

ENVIRONMENTAL ENGG. DEPTT.

SAIL, RSP

DY. No. 632

DATE 16/7/13

76/7/13

A.G.M. (U.P.A.M.)

19/7/13

F. No. J-11011/757/2007-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
Telefax: 011: 2436 6739

Dated: 5th July, 2013

To,

Shri S.N. Xess,
M/s Steel Authority of India Limited,
Rourkela Steel Plant, Rourkela,
Odisha-769011

E-mail: surendronath.xess@sailrsp.co.in Fax: 0651 33078

Subject: Modernization-cum-expansion of Rourkela Steel Plant (1.9 to 4.2 MTPA), Hot metal (4.5 MTPA) at Rourkela, District Sundergarh, Odisha 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 29.1.2008
(ii) Your letter no. No. 691/EE/59 dated 31.12.2012

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 8th meeting held during 16-17th 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. Slow down in Steel Market during 2008-2010.
- ii. Delay in project design as all units are planned within plant's boundary.
- iii. Non availability of technical personnel for implementation as all steel plants are under expansion in this region.

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 28.1.2013 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-11011/757/2007 - IA II (I) dated 29.1.2008 for a period of five years with effect from 28.1.2013 subject to the specific and general environmental conditions.

5. All other conditions stipulated in the environmental clearance letter no. J-11011/757/2007 - IA II (I) dated 29.1.2008 shall remain the same.

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

This issues with the approval of the Competent Authority.



(Sundar Ramanathan)
Deputy Director(S)

Copy to:

1. The Secretary, State Department of Environment, Government of Odisha, Bhubaneswar, Odisha.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.
3. The Chairman, Odisha Pollution Control Board, Parivesh Bhavan, A/118, Neelkanthhanagar, Unit-8, Bhubaneswar - 751 012, Odisha.
4. The Additional Principal Chief Conservator of Forests (Eastern), Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar - 751 023, Odisha.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File / Record File/Monitoring file.



(Sundar Ramanathan)
Deputy Director(S)

F. No. J-11011/757/2007- 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 : pb.rastogi@nic.in
Telefax : 011: 2436 7668

Dated 29th January, 2008

To, ✓
M/s Steel Authority of India (SAIL)
Rourkela Steel Plant
Rourkela, Orissa.

E-mail : emdsail@rediffmail.com : Fax No. :011-22465012

Subject : Expansion-cum-Modernization of Rourkela Steel Plant (1.9 MTPA to 4.2 MTPA) Hot metal (4.5 MTPA) at Rourkela, District Sundergarh, Orissa by M/s Steel Authority of India Ltd (SAIL) – Environmental clearance reg.

Sir,

This has reference to your letter no. 691/EE/59/725 dated 22nd June, 2007 alongwith project documents including Application in Schedule II, Questionnaire and EIA/EMP Report as per the EIA Notification, 1994 and subsequent clarifications furnished by you vide your letter dated 29th October, 2007 for environmental clearance on the above mentioned project.

2.0 The Ministry of Environment and Forests has examined your application. It is noted that proposal is for the expansion-cum-modernization of Rourkela Steel Plant (1.9 MTPA to 4.2 MTPA) and Hot metal (4.5 MTPA) at Rourkela, District Sundergarh, Orissa. Total project area acquired is 6,477.80 ha. The expansion and modernization will be carried out within the existing plant and land only and no additional land will be required. Sona Parbat RF, North Chirobeda RF and South Chirobeda RF are dense reserve forests located within 7 km. of the project site. No rehabilitation and resettlement is involved. Following items will be manufactured:

S.N.	PLANT UNIT	EXISTING PRODUCTION (TPA)	PRODUCTION AFTER EXPANSION (TPA)
1.	Coke ovens <ul style="list-style-type: none">• No. of ovens• Gross coke	370 ovens 1,295,394	437 ovens 2,170,000
2.	Sinter Plant (Sinter)	2,564,538	6,760,000
3.	Blast Furnace – Hot Metal Production	1,778,063	4,500,000
4.	Steel Melting Shops --Crude Steel	1,661,644	4,200,000

5.	Rolling Mills - • Total Saleable Steel	1,615,839	3,880,000
6.	Hot Strip Mill – Hot rolled steel	1,469,869	1,850,000
7.	Plate Mill – Plates	384,035	2,135,000
8.	Cold Rolling Mill – cold rolled steel • CR coils • CR sheets • Galv. Sheets • Tin plates	100,000 25,000 193,300 50,000	345,000 25,000 196,000 75,000
9.	Silicon Steel Mill – CRNO steel	70112	255,000
10.	Pipe Plant • Spiral welded pipes • ERW Pipes	49,821 13,153	55,000 75,000
11.	LDBP	Lime : 23, 091	Lime : 4,14,900 Dolo : 1,30,000

Following will be the raw material requirement:

Raw material	Gross annual requirement (TPA)
Iron ore fines	3,492,000
Blue dust	1,566,000
Limestone	298,800
Dolomite	459,700
Coke Breeze	411,000
Iron ore lump	1,440,000
Quartzite	161,600
Iron ore lump	14,900
Limestone	856,900
Dolomite	243,100

3.0 Dry coke quenching will be adopted and recovery type of the coke oven will be installed. Coal dust injection (CDI) will be provided to Blast furnace plants. ESP, bag filters High Pressure Liquor Aspiration (HPLA) system, dust extraction and dust suppression system will be provided to control emissions. Total water requirement from Brahmani river after expansion will be 2,27,352 m³/day but after recycling / reuse, make up water requirement will be 1,76,256 m³/day. No ground water will be sourced. Total cost of the project is revised to Rs. 7,671.00 Crores. Total capital cost and recurring cost/annum for environment pollution control measures will be Rs. 614.00 Crs. and Rs. 36.00 Crs. respectively.

4.0 No public hearing is required as per the Section (iii), Stage (3), Para (i) (b) of the EIA Notification, 2006 since the unit is located in the notified due to location of the project in notified industrial area as per Orissa Gazette Notification no. 448 dated 15/04/1995.

5.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 subject to strict compliance of the following specific and general conditions:

A. SPECIFIC CONDITIONS :

- i) All the existing batteries shall be rebuilt by 2012 meeting all the pollution control norms as per CPCB guidelines and a commitment in this regard shall be submitted to the Ministry.
- ii) The industry shall follow coke oven standards as per E (P) Rules. VOCs from the coke oven shall be monitored and controlled as per CPCB guidelines.
- iii) Efforts shall be made to further reduce the existing ambient air and stack emissions and waste generation and a report submitted to the Ministry, its Regional Office at Bhubaneswar, CPCB and OPCB.
- iv) Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line stack monitoring facilities for all the stacks and sufficient air pollution control methods shall be provided to control emissions below 100 mg/Nm³ viz. ESP and bag filters etc. and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB.
- v) Electrostatic precipitator (ESP) shall be provided to Sinter plant, Power Plant and Blast Furnace (BF) to control gaseous emissions from all the vents/stacks within 100 mg/Nm³. Coal dust injection (CDI) shall be provided to Blast furnace plants. Bag filter shall be provided to lime calcining plant, new vertical shaft kiln and dolomite plant. Emissions shall be controlled from the Cast house and Stock house within permissible limits. High Pressure Liquor Aspiration (HPLA) system shall be provided to new coke oven battery.
- vi) Regular monitoring of the Benzo(a)pyrene, Poly Aromatic Hydrocarbons (PAHs) and Volatile Organic Compounds (VOCs) in the ambient air and stack emissions shall be carried out.
- vii) Secondary fugitive emissions from all the sources including 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.
- viii) Total make up water requirement of the water from Brahamani River shall not exceed 1,76,256 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. The excess wastewater shall be discharged only after conforming all the parameters to the prescribed standards within the permissible limits of OPCB.
- ix) As proposed, 90% of the solid waste shall be recycled and reused and remaining shall be disposed off in secured landfill designed as per the specifications of the CPCB. BF slag shall be granulated and used in environment-friendly manner. Slag from SMS-I & II shall be used for making road embankments. Iron ore fines, Fluxes cinder, Mill scales

and Scrap etc. shall be recycled and reused in Sintering Plant. SMS scrap shall be recycled in Steel Melting Shop. All the waste oil shall be sold to recyclers/reprocessors.

- x) Ground water monitoring around the solid waste disposal site / secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.
- xi) An action plan for the disposal of fly ash, granulated and SMS slag shall be submitted to the Ministry within 3 months. All the BF slag generated shall be granulated and provided to cement manufacturers for further utilization and should not be disposed off anywhere else. SMS slag shall also be properly utilized. All the char from DRI plant shall be utilized in AFBC boiler of power plant and no char shall be disposed off anywhere else. All the fly ash shall be utilized as per the Fly Ash Notification, 1999 and subsequently amended in 2003.
- xii) Green belt shall be developed in 33 % area within and around the plant premises as per the CPCB guidelines in consultation with DFO.
- xiii) Recommendations of the State Forest Department shall be obtained regarding impact of the proposed expansion of the plant on the Sona Parbat RF, North Chirobeda RF and South Chirobeda RF and implemented.
- xiv) All the recommendations mentioned in the CREP guidelines for the steel plants shall be implemented.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OPCB) 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 19th 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. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit. NO_x burners shall be installed to control NO_x levels.
- iv. At least four ambient air quality-monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO₂ and NO_x are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar / OPCB / CPCB once in six months.
- v. In-plant control measures for checking fugitive emissions from all the vulnerable sources like Coke oven area, Sinter plant, Blast Furnace area etc. shall be adopted. Further, specific measures like water sprinkling shall be carried out at the stock piles of raw

- material, stacker, reclaimer, transfer points etc. Dust extraction system and bag filters shall be provided to the sinter plant, stock house, blast furnace and steel melting shop etc. Fume extraction system in steel refining units shall also be provided. 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 and height conforming to the standards for induction furnaces in the industry shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.
- vi. 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 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 should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
 - viii. 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.
 - ix. Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
 - x. Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.
 - xi. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company shall undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
 - xii. The project authorities shall utilize Rs. 614.00 Crs. and Rs. 36.00 Crs. earmarked total capital cost and recurring cost/annum for environment pollution control measures respectively judiciously 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 Bhubaneswar. The funds so provided shall not be diverted for any other purpose.
 - xiii. The Regional Office of this Ministry at Bhubaneswar/CPCB/OPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.
 - 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 OPCB/Committee 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

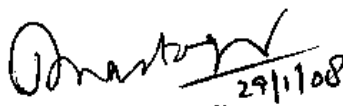
days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.

- 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.
- 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 will 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)
Additional Director

Copy to:-

1. The Secretary, Department of Environment, Govt. of Orissa, Bhubaneswar, Orissa.
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi – 110 032.
3. Chairman, Orissa Pollution Control Board, Parivesh Bhavan, A/118, Nilkanthanagar, Unit-8, Bhubaneswar - 751 012, Orissa.
4. The Chief Conservator of Forests (Eastern), Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar - 751 023, Orissa.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell
7. Guard File.
8. Record File.


(Dr. P. B. Rastogi)
Additional Director



सत्यमेव जयते

Government of India
Ministry of Environment and Forests

F. No. J-11011/757/2007-IA II (I)

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

E-mail: tchand2003@yahoo.co.uk
Telefax: 011: 2436 3963

Dated: 26th March 2014

To

Shri S.N. Xess,

M/s Steel Authority of India Limited,

Rourkela Steel Plant,

Rourkela, Odisha-769011

E-mail: surendronath.xess@sailrsp.co.in Fax: 0651 33078

CORRIGENDUM

Subject: Expansion-cum-Modernization of Rourkela Steel Plant (1.9 to 4.2 MTPA), Hot metal (4.5 MTPA) of **M/s Steel Authority of India Limited (SAIL)** at Rourkela, District Sundergarh, Odisha – **Environmental Clearance** – regarding.

Sir,

This is with reference to this Ministry's Environmental clearance letter of even no. dated 29.1.2008 and 5.7.2013 and your letter no. 691/EE/59/982 dated 27.7.2013 seeking a correction in Specific Condition no (viii) of the EC dated 29.1.2008 as given below:

The total makeup water requirement in the Specific Condition No: "VIII" stipulated in the Environmental Clearance (EC) dated 29.1.2008 as "2,27,352 m³/day" instead of "1,76,256 m³/day".

2. The Ministry of Environment and Forests has examined the request submitted by you. The line no. 1 & 2 of the specific condition no (viii) of the EC dated 29.1.2008 shall be read as below:-

(viii) The total make up water requirement of the water from River Brahamani shall not exceed 2,27,352 m³ /day.

3. All other conditions stipulated in the EC letter of even no. dated 29.1.2008 shall remain the same.


(Dr.T.Chandini)
Director

Copy to:

1. The Secretary, State Department of Environment, Government of Odisha, Bhubaneswar, Odisha.

2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.
3. The Chairman, Odisha Pollution Control Board, Parivesh Bhavan, A/118, Neelkanthhanagar, Unit-8, Bhubaneswar - 751 012, Odisha.
4. The Additional Principal Chief Conservator of Forests (Eastern), Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar - 751 023, Odisha.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File / Record File/Monitoring file.

(Dr.T.Chandini)
Director

F. No. J-11011/757/2007-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-II Section)

ENVIRONMENTAL ENGG. DEPT.

SAIL, RSP

DY. No. 414

DATE 25/5/16

25/5/16

A G M C (R M)

26/05/2016

Indira Paryavaran Bhawan,
Jor Bag Road, Aliganj,
New Delhi - 110 003
E-mail: ad.raju@nic.in
Tel: 011- 24695236

Dated: 13th May, 2015

To

M/s Steel Authority of India Ltd.
Office of DGM (Env. Engg.)
1st Floor of OHSC Building
Rourkela Steel plant, Rourkela
Odisha-769011.

Subject: Expansion cum modernization of Rourkela Steel Plant (1.9 MTPA to 4.2 MTPA), Hot metal (4.5 MTPA) at Rourkela, District Sundergarh, Odisha of M/s SAIL – Rourkela Steel Plant – regarding.

Sir,

This has reference to your letter No. 691/EE/59/269 dated 16th March, 2016 requesting for correction in the letter of even No. dated 28th August, 2015 regarding above mentioned project. It may be informed that in the said letter under paragraph 2, the capacity of Ladle Furnace has been erroneously appeared as '1x150t LF' in place of '2x150t LF'.

It may kindly be informed that the capacity of Ladle Furnace may kindly be read as '2x150t LF' in place of '1x150t LF'. Inconvenience caused is regretted.

This issues with the approval of competent authority.

Yours faithfully,

(Amardeep Raju)
Scientist 'D'

Copy to:-

1. The Chairman, Orissa Pollution Control Board, "Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar, Orissa-751012.

(Amardeep Raju)
Scientist 'D'

ENVIRONMENTAL ENGG. DEPTT.

SAIL, RSP

DY. No. 736

DATE 07/09/2015

F. No. J-11011/757/2007-IA II (I)
Government of India
Ministry of Environment, Forests & Climate Change
(IA-II Section)

Indira Paryavaran Bhawan,
Jor Bag Road, Aliganj,
New Delhi - 110 003

E-mail: adraju@gmail.com
Tele fax: 011: 24695236

Dated: 28th August, 2015

To
M/s Steel Authority of India Ltd.
Office of DGM (Env. Engg.)
1st Floor of OHSC Building
Rourkela Steel plant, Rourkela
Odisha-769011

E-mail:- surendronath.xess@sailrsp.co.in, Fax:- 0651 33078

Subject: Expansion cum modernization of Rourkela Steel Plant (1.9 MTPA to 4.2 MTPA), Hot metal (4.5 MTPA) at Rourkela, District Sundergarh, Odisha of M/s SAIL-Rourkela Steel Plant- regarding.

Sir,

This has reference to your letter No. 691/EE/59/578 dated 08 July, 2015 enclosing the consent letter of SPCB Odisha seeking clarification regarding above mentioned project. It may be mentioned that the expansion –cum –modernization of Rourkela Steel Plant (1.9 MTPA to 4.2 MTPA, hot metal (4.5 MTPA) at Rourkela district sundergarh, Odisha of M/s Steel Authority of India Ltd. was granted Environment Clearance by the Minsitry vide letter of even no. dated 29/01/2008.

2.0 It may be informed that 1x150t BOF, 1x150t LF, 1x150t RH-OB, 1x1 strand and desulphurization are the integral part of steel melting shops-crude steel, which is one of the unit of the expansion cum modernization project for which EC was accorded.

This issues with the approval of competent authority

(Amardeep Raju)
Scientist 'D'

Copy to:-

2. The Chairman, Orissa Pollution Control Board, "Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar, Orissa-751012.

(Amardeep Raju)
Scientist 'D'