

F. No. J-11011/28/2007- IA II (I)  
Government of India  
Ministry of Environment and Forests  
(I.A. Division)

Paryavaran Bhawan  
CGO Complex, Lodhi Road  
New Delhi – 110 003

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Telefax : 011: 2436 7668

Dated 31<sup>st</sup> March, 2008

To, ✓  
M/s Steel Authority of India Ltd.  
Bhilai Steel Plant  
Bhilai – 490 001, Durg  
Chhatisgarh

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Fax No. : 0788-2222890 / 2223491

**Subject : Modernization-cum-expansion of Bhilai Steel Plant (4.00 MTPA to 7.00 MTPA) alongwith Captive Power Plant (72 MW) at Bhilai, Chhattisgarh by M/s Steel Authority of India Ltd. – Environmental clearance reg.**

Sir,

This has reference to your letter no. DGM(EnMD)/EIA&EMP/1624 dated 27<sup>th</sup> December, 2006 alongwith Application Form, Questionnaire, Executive Summary, Pre-feasibility Report and EIA/EMP Report subsequent clarifications furnished by you vide your letter dated 14<sup>th</sup> March, 2007, 20<sup>th</sup> March, 2007, 29<sup>th</sup> June, 2007, 8<sup>th</sup> December, 2007 and 15<sup>th</sup> March, 2007 for environmental clearance on the above mentioned project.

2.0 The Ministry of Environment and Forests has examined the application. It is noted that M/s Steel Authority of India Ltd. have proposed for the Modernization-cum-expansion of Bhilai Steel Plant (4.00 MTPA to 7.0 MTPA) alongwith Captive Power Plant (72 MW) at Bhilai, Chattisgarh and will involve modernization, modification, upgradation, addition, deletion etc. in the existing plant. Total existing land is 6286.75 ha and no additional land will be required for the expansion of project. No national parks, sanctuaries, biosphere reserves, monuments, heritage sites are located within 7 km. of the site. Details of existing, proposed and total capacities of various plants after expansion will be as follows:

S. N.	Name of units / Products	Existing Capacity (4.0 MTPA)	Proposed Capacity (3.0 MTPA)	Total Capacity (7.0 MTPA)
1	Coke Oven Complex	3.303 MTPA	3.94 MTPA	3.94 MTPA
2	Sinter Plant Complex	8.374 MTPA	9.235 MTPA	9.235 MTPA
3	Blast Furnace Complex	4.71 MTPA	7.5 MTPA	7.5 MTPA
4	Steel Melting Shop-1	2.5 MTPA	-	-
5	Steel Melting Shop-2	1.5 MTPA	3.0 MTPA	3.0 MTPA
6	Steel Melting Shop-3	-	4.0 MTPA	4.0 MTPA
7	Blooming & Billet Mill	2.149 MTPA	-	-
8	Plate Mill	0.95 MTPA	1.42 MTPA	1.42 MTPA

9	Rail & Structural Mill	0.75 MTPA	1.70 MTPA	1.70 MTPA
10	Merchant Mill	0.5 MTPA	0.6 MTPA	0.6 MTPA
11	Bar & Rod Mill	-	0.9 MTPA	0.9 MTPA
12	Universal Beam Mill	-	-	1.0 MTPA
13	Wire Rods	0.42 MTPA	0.54 MTPA	0.68 MTPA
14	Lime & Dolo Plant	0.38 MTPA	1.58 MTPA	1.58 MTPA
15	Oxygen Plant	3 x 550 TPD	3x 550 TPD, 1x 650 TPD, 2x 1250 TPD	3x 550 TPD, 1x 650 TPD, 2x 1250 TPD
16	Power & Blowing Station	900 TPH steam, 36 MW	1390 TPH steam 72 MW	1390 TPH steam 72 MW

3.0 SPM, SO<sub>2</sub>, NO<sub>x</sub> levels in the ambient air will decrease due to phasing out of the existing polluting units, better pollution control due to use of environment-friendly technologies and installation of efficient air pollution control system. ESP, Bag filters, Gas cleaning plant (GCP), ventury scrubber, dust suppression system will be provided to control gaseous emissions and dust. Recovery type of the coke oven batteries with HPLA, smokeless charging cars etc. will be provided to control emissions. Total water requirement from Maroda-II reservoir and Tandula canal after expansion will be 15,981 m<sup>3</sup>/h and agreement is signed with the Irrigation Department for 13,576 m<sup>3</sup>/h and have applied for the 'Permission' for the drawl of additional water. Treated wastewater will be recycled and reused and 'zero' discharge will be adopted. Almost 98% solid waste will be utilized in the plant itself and 2% will be dumped within the premises.

4.0. Public Hearing / Public Consultation meeting was held on 28<sup>th</sup> September, 2007. Total cost of the project will be Rs. 12,954.30 Crores.

5.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification, 2006 as amended subsequently subject to strict compliance of the following specific and general conditions:

#### A. SPECIFIC CONDITIONS :

- i) Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan should be submitted. On-line stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices shall be provided to keep the emission levels below 100 mg/Nm<sup>3</sup>. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhopal , CPCB and CECB once in six months.
- ii) As proposed, electrostatic precipitator (ESP) shall be provided to sinter plant, steel melting shop (SMS), blast furnace (BF) and Power plant to control gaseous emissions to 100 mg/Nm<sup>3</sup>. Two-stage Gas cleaning plant (GCP) and ventury scrubbers shall also be provided to BF-8, SMS-II & III, RMP-III and bag filter to RMP-II to control fugitive emissions. Dust suppression system shall be provided to control dust from coal and iron storage area. Dust extraction system shall be provided in coal crushing and screening, cooler discharge area, product separation area etc. to control fugitive emissions.
- iii) All the standards prescribed for the coke oven plants shall be followed as per the latest guidelines. Proper and full utilization of coke oven gases in power plant using heat recovery steam generators shall be ensured and no fuel gases shall be discharged into the air.

- iv) Gaseous emission levels including secondary fugitive emissions from blast furnace and sinter plant shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- v) Total water requirement from Maroda-II reservoir and Tandula canal after expansion shall not exceed 15,981 m<sup>3</sup>/h. Treated wastewater shall be recycled and reused for cooling in BF shell, BF gas, valve of hot air blast and the skids in reheating furnaces. The treated effluent shall also be used in GCP for gas cleaning at BF, steel making, slag granulation plant (SGP), boiler make up water etc. Effluent from coke oven shall be treated in BOD plant and reused for coke quenching. All the treated wastewater shall be recycled and reused in the process, dust suppression and green belt development. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises. Treated effluent may be discharged only in emergency in water recovery system.
- vi) Prior 'Permission' for the drawl of additional water from the concerned department shall be obtained.
- vii) Continuous monitoring of Total Organic Compounds (TOC) shall be done at the outlet of effluent treatment plant (BOD plant).
- viii) As proposed, coal and coke fines shall be recycled and reused in the process. Iron ore, fluxes, mill scale etc. shall be recycled to sinter plant to produce sinter. All the blast furnace (BF) slag shall be granulated and provided to cement manufacturers for further utilization. All the BOF slag shall be reused in the blast furnace, sinter plant. SMS slag shall also be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner or in a suitably designed landfill as per CPCB guidelines to prevent leaching to the sub-soil and underground aquifer within the premises and efforts shall be made to make further utilization. Waste oil shall be sold to authorized recyclers.
- ix) All the fly ash shall be utilized as per Fly Ash Notification, 1999 subsequently amendment in 2003.
- x) A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xi) As proposed, green belt shall be developed in 33 % area within and around the plant premises as per the CPCB guidelines in consultation with DFO.
- xii) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel plants shall be implemented.

## **B. GENERAL CONDITIONS :**

- i. The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Environment Conservation Board (CECB) and the State Government.
- ii. No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.

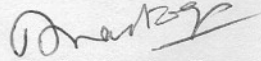
- iii. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19<sup>th</sup> May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. The interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.
- iv. In-plant control measures for checking fugitive emissions from all the vulnerable sources like spillage/raw materials/coal handlings etc. shall be provided. Further, specific measures like provision of dust suppression system consisting of water sprinkling, suction hoods, fans and bag filters etc. shall be installed at material transfer points and other raw material handling areas. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed height conforming to the standards. Fugitive emissions shall be regularly monitored and records maintained.
- v. At least, four ambient air quality-monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO<sub>2</sub> and NO<sub>x</sub> are anticipated in consultation with the CECB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhopal and the CECB/CPCB once in six months.
- vi. 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 from time to time. The treated wastewater shall be utilized for plantation purpose.
- vii. 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 shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- viii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- ix. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- x. 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.
- xi. As proposed, Project authorities shall earmark Rs. 736.50 Crores & Rs. 110.50 Crores towards capital cost and recurring cost/annum for environmental pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Ministry's Regional Office at Bhopal. The funds so provided should not be diverted for any other purpose.

- xii. The Regional Office of this Ministry at Bhopal/CPCB/CECB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.
- xiii. 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 CECB and may also be seen at Website of the Ministry of Environment and Forests 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.
- xiv. 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.

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

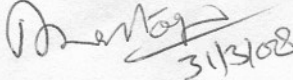
7.0. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

8.0. 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 and Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules

  
(Dr. P. B. Rastogi)  
Director

Copy to :

1. Secretary, Department of Environment, Govt. of Chhattisgarh, Chhattisgarh.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Chhattisgarh Environment Conservation Board, Nanak Niwas, Civil Lines, Raipur, Chhattisgarh.
4. The Chief Conservator of Forests (Eastern), Regional Office (WZ), E-3/240, Arera Colony, Bhopal - 462 016, M.P.
5. Adviser (IA-II), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment & Forests, New Delhi.
7. Guard file.
8. Record file.

  
(Dr. P. B. Rastogi)  
Director

F. No. J-11011/28/2007- IA II (I) - part  
Government of India  
Ministry of Environment and Forests  
(I.A. Division)

Paryavaran Bhawan  
CGO Complex, Lodhi Road  
New Delhi - 110 003  
E-mail: ms.industry-mef@nic.in  
Tele/fax: 011 - 2436 3973  
Dated: 23<sup>rd</sup> June, 2011

To,  
M/s Steel Authority of India Limited  
Bhilai Steel Plant, Bhilai- 490 001, Durg  
Chhattisgarh

E-mail: [sailbsp@sancharnet.in](mailto:sailbsp@sancharnet.in)

Sub: Modernization-cum-expansion of Bhilai Steel Plant (4.0 MTPA to 7.0 MTPA) along with Captive Power Plant (72 MW) at Bhilai in Chhattisgarh by **M/s Steel Authority of India Limited (SAIL) - regarding amendment in Environmental Clearance**

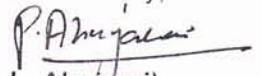
This is in continuation of this Ministry's letter of even no. dated 31.03.2008 and subsequent communications dated 23.03.2011 and 28.05.2011 informing the Ministry to withdraw 2x1250 TPD Oxygen Plant from the list of units for which environmental clearance was accorded vide Ministry's letter of even no. dated 31.03.2008.

2. The proposal for amendment of environmental clearance was placed before the Expert Appraisal Committee-1 (Industry) in its 24<sup>th</sup> meeting held during 19<sup>th</sup> - 20<sup>th</sup> May, 2011. The Committee noted that as per the BOO contract for installation of 2x1250 TPD O<sub>2</sub> plant, the responsibility to get statutory approvals lie with M/s PRAXAIR India Limited. The land for the installation of the O<sub>2</sub> plant has been leased to M/s PRAXAIR India Limited within the boundary of the steel plant. The Committee decided that M/s SAIL would withdraw the Oxygen Plant from the list of units mentioned in the environmental clearance of even no. dated 31.03.2008 and take measures for risk management due to the Oxygen Plant.

3. In view of the above, the Ministry's has taken note of your request vide letter no. DGM(EnMD)/B-10/11/409 dated 20.05.2011 regarding withdrawal of Oxygen Plant from the list of units as mentioned in the Environmental clearance accorded on 31<sup>st</sup> March, 2008. As the Oxygen plant will be set up within the premises of Steel Plant, measure for risk mitigation shall be taken by M/s SAIL.

This issues with the approval of the Competent Authority.

Yours faithfully,

  
(Dr. P. L. Ahujarai)  
Scientist 'F'

Copy to: The Chairman, Chhattisgarh Environment Conservation Board, 1-Tilak Nagar, Shiv Mandir Chowk, Main Road, Avanti Vihar, Raipur- 392001, Chhattisgarh

(Dr. P.L. Ahujarai)  
Scientist 'F'

cc file

F. No. J-11011/28/2007-IA II (I)  
Government of India  
Ministry of Environment and Forests  
(I.A. Division)

Paryavaran Bhawan  
CGO Complex, Lodhi Road  
New Delhi – 110 003

E-mail: [r.sundar@nic.in](mailto:r.sundar@nic.in)  
Telefax: 011: 2436 6739

Dated: 5<sup>th</sup> July, 2013

To,

Mr. R.K. Agrawal  
DGM I/C, Room No. 540,  
Ispat Bhawan, Bhilai Steel Plant,  
Bhilai-490001, Chhattisgarh.

E-mail: [rkagrawal4@sail-bhilaisteel.com](mailto:rkagrawal4@sail-bhilaisteel.com) Fax: 0651 33078

**Sub :** Modernization-cum-expansion of Bhilai Steel Plant (4.00 to 7.00 MTPA) along with Captive Power Plant (72 MW) at Bhilai, Chhattisgarh by M/s Steel Authority of India Limited (SAIL) – regarding extension of validity of the Environmental Clearance

**Ref. :** (i) Ministry's EC letter of even no. dated 31.3.2008  
(ii) Your letter no. No. B-10/13/183 dated 2.3.2013

Sir,

This is in continuation of this Ministry's letter referred above and your letter under reference, wherein you have requested for extension of validity of the aforesaid Environmental Clearance (EC).

2. The above proposal was placed before the Reconstituted Expert Appraisal Committee (Industry) in its 8<sup>th</sup> meeting held during 16-17<sup>th</sup> May, 2013. It was noted that the proposed project could not be established within validity period of the granted Environmental Clearance mainly because of:-

- i. Major packages of the Modernisation-cum-expansion projects were either retendered or time extension has been provided due to higher price bid or technology consortium issues.
- ii. The modernisation of plant involves relocation of some of the existing units suitably.
- iii. The project is integrated in nature and various packages are interlinked. The progress of packages depends on upstream and downstream progress of other packages also. Contractors/ suppliers of some of these packages could not achieve the desired progress causing time over run in other packages.

3. After taking into consideration the aforesaid facts, the committee recommended for the extension of validity of EC by a period of five years with effect from 30.3.2013 subject to environmental safeguards.

4. The Ministry accepts the recommendation of the REAC (Industry) and extends the validity of the Environmental Clearance letter no. J-11011/28/2007 - IA II (I) dated 31.3.2008

EC file

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for a period of five years with effect from 30.3.2013 subject to the specific and general environmental conditions.

5. All other conditions stipulated in the environmental clearance letter no. J-11011/28/2007 - IA II (I) dated 31.3.2008 shall remain the same.

6. The company shall obtain fresh environmental clearance in case of any change in the scope of the project.

This is issued with the approval of the Competent Authority.

  
(Sundar Ramanathan)  
Deputy Director(S)

**Copy to:**

1. The Secretary, Department of Environment, Govt. of Chhattisgarh, Chhattisgarh.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office 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 (Eastern), Regional Office (Western Zone), E-3/240, Arera Colony, Bhopal - 462 016, Madhya Pradesh.
5. Monitoring Cell, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard file / Record file.

  
(Sundar Ramanathan)  
Deputy Director(S)

5

F. No. J-11011/28/2007-IA II (I)  
Government of India  
Ministry of Environment, Forests and Climate Change

Indira Paryavaran Bhawan  
Jor Bagh Road, Ali Ganj,  
New Delhi - 110003  
E-mail: [tchand2003@yahoo.co.uk](mailto:tchand2003@yahoo.co.uk)  
Tele: 011; 24695313

Dated: 23<sup>rd</sup> July 2014

To  
Shri R.K. Agrawal  
DGM I/C, Room No. 540,  
M/s Steel Authority of India Ltd.  
Ispat Bhawan, Bhilai Steel Plant,  
Bhilai-490001, Chhattisgarh.  
E-mail: [rkagrawal4@sail-bhilaisteel.com](mailto:rkagrawal4@sail-bhilaisteel.com) Fax: 0651 33078

**Sub :** Modernization-cum-expansion of Bhilai Steel Plant (4.00 to 7.00 MTPA) along with Captive Power Plant (72 MW) at Bhilai, Chhattisgarh by M/s Steel Authority of India Limited (SAIL) –Amendment in the Environmental Clearance dated 31.03.2008 and 05.07.2013 in respect of Oxygen Plant Capacity – reg.

Sir,

This is with reference to this Ministry's environmental clearances of even no. dated 31.03.2008 and 05.07.2013 and your letter no. No. B-10/13/799 dated 04.09.2013, wherein you have requested for amendment in the Environmental Clearance (EC) dated 31.3.2008 in respect of capacity of the oxygen plant.

2. The above proposal was placed before the Reconstituted Expert Appraisal Committee (Industry) in its 19<sup>th</sup> meeting held during 28-30<sup>th</sup> May 2014. It was noted that the amendment sought is as given below:

As per the EC dated 31.3.2008	Revision sought
Oxygen Plant – 650 TPD	Oxygen Plant – 700 TPD

It was informed that changing capacity of the oxygen plant from 1x650 TPD to 1x700 TPD was necessary due to standard module capacity of units of manufactures/ suppliers and there will not be increase in pollution load due to the increase in capacity of the oxygen plant. After taking in to consideration the above, the Committee recommended for the amendment in the EC dated 31.3.2008 as referred above subject to environmental safeguards.

3. The Ministry accepts the recommendation of the REAC (Industry) and amends the Environmental Clearance letter no. J-11011/28/2007 - IA II (I) dated 31.3.2008. The capacity of the "Oxygen Plant – 1 x 650 TPD" mentioned in the column 3 & 4 of the table given in the para 2 of the environmental clearance letter dated 31.3.2008 stands deleted and it may be read as "Oxygen Plant – 1 x 700 TPD".

4. All other conditions stipulated in the environmental clearance letter no. J-11011/28/2007 - IA II (I) dated 31.3.2008 shall remains the same.

EC file

5. The company shall obtain fresh environmental clearance in case of any change in the scope of the project.

This issues with the approval of the Competent Authority.



(Dr. T. Chandini)  
Director

Copy to:

1. The Secretary, Department of Environment, Govt. of Chhattisgarh, Chhattisgarh.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office 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 (Eastern), Regional Office (Western Zone), E-3/240, Arera Colony, Bhopal - 462 016, Madhya Pradesh.
5. Monitoring Cell, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard file / Record file.

(Dr. T. Chandini)  
Director

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,  
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E-mail: sharath.kr@gov.in  
Tel: 011-24695319

Dated: 15<sup>th</sup> 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.

3.0 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
<b>Sinter Plant Complex</b>				
	Sinter Plant-3 M/c 2	1x 320 m <sup>2</sup> (new)	Change in grate area 1x360 m <sup>2</sup> (new)	
	<b>Total Sinter Production</b>	<b>9.235 MTPA</b>	<b>9.235 MTPA</b>	<b>No Change</b>
<b>Coke Oven Complex</b>				
	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.	
	<b>Total Capacity</b>	<b>3.94 MTPA</b>	<b>3.94 MTPA</b>	<b>No Change</b>
<b>Rolling Mills</b>				
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>	<b>6.30 MTPA</b>	<b>6.30 MTPA</b>	<b>No Change</b>
<b>Power Blowing Station</b>				
	PBS I	Existing 3x12 MW Turbo-generators to be upgraded to 1 x 12 MW + 2 x 15 MW	Turb-generators not up- graded, 3 x 12 MW (Existing)	
	PBS II	2 x 170 TPH BF gas fired boiler 1 x 15 MW turbo- generator.	2 x 150 TPH BF gas fired boiler 1 x 25 MW turbo- generator	
	<b>Total Power Generation (MW) &amp; Steam Generation (TPH)</b>	<b>1390 TPH Steam 72 MW</b>	<b>1350 TPH Steam 76 MW</b>	<b>-40 TPH Steam +4 MW</b>
	TRT	Power Generation Capacity not specified	14 MW	<b>Green power from TRT indicated</b>
	CDCP	Power Generation Capacity not specified	4MW	<b>Green power</b>

Sl.	Units	7.0 MTPA Expansion EC Accorded valid upto 31.03. 2018	Amendment Requested/ Changes Proposed	Change in Capacity  (from CDCP indicated
	<b>Blast Furnace</b>			
	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>	
	<b>Total Hot Metal Production</b>	<b>7.5 MTPA</b>	<b>7.5 MTPA</b>	<b>No Change</b>

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).

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*  
(Sharath Kumar Pallerla)  
Scientist 'F'/Director