

F. No. J-11011/205/2016-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: 23rd July, 2018

To,

M/s Alope Steels Industries Private Limited
Village Budhakhap, P.O - Karma,
Dist. - Ramgrah, Jharkhand-829137.

Subject: Expansion of Sponge Iron Plant (from 1,20,000 TPA to 1,38,000 TPA), Rolling mill (90,000 TPA), Iron Ore crushing & Beneficiation plant (2,70,000 TPA), Slag Crushing plant (16,200 TPA) and Captive Power plant (4x2 MW WHRB; 1x10 AFBC) located at Village Budhakhap, P.O - Karma, Dist. - Ramgrah, Jharkhand by **M/s Alope Steels Industries Private Limited. - Environmental Clearance regarding.**

Sir,

This has reference to your application vide online proposal no. **IA/JH/IND/53261/2016** dated **9th January 2018** along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of EIA Notification, 2006 and the proposal is appraised at Central level.

2.0 The expansion proposal of M/s Alope Steel Industries Pvt. Ltd. is located in the existing plant at Village-Budhakhap, P.O.- Karma, District - Ramgarh, State-Jharkhand was initially received in the Ministry on 30.04.2016 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 7th meeting held on 30th May 2016 to 1st June 2016 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 on 01.08.2016 vide Lr. No. J-11011/205/2016-IA.II(I).

3.0 The project of M/s. Alope Steel Industries Pvt. Ltd., located in Budhakhap Village, P.O.- Karma, Ramgarh District, Jharkhand State is for expansion of the existing plant for production of 0.12 MTPA of Sponge Iron by installation of new facilities for production of Steel Melting Shop for 0.108 MTPA of Billets, Rolling Mill for production of 0.09 Million tonnes of rolled

product with 18 MW Power Plant and 0.27 MTPA of Ore Crushing & Beneficiation Plant. EC for the existing project was not required as the project was installed prior to EIA Notification, 2006 and the project cost was less than 100 Cr. The proposed project facilities and the cost are as below.

S.No.	Project Particulars	Cost Rs. (in lakhs)
Existing		
1	Existing sponge iron plant	2975
Proposed		
2	SMS (3x12 T induction furnace +CCM)	1600
3	Power plant 18MW	6200
4	Bar Mill	4000
5	Iron Ore crushing and beneficiation facility with filter press	550
6	Briquetting plant	600
7	Slag crushing facility	60
8	Utilities & central services	1500
9	Engineering & project management	500
10	Contingencies	690
11	Plant cost without IDC (2 to 10)	15700
12	Interest during construction	1000
13	Margin money for working capital	1000
14	Cost of Expansion project with IDC (11+12+13)	17700
15	Enterprise Social Commitment Budget	160
Total Capital cost (1+14+15)		20385

4.0 The total land required for the project is 'Nil' (project shall be installed within existing 21.9 ha. plant area). No forest land is involved. The Damodar river is at a distance of 1.5 Km. The land use of the project site including briquetting plant shall be as below.

S. No.	Type of Land Use	Area		
		Acres	Hectares	Percentage (%)
1	Existing Units (4 Nos. of DRI Kilns)	13.07	5.29	24.05
2	Power Plant with WHRB	3.07	1.24	5.65
3	Steel Melting Shop	2.59	1.05	4.77
4	Rolling Mill	3.98	1.61	7.32
5	Iron Ore Beneficiation Plant with Filter Press	3.50	1.42	6.44
6	Briquetting Plant	3.20	1.30	5.89
7	Slag Crushing Plant	0.32	0.13	0.59
8	Rain Water Harvesting	0.25	0.10	0.46
9	Parking	2.47	1.00	4.54
10	Storage for Cakes	1.50	0.61	2.76
11	Green Belt	20.36	8.24	37.53
Total		54.3	21.9	100

5.0 The topography of the area is undulated flat and reported to lie between 23°39'46.33" N Latitude and 85°33'10.04" E Longitude in Survey of India topo sheet No. 73 E/6 & 73 E/10 at an elevation of 260m AMSL. The ground water table reported is 1.6 to 5.9 mbgl. during the post-monsoon season and 2.25 mbgl at Barwatola and 11.19 mbgl at Bhurkunda respectively during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be 1 m. Further, the stage of ground water development is reported to be 60% and 40% in core and buffer zone respectively and there by these are designated as safe area.

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 doesn't report to form Corridor for Schedule-I fauna. The authenticated list of flora and fauna provided. There is no presence of Schedule-I fauna in the study area (Given in Chapter-3 in EIA Report).

7.0 The raw materials required for the expansion project are Iron ore- 2,25,000 TPA; Coal -1,92,000 TPA; Dolomite -3000 TPA; Pig iron /scrap - 13,642 TPA. The raw material sourced from local market and transported by road.

8.0 The water requirement of the project is estimated as 2923 m³/day. 2923 m³/day fresh water requirement will be obtained from Damodar Valley Corporation (DVC). Permission for drawl of 0.644 MGD ~ 2923 m³/day from vide Lr. No. ASWA43,5/17-18 dated 17.10.2017 from Damodar Valley River Regulation Committee (DVRR) Govt. of Jharkhand.

9.0 The power requirement of the project is estimated as 18.5 MW, out of which 18 MW will be obtained from Captive generation and 0.5 MW from Grid.

10.0 Baseline Environmental Studies were conducted during Post monsoon season i.e. from 1st October to 31st December, 2016. Ambient air quality monitoring has been carried out at 8 locations during October to December and the data submitted indicated: PM₁₀ (57.50µg/m³ to 98.50 µg/m³), PM_{2.5} (25.70 µg/m³ to 59.70µg/m³), SO₂ (9.20 µg/m³ to 15.10 µg/m³) and NO_x (21.10 µg/m³ to 25.04 µg/m³). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 0.310 µg/m³ with respect to the PM₁₀, 0.605 µg/m³ with respect to the SO₂ and 0.948 µg/m³ with respect to the NO_x at Project Site.

11.0 Ground water quality has been monitored in 8 locations in the study area and analyzed. pH: 7.36 to 7.63, Total Hardness: 236 to 314.52 mg/l, Chlorides: 85.00 to 153.00 mg/l fluoride: 0.60to 1.26 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 2 locations. pH: 7.45 to 7.51; DO: 5.7 to 5.9 mg/l and BOD: 10.86 to 12.05 mg/l. COD from 47.60 to 54.89 mg/l.

12.0 Noise levels are in the range of 51.30 to 57.40 dB(A) for daytime and 42.90 to 48.70 dB (A) for nighttime.

13.0 No R&R is involved. It has been envisaged that no family will be rehabilitated.

14.0 It has been reported that a total of 146980 TPA of solid waste will be generated due to the project, the same will be dumped in the earmark dump yard. It has been envisaged that an area of 7.30 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.

15.0 It has been reported that the Consent to Operate from the Jharkhand State Pollution Control Board obtained vide Lr. No. PC/Air/HBG/A-25/05/B-4806 dated 24.11.2015.

16.0 The Public hearing of the project was held on 13.05.2017 at Nav Prathamik Vidyalaya, Vill- Budhakhap, Sub Division- Mandu, P.O- Karma, District- Ramgarh, Jharkhand under the Chairmanship of Sri Dinesh Prasad Singh, Dy. Magistrate for setting up of 18 MW Power Plant, Steel Melting Shop of 108,000 TPA Billet Production and Rolling Mill for 90,000 TPA TMT Br production with Ore Crushing and Beneficiation Plant of 2,70,000 TPA throughput and Slag Crushing Unit. The issues raised during public hearing which, inter alia, are concern over health of children, villagers and cattle due to pollution; effect on crop/ agriculture due to pollution from the plant; concern over water level going down in the area; Increase of development fund being given to the affected villages; employment to educated people in the nearby villages.

17.0 An amount of Rs. 1.35 Crores has been earmarked for Corporate Environment Responsibility calculated based on the Ministry's Office memorandum dated 1st may 2018 for public hearing issues.

18.0 The capital cost of the project is Rs. 208.35 Crores including CER cost and the capital cost for environmental protection measures is proposed as Rs. 945 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 105.50 Lakhs. The CER budget is proposed Rs.1.6 crore. The employment generation from the proposed expansion project is 500. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

S. No.	Environmental Protection Measures	Capital Cost Rs. In lakhs	Recurring Cost Rs. In lakhs/year
1	Air Pollution Control Measures	800.00	84.00
2	Water Pollution Control Measures	45.00	3.00
3.	Noise Pollution Control Measures	6.00	1.50

4.	Greenbelt Development	55.00	5.00
5.	Rain Water Harvesting	9.00	2.00
6.	Fire Fighting and safety measures	30.00	10.00
TOTAL		945.00	105.50

19.0 Greenbelt will be developed in 7.30 Ha which is about 33% of the total acquired area. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 11,000 saplings will be planted and nurtured in 7.30 hectares in 5 years.

20.0 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

21.0 The proponent has made presentation along with EIA Consultant M/s M/s Vardan Environet, Gurgaon, Haryana.

22.0 The proposal was considered in the 28th meeting of EAC (Industry-I) held during 5th to 7th February 2018. Further, project was again considered in the 32nd Meeting of EAC (Industry - 1) on 12th June, 2018. After detailed deliberations, the committee recommended for grant of environmental clearance for the proposed expansion of Sponge Iron Plant subject to following specific and general conditions.

23.0 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 the **Expansion of Sponge Iron Plant located at Village Budhakhap, P.O - Karma, Dist. - Ramgrah, Jharkhand by M/s Alope Steels Industries Private Limited** under the provision of EIA Notification dated 14th September, 2006, as amended, subject to strict compliance of the following Specific conditions as recommended by EAC and General conditions:

A. SPECIFIC CONDITION:

- i. The project proponent shall revise the layout by removing the tailing pond, providing additional entry gate, sufficient parking area and green belt in 8.24 Ha, space for storage of filter cakes, etc.
- ii. The project proponent shall install the filter press/belt filter and make a filter cake of the tailing and sent to dispose to the users of the same.
- iii. The project proponent shall install the briquetting plant for briquetting/amalgamation of dust collected from air pollution control devices including mill scales.
- iv. No ground water shall be extracted during construction and operation of the project

General Conditions:

- 1) An amount of Rs 160 Lakhs proposed towards Corporate Environmental Responsibility 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.
- 2) Green belt shall be developed in 8.24 Ha 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.
- 3) The Capital cost Rs. 945.0 Lakhs and annual recurring cost Rs. 105.50 Lakhs towards the environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.
- 4) The project proponent shall (Air Quality Monitoring):
 - a. install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008 as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - b. monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
 - c. Install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions; and
 - d. submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- 5) The project proponent shall (Water Quality Monitoring):
 - a) install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- b) monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories; and
- c) submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- 6) The project proponent shall (Air Pollution Control):
- a) provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- b) provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags;
- c) provide pollution control system in the steel plant as per the CREP Guidelines of CPCB;
- d) provide sufficient number of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs regularly;
- e) 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;
- f) ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation;
- g) provide wind shelter fence and chemical spraying on the raw material stock piles.
- 7) The project proponent shall (Water Pollution Control):
- a) adhere to 'zero liquid discharge';
- b) provide Sewage Treatment Plant for domestic wastewater; and
- c) 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.
- 8) The project proponent shall (Water Conservation):
- a) practice rainwater harvesting to maximum possible extent; and
- b) make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- 9) The project proponent shall (Energy Conservation):
- a) provide waste heat recovery system on the DRI Kilns;
- b) use dolochar generated for power generation;

- c) 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
- d) provide the project proponent for LED lights in their offices and residential areas;
- 10) Used refractories shall be recycled as far as possible.
- 11) The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.
- 12) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- 13) The project proponent 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.
- 14) The project proponent 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.
- 15) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel plants shall be implemented.
- 16) A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of the organization.
- 17) 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.
- 18) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- 19) 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).
- 20) The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- 21) 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.
- 22) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

- 23) The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.
- 24) 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.
- 25) Kitchen waste shall be composted or converted to biogas for further use.
- 26) The project proponent shall (Post-EC monitoring):
- a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
 - b. put on the clearance letter on the web site of the company for access to the public.
 - c. 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>.
 - d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
 - e. monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (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;
 - f. 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;
 - g. 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;
 - h. 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.
- 24.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.


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

26.0 The project proponent 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.

27.0 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.


28.0 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 & Forests, Government of Jharkhand, Secretariat Ranchi.
2. **The Additional Principal Chief Conservator of Forests(C)**, Ministry of Environment and Forest, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi-834002.
3. **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. **The Chairman**, Jharkhand State Pollution Control Board, CTI Colony, Sector 4, Birsa Nagar, Ranchi, Jharkhand 834004
5. **The Member Secretary**, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
6. **The District Collector**, District Ramgrah, Jharkhand.
7. **Guard File / Record file / Monitoring file.**
8. **MOEF&CC Website.**


(Sharath Kumar Pallerla)
Scientist 'F' / Director