to the higher output from IF-LRF. There will be no other change.
- The smallest 'direct' rolling mills that are currently manufactured by suppliers are 28 TPH. This configuration can easily cater to the increased output from IF-LRF-CCM by increasing the number of operating hours from average 11-12 hrs/day to 15 hours/day. There will be no other change.

6. The salient features for proposed enhancement in production are summarized as below:

Description	Existing as per EC dated 15.01.2018	After Expansion
Location	Village Karakhendra, District Keonjhar, Odisha	Same
Total Area	13.20 Acres	Same
Product	Billets/ Bloom/ Slab and TMT/ Flat/ Round/ Wire rod/ Structural steel/ other	Same
Working days	330 days	Same
Manpower	250	260
Implementation Schedule	-	24 month
Cost of the project	Rs. 83 crores	Rs 85 crores
Recirculating Water	758 KLD	1226 KLD
Daily make up water	Not estimated	104.6, say, 105 KLD
Waste water generation	42.2 KLD (including initial losses to clean the system)	4.7 KLD
Source of water	Industrial water - harvested rain water and deficit from Karo River, if required. Ground water sourced for domestic.	Same
Power requirement	15 MW	20 MW

7. The raw materials requirement for the proposed enhancement in production is furnished as below:

Sl. No.	Facilities	Raw Material	Unit	Required	Own Source	From outside Purchased
1	Steel Melt Shop					
	I.F.	DRI	TPA	1,19,266	1,19,266	-
		Pig Iron	TPA	13,774	-	13,774

Sl. No.	Facilities	Raw Material	Unit	Required	Own Source	From outside Purchased
		Scrap	TPA	13,774	-	13,774
		Product		**Produced**		**Sold to market**
2	Rolling mill	TMT	TPA	121702		121702

- Own source is the Karakolha sponge iron plant at a distance of 0.5 km aerially.
- Pig Iron & scrap will be purchased from open market
- Raw material and product will be transported through Road and Road-Rail combination (from nearest siding at Barbil-2.9 km aerially and Bolani-13.5 km aerially).

8. Due to the expansion, there will be no additional land requirement beyond 13.2 acres for which Environmental Clearance was accorded. There will be marginal increase in water requirement and total daily fresh water requirement shall become 105 KLD. Out of this, 4 KLD drinking water requirement will be met from ground water, for which permission has been obtained from CGWA. Balance 101 KLD shall be met through harvested rain water collected in raw water reservoir. Entire waste water will be reused within plant for sprinkling after treatment in OWS, settling tanks and common sump.

9. Increase in total pollutant emissions from stack into the air are anticipated for PM_{10}, $PM_{2.5}$ and NO_2 but decrease in SO_2 will be there due to use of lower sulfur fuel. The maximum incremental GLCs will increase by 0.02 $\mu g/m^3$ for PM_{10}, 0.01 $\mu g/m^3$ for $PM_{2.5}$ and 0.01 $\mu g/m^3$ for NO_2. Bag filters shall be installed to comply to the emission norms.

10. Fugitive emissions will be controlled by keeping raw materials DRI & Scrap as well as finished products under covered sheds. There will be increase in traffic by approximately 28 trucks. The total solid waste generation will increase in form of slag (by 2859 TPA), mill scale (by 228 TPA) and BF dust (by 489 TPA). Slag and mill scale shall be 100% reutilized while BF dust shall be stored in designated solid waste area. Additional environmental management measures proposed are:

    - Installation of the latest & state-of-the art bag filters compliant to 30 mg/Nm^3
    - Solar lighting for all streets and parking area.
    - Solar panels of roof top to minimize power consumption from own power plant at Karakolha (0.5 km away). This will reduce coal consumption in own CPP
    - 1 ha green belt plantation outside project boundary

11. Project proponent submitted certified compliance report of EC dated 15.01.2018 from Regional Office, MOEF&CC, Bhubaneshwar. Project was monitored on 26.02.2019 by Regional Office Bhubaneswar and issued a compliance status report vide letter no. 101-1001/EPE/ dated 06.03.2019. The observations made in the Regional Office report is furnished as below:

    i. Chose at least 2-3 feet plant saplings for better survival of the green belt development.
    ii. Complete construction work of rain water storage pond before the monsoon season.
    iii. Put up Environment & Safety signage boards in various prominent location of the project site.

In this regard, the project proponent informed that the necessary correction actions to the aforesaid observations have been taken and the compliance is under progress.

12. Public hearing for the existing project was conducted on 12.10.2017 and the issues raised in the public hearing are being carried out by the project proponent under various headings of environment, employment, health, supply of drinking water, electricity, road communication & others. Rs. 43.12 lakhs have been spent between Oct 2017 to Jan 2019.

13. Name of Environmental consultant: Min Mec Consultancy Pvt. Ltd. who is preparing and presenting reports as per the High Court of Delhi orders in LPA 110/2014 and CM No.2175/2014 (stay) and W.P.(C) 3665/2016.

Recommendations of the EAC

14. The aforesaid proposal was considered in the 6th meeting of the Reconstituted Expert Appraisal Committee (Industry 1) held during 29-30th April, 2019 and further reconsidered in the 7th meeting of the Reconstituted Expert Appraisal Committee (Industry 1) held during 29-31st May, 2019. After detailed deliberations, the Committee recommended the proposal cited above for grant of Environmental Clearance under para 7(ii) of the EIA Notification, 2006. subject to following additional conditions:

    i. All other terms and conditions mentioned in the earlier EC letter no. J-11011/230/2016-IA.II (I) dated 15/01/2018 shall remain unchanged.

Decision of MoEF&CC

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 decided to accord environmental clearance for enhancement of production in the Steel Melting Shop [105600 TPA to 126720 TPA], billet/bloom/slab caster [103488 TPA to 124186 TPA] and Rolling Mill [TMT/Flat Round/ Wire Rod/Structural Mill/ Others] (102418 TPA to 121702 TPA] at Karakhendra Steel Plant located at village Karakhendra, District Keonjhar, **Odisha** under para 7(ii) of EIA Notification, 2006 subject to following additional conditions:

    i. All other terms and conditions mentioned in the earlier EC letter no. J-11011/230/2016-IA.II (I) dated 15/01/2018 shall remain unchanged.

16. The PP shall obtain fresh environmental clearance in case of change in scope of the project if any.

17. This issues with the approval of Competent Authority.

Yours faithfully,

(A.K. Agrawal)
Director

Copy to:-

1. The Secretary, Department of Forests, Government of Odisha, Secretariat, Bhubaneswar.
2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Deputy Director General (Central), Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandersekharpur, Bhubaneswar – 751023.
4. The Chairman, Odisha State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneshwar-751012.
5. The Member Secretary, Central Ground Water Authority, West Block –II, Wing -3, Sector I, R.K.Puram, New Delhi – 110086.
6. The District Collector, Keonjhar District, Odisha.
7. Guard File/Record File/Monitoring File.
8. MoEF&CC website.

(A.K. Agrawal)
Director