## F. No. J-11011/57/2015-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: 22<sup>nd</sup> January, 2018

To

M/s Om Sairam Steel and Alloys Pvt Ltd Plot No. F-1, 2, 3, 8, 9, 10, ADD. MIDC Phase – II Adjacent Gut No. 46 & 63, Village Daregaon, Tehsil and District Jalna, Maharashtra.

Subject: Expansion of Metallurgical unit, billets /Ingots (528 to 1000 TPD), Sponge Iron (1000 TPD) and Captive Power Plant (50 MW) located at MIDC, Ph-II, Aurangabad, Daregoan, Jalana Maharashtra by M/s Om Sairam Steel and Alloys Private Limited -Environmental Clearance regarding.

Sir,

This has reference to your online application vide proposal no.**IA/MH/IND/62864/2015**, dated 1st March 2017 along with copies of EIA/EMP report and subsequent information vide letters dated 17th July 2017 and 11th November 2017 seeking environmental clearance under the provisions of the EIA Notification, 2006 for the project mentioned above. The ToRs to the project were prescribed by the Ministry vide letter number J-11011/57/2015-IA.II (I) dated 01.01.2016. The proposed project activity is listed at Sl. No. 3(a) in Metallurgical industries (ferrous and non-ferrous) and 1(d) Thermal Power Plants under Category "A" EIA Notification 2006.

- 2.0 The proposed project of M/s Om Sairam Steel and Alloys private Limited at Plot No. F-1, 2, 3, 8, 9, 10, ADD. MIDC Phase II and adjacent Gut No. 46 & 63, Daregaon, Tehsil and District Jalna, Maharashtra State was initially received in the Ministry in February 2015 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 37<sup>th</sup>meeting held between 30<sup>th</sup>April 1<sup>st</sup>May 2015 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project dated 01.01.2016.
- 3.0 The existing plant of M/s Om Sairam Steel and Alloys private Limited is currently manufacturing 528 TPD Billet and/ or 1000 TPD TMT Bars/angles/channels. Now the company proposes to expand the capacity



and add new product, Sponge Iron, using iron ore/pellets and coal and to generate power from waste heat recovery as well as coal fired boiler. The project was accorded Environmental Clearance vide Letter SEAC-2009/CR-200/TC-2 dated 29<sup>th</sup> December 2010 for re-rolling mill and vide J-11011/883/2007-IA(II) dated 30<sup>th</sup> October, 2008 for expansion of ingots and metal alloys. The Status of compliance of earlier EC was obtained from Regional Office, Nagpur vide Lr. No. 5-22/2009(Env)/1333, dated 08.12. 2015. The Regional officer inspected and issued the certificate vide 5-22/2009(ENV)/1333 dated 08.12.2015 and subsequent letter vide Lr. No. EC-409/RON/2017-NGP dated 06<sup>th</sup> November 2017. The details of proposed expansion as follows:

S1.	Particulars	Capacity		Total
No		Existing	Proposed	
1	Sponge Iron (TPD)	0	1000	1000
2	Billets/ Ingots (TPD)	528	472	1000
3	TMT bars (TPD)	1000	0	1000
4	Power generation (MW)	0	50	50

- 4.0 The total land required for the project is 6.09 ha, out of total 2.6 ha is for green belt development. No forestland involved. The entire land has been acquired for the project. The Kundalika River passes through the study area. It has been reported that no other water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.
- 5.0 The topography of the area is flat terrain and reported to lies between 19° 50′ 52.39″ N Latitude to 75° 50′ 41.51″ E Longitude in Survey of India topo sheet No. 47M-9 & 47 M13, at an elevation of 552 m AMSL. The northern part forms the highly dissected basaltic plateau; the ground water potential is expected to be poor. The depth to water levels in the district during May 2011 ranges between 3.84 and 16.20 m bgl. The depth to water levels during post monsoon (Nov.) ranges between 1.05 and 14.65 m.
- 6.0 No national park/wildlife sanctuary/ biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The authenticated list of flora and fauna provided and no schedule-I fauna in the study area.
- 7.0 The process of project showing the basic raw material used and the various processes involved to produce the final output, waste generated in process.

S1. No.	Product	Raw Material	Quantity TPD	Transport & Linkage
1	DRI Plant	Iron Ore and	1450	By road from
	Sponge Iron	Pellet		Raipur, Bellari,
	0000	Coal B Grade	1200	Bhilwara and
		Dolomite	50	Raigarh
2	Billets and/or	Sponge Iron	1000	By Road from
	TMT bars	Scrap	100	Captive

		Pig Iron	80	Mumbai & Local	
		Silico	10	Raipur, Bellari	
		manganese			
3	Power Plant	Dolochar + char	312	By road from	
	(FBC Boiler 24	Coal	420	Chandrapur	
	MW & WHR 26			-	
	MW)				

- 8.0 The only solid waste produced by the induction furnace is about 170 MT slag per day. It will be used for road making and land levelling. In addition, office waste generated shall be disposed to local authority.
- 9.0 The targeted production capacity of the 1000 TPD. The ore for the plant would be procured from (linkage attached to EIA Report). The ore transportation will be done through road.
- 10.0 The water requirement of the project is estimated at  $11,682 \text{ m}^3/\text{day}$ , out of which  $752 \text{ m}^3/\text{day}$  of fresh water requirement will be obtained from the MIDC and the remaining requirement of  $10945\text{m}^3/\text{day}$  will be met from the recycled water. No drawl of groundwater / surface water.
- 11.0 The power requirement of the project is estimated as 5 8 MW, out of which 50MW will be obtained from the self and 8 MW from MSEDCL.
- 12.0 Baseline Environmental Studies were conducted during winter season (i.e. October 2014 December 2014) Ambient air quality monitoring has been carried out at 14 locations during October 2014 December 2014 and the data submitted indicated: PM10 (69.74  $\mu g/m^3$ ) to 64.04  $\mu g/m^3$ ), PM<sub>2.5</sub>(26.7 to 20.06  $\mu g/m^3$ ), SO<sub>2</sub> (18.9 to 12.5  $\mu g/m^3$ ) and NOx (24.05 to 19.22  $\mu g/m^3$ ). The results of the modelling study indicated that the maximum increase of GLC for the proposed project is 72.79  $\mu g/m^3$  with respect to the PM10, 35.13  $\mu g/m^3$  with respect to the SO<sub>2</sub> 25.93  $\mu g/m^3$  with respect to the NOx.
- 13.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.10 to 7.81, Total Hardness: 99 to 235 mg/l, Chlorides: 42 to 78 mg/l, Fluoride: 0.2 to 0.4 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 8 locations. pH: 7.1to 7.5; DO: 2.1 to 4.6 mg/l and BOD:<2 to 5.2 mg/l. COD from 7.08 to 11.68
  - 14.0 Noise levels are in the range of 53.7 to 47.6 dB(A) for daytime and 48.9 to 42.3 dB(A) for night time.
  - 15.0 It has been reported that no R&R is involved.
  - 16.0 It has been reported that a total of 170 TPD of waste will be generated due to the project, which will be resale and used for Building construction material, road making. It has been envisaged that an area of 2.6 ha will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.



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17.0 It has been reported that the Consent to Operate from the Maharashtra State Pollution Control Board obtained vide Lr. No. BO/JD(APC)/EIC No. AD-18272-16/R/CC- 10758 dated 02.12.2016 and consent is valid up to 31.05.2021.

18.0 The Public hearing of the project was held on 28.10.2015. for production of Sponge Iron 1000 TPD, Billets and /or TMT Bar 1000 TPD and Power 50 MW on Waste-heat setting up of plant. The issues raised during public hearing are on Air Pollution Control; Health o workers; discharge of waste water; employment; infrastructure development for village; efficiency of ESP; rain water harvesting; etc.

19.0 An amount of 1307 Lakhs (2.5 % of Project cost) has been earmarked for Enterprise Social Commitment based on public hearing issues. The year wise fund earmarked for Enterprise Social Commitment is as follows:

Sl. No	Year	Amount	allocated	in
		Lakhs		
1	1st year	461.76		
2	2nd year	251.29		
3	3rd year	219.10		
4	4th year	188.79		
5	5 <sup>th</sup> year	186.07		
	Total	1307.01		

20.0 The capital cost of the project is Rs 523 Crores and the capital cost for environmental protection measures is proposed as Rs. 1300 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 504 Lakhs. The total employment generation from the proposed expansion is 610 (existing 400 + proposed 210). The details of the capital cost and annual recurring cost for environmental protection measures is as follows:

S1. No	Description	Capital cost, Rs. Lakhs	Recurring cost per annum, Rs. Lakhs
1	Emission control Engineering	1140.00	16.00
2	Water & waste water management	65.00	4.50
3	Solid waste	22.50	4.00
4	Greening drive	16.50	3.50
5	Monitoring	15.00	5.50
6	Environmental Cell & PR	6.00	2.00
7	Others (Rain water harvesting, safety, security, etc.)	22.00	3.00
8	Contingency	13.00	3.50
	Total	1300.00	42.00

21.0 It was reported that Greenbelt will be developed in 2.6 Ha which is about 33% of the total acquired area. Greenbelt, consisting of at least 2 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be



planted with a density of 2500 trees per hectare. It is proposed that total 4000 no. of saplings will be planted and nurtured in next 3-4 years.

- 22.0 The proponent has mentioned that there is no court case to the project or related activity.
- 23.0 The proposal was considered in the 17<sup>th</sup> meeting of Expert Appraisal Committee [EAC(industry-I)] held during 6<sup>th</sup> 7<sup>th</sup> April, 2017; re-considered in 22<sup>nd</sup> meeting of Expert Appraisal Committee [EAC(industry-I)] held during 11<sup>th</sup> 13<sup>th</sup> September 2017; and further consideration in 26<sup>th</sup>meeting of Expert Appraisal Committee (Industry-I) held during 13<sup>th</sup> to 15<sup>th</sup> December, 2017. After detailed deliberations, the committee recommended the proposal for grant of Environmental Clearance subject to specific and general conditions along with other environmental conditions while considering for accord of Environmental Clearance by the ministry.
- 24.0 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 grant Environmental Clearance for Expansion of Metallurgical unit located at MIDC, Ph-II, Aurangabad, Daregoan, Jalana Maharashtra by M/s Om Sairam Steel and Alloys Private Limitedunder the provision of EIA Notification dated 14th September, 2006, as amended, subject to strict compliance of the following Specific and General conditions:

## A. SPECIFIC CONDITION:

- i. Continuous Emission Monitoring Stations shall be installed within 3 months from the date of issue of EC.
- ii. A dedicated environmental cell with qualified personnel shall be established within 3 months from the date of issue of EC and shall report the compliance to the ministry. The head of the environment cell shall report directly to the head of the organization
- iii. An amount of Rs. 1307 Lakhs proposed towards Enterprise Social Commitment (ESC) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.
- iv. Green belt shall be developed in 2.6 Ha equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
- v. The Capital cost Rs. 1300 Lakhs and annual recurring cost Rs. 504 Lakhs towards the environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.
- vi. Kitchen waste shall be composted or converted to biogas for further use.



#### B. GENERAL CONDITIONS:

- 1. The project proponent shall (Air Quality Monitoring):
  - i. install 24x7 continuous emission monitoring system at all the stacks to monitor stack emission with respect to parameters prescribed in G.S.R 414 (E) dated 30<sup>th</sup> May 2008; S.O. 3305 (E) dated 7<sup>th</sup> December 2015 forthermal power plantas amended from time to time and connected to CPCB online;
  - ii. monitor fugitive emissions in the plant premises;
  - iii. carryout Continuous Ambient Air Quality monitoring as per National Ambient Air Quality Standardsissued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 (as amended from time to time) within and outside the plant area at least at four locations covering upwind and downwind directions at an angle of 120° each; and
  - iv. submit monitoring report to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- 2. The project proponent shall (Water Quality Monitoring):
  - i. install 24x7 continuous effluents monitoring system at all the discharge points to monitor treated effluents with respect to parameters prescribed in G.S.R 414 (E) dated 30<sup>th</sup> May 2008; S.O. 3305 (E) dated 7<sup>th</sup> December 2015 for thermal power plantas amended from time to time;
  - ii. monitor regularly ground water through sufficient numbers of piezometers in the plant and adjacent areas; and
- iii. submit monitoring report to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

# 3. The project proponent shall (Air Pollution Control):

- i. provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources;
- ii. design suitable capacity of bag filters to handle gas/air shall be 150% of the normal flow from process/ from suction hoods to achieve particulate emission to less than 30 mg/Nm³;
- iii. provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags;
- iv. provide pollution control system in the steel plant as per the CREP Guidelines of CPCB;
- v. provide sufficient number of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs regularly;
- vi. recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration;



- vii. use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin; and
- viii. provide wind shelter fence around raw material stock piles and chemical spraying on the raw material stock piles.
- 4. The project proponent shall (Water Pollution Control):
  - i. adhere to 'zero liquid discharge';
  - ii. provide Sewage Treatment Plant for domestic wastewater; and
- iii. provide garland drains and collection pits for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- 5. The project proponent shall (Water Conservation):
  - i. practice rainwater harvesting to maximum possible extent; and
  - ii. make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- 6. The PP shall (Energy Conservation):
  - i. provide waste heat recovery system on the DRI Klins:
  - use dolochar generated for power generation;
  - provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly; and
  - provide the project proponent for LED lights in their offices and residential areas.



- 7. Used refractories shall be recycled as far as possible.
- 8. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. PP shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. PP shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
- 9. Sufficient number of colour coded waste collection bins shall be constructed at t shop floors in each shop to systematically segregate and store waste materials generated at the shop floors (other than Process waste) in designated colored bins for value addition by promoting reuse of such wastes and for good housekeeping.
- 10. The PP shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

- 11. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- 12. The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- 13. The PP shall adhere to the corporate environmental policy and system of the reporting of any infringements/ non-compliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF&CC as a part of six-monthly report.
- 14. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel plants shall be implemented.
- 15. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- 16. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- 17. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- 18. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- 19. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- 20. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- 21. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.
- 22. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office.
- 23. The project proponent shall (Post-EC Monitoring):



- i. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
- ii. put on the clearance letter on the web site of the company for access to the public.
- iii. inform the public through advertisement 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 that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http://envfor.nic.in.
- iv. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
- v. monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;
- vi. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
- vii. submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company;
- viii. 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.
- 25.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 26.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 27.0 The PP shall abide by all the commitments and recommendations made in the EIA/EMP report and that during their presentation to the EAC. The commitment made by the project proponent to the issue raised during Public Hearing shall be implemented by the proponent.
- 28.0 This Environmental Clearance supersedes the earlier Environmental Clearances granted vide letter SEAC-2009/CR-200/TC-2 dated 29<sup>th</sup> December 2010.



29.0 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 and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

30.0 Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

This issues with the approval of Competent Authority.

(Sharath Kumar Pallerla) Scientist 'F' / Director

## Copy to:-

- 1. **The Secretary**, Department of Environment, Government of Maharashtra, Secretariat, Mumbai.
- 2. **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
- 3. **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 4. **The Chairman**, Maharashtra Pollution Control Board, Kalpatru Point, Sion Circle, Sion (East), Mumbai-400 022, Maharashtra
- 5. **The Member Secretary**, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 6. The District Collector, Jalana District, Maharashtra.
- 7. Guard File / Record file / Monitoring file.
- 8. MOEF&CC Website.

(Sharath Kumar Pallerla) Scientist 'F'/Director