## F. No. J-11011/28/2007- IA-II(I) Government of India

Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

Indira Paryavaran Bhawan Jor Bagh Road, Aliganj, New Delhi - 110003 E-mail: sharath.kr@gov.in Tel: 011-24695319

Dated:15th January, 2018

To

M/s Steel Authority of India Ltd

Room No. 548, Environment Management Department Ispat Bhawan, Bhilai Steel Plant, Bhilai, Chhattisgarh-490001.

Subject: Modernization-cum-expansion of Bhilai Steel Plant (Crude Steel capacity from 4 MTPA to 7.0 MTPA; Captive Power Plant - 76 MW; TRT -14 MW & CDCP - 4 MW; Total Power Generation: 94 MW) located at Bhilai, Chhattisgarh - Amendment in Environmental Clearance regarding.

Sir,

This has reference to your online application vide proposal no. IA/CG/IND/67971/2017 dated 8<sup>th</sup> November 2017 seeking amendments in Earlier Environmental Clearance granted vide File No. IA-J-11011/28/2007-IA.II(I), dated 31<sup>st</sup> March 2008.

- 2.0 M/s. Bhilai Steel Plant (BSP) is established in 1956 and since then there has been phases of expansion. The Environmental Clearance (EC) for 4.0 MTPA to 7.0 MTPA Modernization-Cum-Expansion Plan of Bhilai Steel Plant along with Captive Power Plant has been accorded by MoEFCC dated 31.03.2008 with amendments dated 23.06.2011 and 23.07.2014. The EC validity was extended up to 30.03.2018 by MoEFCC vide letter dtd. 05.07.2013. Consent to Establish was accorded by Chhattisgarh Environment Conservation Board(CECB) vide lr. no. 12981/TS/CECB/2009 dated 01.06.2009.
- Now, M/s. Bhilai Steel Plant (BSP), Steel Authority of India Limited (SAIL) proposed for amendments in Environmental Clearance accorded vide lr.no. J-11011/28/2007-IA II (I) dated 31.03.2008 for modernization cum expansion of 4.0 MTPA to 7.0 MTPA Modernization-Cum-Expansion Plan of Bhilai Steel Plant along with captive power plant. BSP is presently based on Blast Furnace-Twin Hearth Furnace (BF-THF) and BF- Basic Oxygen Furnace (BF-BOF) routes for production of iron and steel. Under the ongoing modernization-cum-expansion plan the crude steel production capacity is envisaged to be 7.0 MTPA within the existing premises of BSP.
- 4.0 It was informed that during execution of the project after detailed design engineering certain changes are envisaged in the configuration of the plant from the Environmental Clearance conditions, without any change in crude steel production. Further, certain changes in the product mix are envisaged without any change in finished steel production capacity. Moreover, there will be a decrease in overall pollution load from that envisaged during the EC 2008.



5.0 The proposed amendments are as follows:

Sl.	Units	7.0 MTPA Expansion EC Accorded valid upto 31.03. 2018	Amendment Requested/ Changes Proposed	Change in Capacity
	Sinter Plant Complex			
	Sinter Plant-3 M/c 2	1x 320 m <sup>2</sup> (new)	Change in grate area1x360 m <sup>2</sup> (new)	
	<b>Total Sinter Production</b>	9.235 MTPA	9.235 MTPA	No Change
	Coke Oven Complex			
	Coke Oven Battery 1 to 11	Battery No. 1, 7 & 8 to be phased out	At any time, three batteries will not be in operation (will always be under cold repair / rebuilding cycle). Total Coke production will be same as per accorded EC.	
	Total Capacity	3.94 MTPA	3.94 MTPA	No Change
	Rolling Mills			
a.	Universal Beam Mill	1.0 MTPA	Now not coming	-1.00 MTPA
b.	Rail & Structural Mill (RSM) with new Universal Rail Mill (URM)	1.70 MTPA	2.20 MTPA	+0.50 MTPA
c.	Plate Mill	1.42 MTPA	1.65 MTPA	+0.23 MTPA
d.	Merchant Mill	0.60 MTPA	0.85 MTPA	+0.25 MTPA
e.	Wire Rod Mill	0.68 MTPA	0.70 MTPA	+0.02 MTPA
f.	Bar and Rod Mill	0.90 MTPA	0.90 MTPA	-
	<b>Total Capacity</b>	6.30 MTPA	6.30 MTPA	No Change
	Power Blowing Station			
	PBS I	Existing 3x12 MW Turbo-generators to be upgraded to 1 x 12 MW + 2 x 15 MW	Turb-generatorsnot upgraded, 3 x 12 MW (Existing)	
	PBS II	2 x 170 TPH BF gas fired boiler 1 x 15 MW turbogenerator.	2 x 150 TPH BF gas fired boiler 1 x 25 MW turbo- generator	
	Total Power Generation (MW) & Steam Generation (TPH)	1390 TPH Steam 72 MW	1350 TPH Steam 76 MW	-40 TPH Steam +4 MW
	TRT	Power Generation Capacity not specified	14 MW	Green power from TRT indicated
	CDCP	Power Generation Capacity not specified	4MW	Green power

SI.	Units	7.0 MTPA Expansion EC Accorded valid upto 31.03, 2018	Amendment Requested/ Changes Proposed	Change in Capacity
	Blast Furnace	.7		(from CDCP indicated
	BF 6 with CDI	Modernisation Volume from 1719 m <sup>3</sup> to 2000 m <sup>3</sup>	Modernisation not undertaken Volume - 1719 m <sup>3</sup>	
×	Total Hot Metal Production	7.5 MTPA	7.5 MTPA	No Change

- 6.0 The hot metal, crude steel and finished steel production will be same as envisaged in EC 2008, i.e. 7.5 MTPA, 7.0 MTPA and 6.3 MTPA, respectively.
- 7.0 The assessment of change in production capacity, resource requirements and pollution load due to the proposed amendment shows that there is no change in hot metal; crude steel and finished steel production as envisaged at EC stage; no change in sinter and coke production as envisaged at EC stage; decrease in overall pollution load from that envisaged during the EC stage; no change in raw material requirement as envisaged at EC stage; no change in power requirement as envisaged at EC stage; no change in fuel gas requirement as envisaged at EC stage; no change in land area requirement as envisaged at EC stage; no change in water requirement as envisaged at EC stage; and no change in solid waste generation and its management as envisaged at EC stage.
- 8.0 The proposal was considered during the 25<sup>th</sup> meeting of Expert Appraisal Committee [EAC] (Industry-I) held on 20<sup>th</sup> November, 2017. After detailed deliberations, based on the site visit recommendations, the committee recommended for amendment for the proposed changes in the configuration as given in the table at pre-para (5).
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- 9.0 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 accord amendment in the earlier EC for change in the configuration as envisaged in the above table at para (5) subject to following conditions:
  - i. No change in the scope of the project shall be made without prior approval of the ministry.
  - ii. All the conditions prescribed in the environmental clearance letter No F. No. J-11011/28/2007- IA-II(I) dated 31<sup>st</sup> March 2008 and subsequent amendments shall be strictly complied with.
- iii. The validity of the present EC will be valid up to 30.03.2018.
- iv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

This issues with the approval of competent authority

(Sharath Kumar Pallerla)
Scientist 'F' / Director

## Copy to:-

- 1. The Secretary, Department of Environment, Government of Chhattisgarh.
- 2. **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cumoffice complex, East Arjun Nagar, Delhi-110032.
- 3. **The Chairman**, Chhattisgarh Environment Conservation Board, Nanak Niwas, Civil Lines, Raipur, Chhattisgarh
- 4. The Additional Principal Chief Conservator of Forests(C), Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur 440001.
- 5. The District Collector, Bhilai District, Government of Chhattisgarh.
- 6. Guard File/Record File/Monitoring File.
- 7. MoEF&CC website.

(Sharath Kumar Pallerla) Scientist 'F'/Director