



सत्यमेव जयते

**File No: IA-J-11011/1039/2007-IA-II-(IND-I)**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**IA Division**  
**\*\*\***



Date **12/10/2023**



To,

M/s HIRA ELECTRO SMELTERS LIMITED  
Plot No. 364 - 367 APIIC Growth Center, Bobbili (V&M), APIIC Growth Centre, Bobbili,  
VIZIANAGARAM, ANDHRA PRADESH, APIIC Growth Center, 535558  
Email: emd.hesl@hpslindia.com

**Subject: Proposed Change in Configuration of Ferro Alloys Production Unit by M/s Hira Electro Smelters Limited, located at Plot No. 364-367, APIIC Growth Centre, Bobbili, District-Viziangaram, Andhra Pradesh- Grant of Environmental Clearance under the provisions of Para 7(ii) of the EIA Notification 2006 & OM dated 11.04.2022. regarding.**

Sir/Madam,

This refers to your proposal no **IA/AP/IND1/432164/2023** dated **15.08.2023** along with copy of EIA report, Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. Further, the PP has uploaded the information on Portal on 20.09.2023.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A1011AP5904005N
(ii) File No.	IA-J-11011/1039/2007-IA-II-(IND-I)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	3(a) Metallurgical Industries (ferrous and non ferrous)
(vi) Sector	Industrial Projects - 1
(vii) Name of Project	Proposed Change in Configuration of Ferro Alloys Production Unit by M/s Hira Electro Smelters Limited
(viii) Name of Company/Organization	M/s HIRA ELECTRO SMELTERS LIMITED
(ix) Location of Project (District, State)	VIZIANAGARAM, ANDHRA PRADESH
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per	No

## EIA Notification, 2006

3. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity is covered schedule Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

4. The proposal is considered in the 43<sup>rd</sup> meeting of the EAC for Industry-I sector held during **4<sup>th</sup> -5<sup>th</sup> September, 2023**, wherein the Committee, after detailed deliberations, recommended the proposal. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <https://parivesh.nic.in>.

5. The PP reported that the existing project was initially accorded environmental clearance vide dated 28.02.2008 in the name of M/s RVR Smelters Pvt Ltd and further amendment in EC on 22.03.2012. Further, the transfer of EC from "M/s RVR Smelters Pvt Ltd" to "M/s Hira Electro Smelters Pvt Ltd." was obtained on 30.09.2015 by the Ministry. Thereafter, The PP has obtained Transfer of Environmental clearance from "M/s Hira Electro Smelters Pvt. Ltd." to "M/s Hira Electro Smelters Ltd." on 18.07.2023. Plant has valid Consent to Operate for the existing unit issued by APPCB vide order dated 16.09.2021 which is valid till 31.12.2025.

6. The details of the proposal are as per the EIA/EMP report submitted by the proponent. The salient features of the proposal, as presented during the above-mentioned meetings of EAC (Industry 1 Sector), are given at **Annexure I**, Unit configuration and capacity are given at **Annexure-II**.

7. The EAC, in its meeting held during **4<sup>th</sup> -5<sup>th</sup> September, 2023**, inter-alia, deliberated the following:

(i). The instant proposal is Change in Configuration of Ferro Alloys Production and Furnace capacity from 100877 TPA to 83682 TPA and 57 MVA to 30 MVA, respectively under the provisions of para 7(ii) of the EIA Notification, 2006.

(ii). The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with addendum to the EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

(iii). The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

(iv). The EAC deliberated on the justification provided by the Project Proponent for appraisal of instant proposal under para 7(ii) of EIA Notification, 2006 in pursuance to the Ministry's O.M. dated 11.04.2022 and found it satisfactory. EAC is of the view that the instant project is qualifying the criteria mentioned in the Ministry's OM dated 11.04.2022 and accordingly appraise the project under modernisation category.

(v). The existing project was initially accorded environmental clearance vide No. J-11011/1039/2007-IA II (I) dated 28.02.2008 with amendments dated 22.03.2012 and 30.09.2015. Thereafter, Transfer of Environmental clearance from M/s Hira Electro Smelters Pvt. Ltd. to M/s Hira Electro Smelters Ltd. dated 18.07.2023. Plant has valid Consent to Operate for the existing unit issued by APPCB vide order no. APPCB/VSP/VZN/156/HO/CFO/2021 dated 16.09.2021 valid till 31.12.2025. The details of the permissions are provided in Annexure II.

(vi). The proposed project is planned within the existing unit which is spread over an area of 23.72 acres. The land has been allotted by Andhra Pradesh Industrial Infrastructure Corporation Limited vide allotment Letter no. 2137/RVR/GC/bbl/06 dated 11.07.2007 for establishment of industry.

(vii). The nearest habitation to plant is Gorla Seetharampuram Village (0.5 km, W) and Pankuvalasa Village (0.75 km, SE) within the study area of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.

(viii). There are number of water bodies including ponds, canal and Vegavati river within study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.

(ix). The total water requirement of the project is estimated to increase to 300 KLD which is proposed to be sourced from APIIC supply and ground water. The EAC deliberated on the water requirement and the reasons submitted by the project proponent through written submission and found it satisfactory.

(x). The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures as per the submitted action plans to minimise the pollution.

(xi). The Committee deliberated on the baseline data along with pollution load assessment reported and observed that emission load is decreasing after the proposed modification. However, the waste water generation will increase and Accordingly, the EAC found it satisfactory to appraise the instant proposal under para 7(ii) of EIA Notification, 2023.

(xii). The EAC noted that the existing green belt has been developed in 3.1953 ha area which is about 33% of the total project area of 9.59 ha. Total 7990 nos. of trees and shrubs has been planted under the existing greenbelt. Further PP has submitted an undertaking that the industry will enhance tree plantation to increase the density of trees within the plant area upto October, 2023. The EAC deliberated on the greenbelt development plan and found it satisfactory.

(xiii). The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

(xiv). Schedule-I Species such as Indian Fox (*Vulpes bengalensis*), Indian Crested Porcupine (*Hystrix indica*), Rat Snake (*Ptyas muscous*), Russel Viper (*Vipers russelii*) are found in the study area. PP has prepared and submitted Wildlife Conservation Plan vide letter dated 02.05.2023 to The Chief Wildlife Warden, Andhra Pradesh for approval.

(xv). The Committee deliberated upon the certified compliance report of IRO, MoEF&CC and found it satisfactory.

(xvi). The Committee also deliberated on the earlier public hearing issues along with status of compliance of action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

(xvii). The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

(xviii). The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State

Pollution Control Board, prior to construction & operation of the project.

(xix). The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

8. The EAC, in its **43<sup>rd</sup> meeting of Expert Appraisal Committee (Industry-1 Sector) held during 4<sup>th</sup> - 5<sup>th</sup> September, 2023**, based on information & clarifications provided by the project proponent and after detailed deliberations **recommended** the instant proposal for grant of Environment Clearance under the para 7(ii) EIA Notification, 2006 subject to stipulation of specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements.

9. The MoEF&CC has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Industry-1 Sector) hereby decided to grant **Environment Clearance** for instant proposal of **M/s Hira Electro Smelters Limited** under the para 7(ii) provisions of EIA Notification, 2006 subject to specific conditions and general conditions at **Annexure III**.

10. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

11. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

12. Any appeal against this environmental clearance 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.

13. 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 and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

14. This issues with approval of the competent authority.

**(Dr. R. B. Lal)**  
**Scientist 'F'/ Director**  
Tel: 011-20819346  
[Email-rb.lal@nic.in](mailto:Email-rb.lal@nic.in)

#### **Copy To**

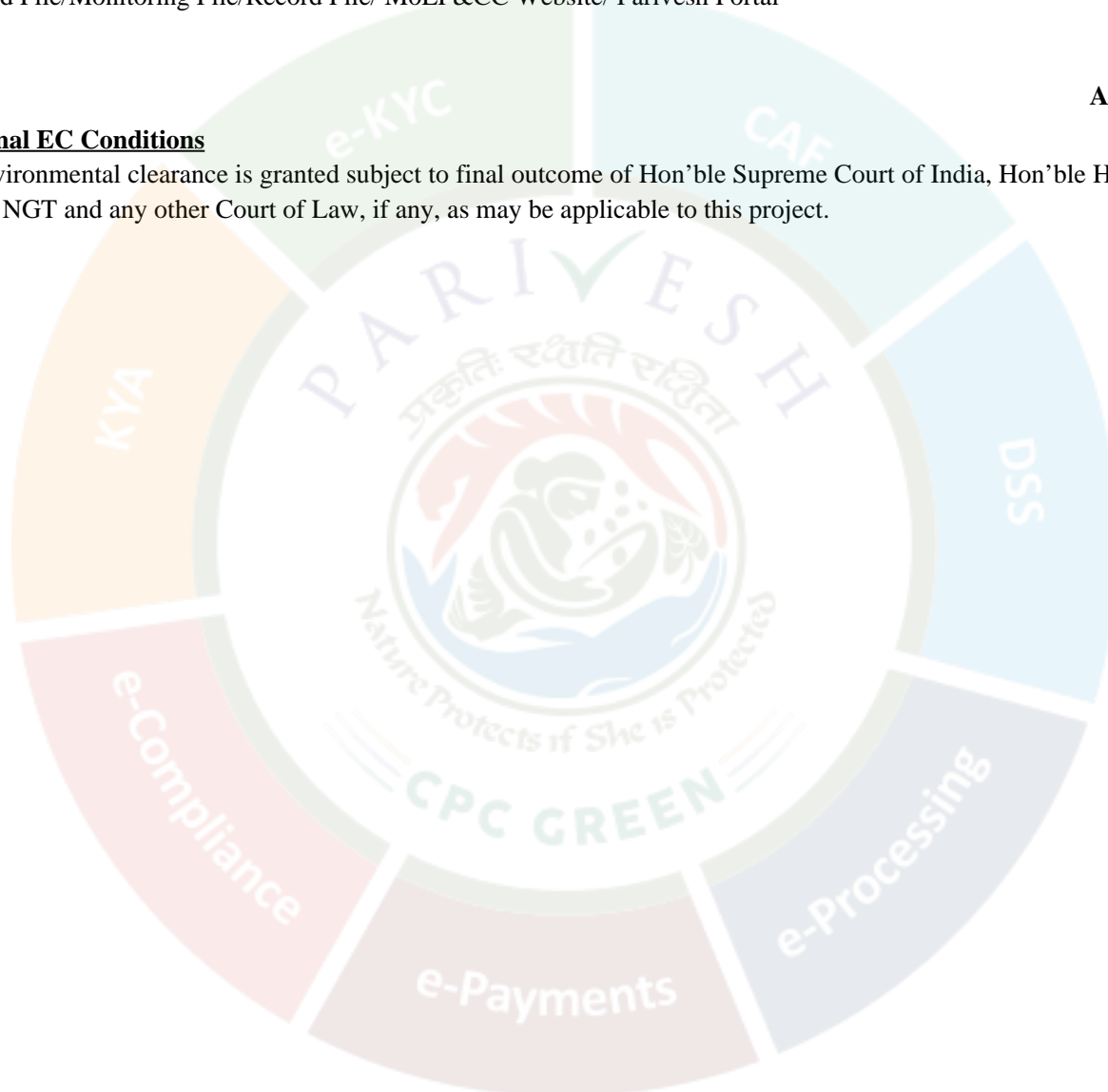
1. The Principal Secretary, Environment and Forests Department Secretariat, Government of Andhra Pradesh, B Block, Secretariat, Hyderabad-500004
2. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi.
3. The Principal Chief Conservator of Forests, Government of Andhra Pradesh, Aranya Bhawan, Hyderabad-500 004

4. Inspector General of Forests, Integrated Regional Office, Ministry of Environment, Forest and Climate Change, Vijayawada Green House Complex, Vijayawada, Andhra Pradesh 520010
5. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi - 110032
6. The Member Secretary, Andhra Pradesh Pollution Control Board, D.No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamalavari, Street, Kasturibaipet, Vijayawada – 520010
7. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
8. The Chief Wildlife Warden, Govt. of Andhra Pradesh, Aranya Bhawan, Saifabad, Hyderabad-500004
9. The District Collector, District Vizianagaram, Andhra Pradesh
10. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
11. Guard File/Monitoring File/Record File/ MoEF&CC Website/ Parivesh Portal

#### Annexure 1

#### Additional EC Conditions

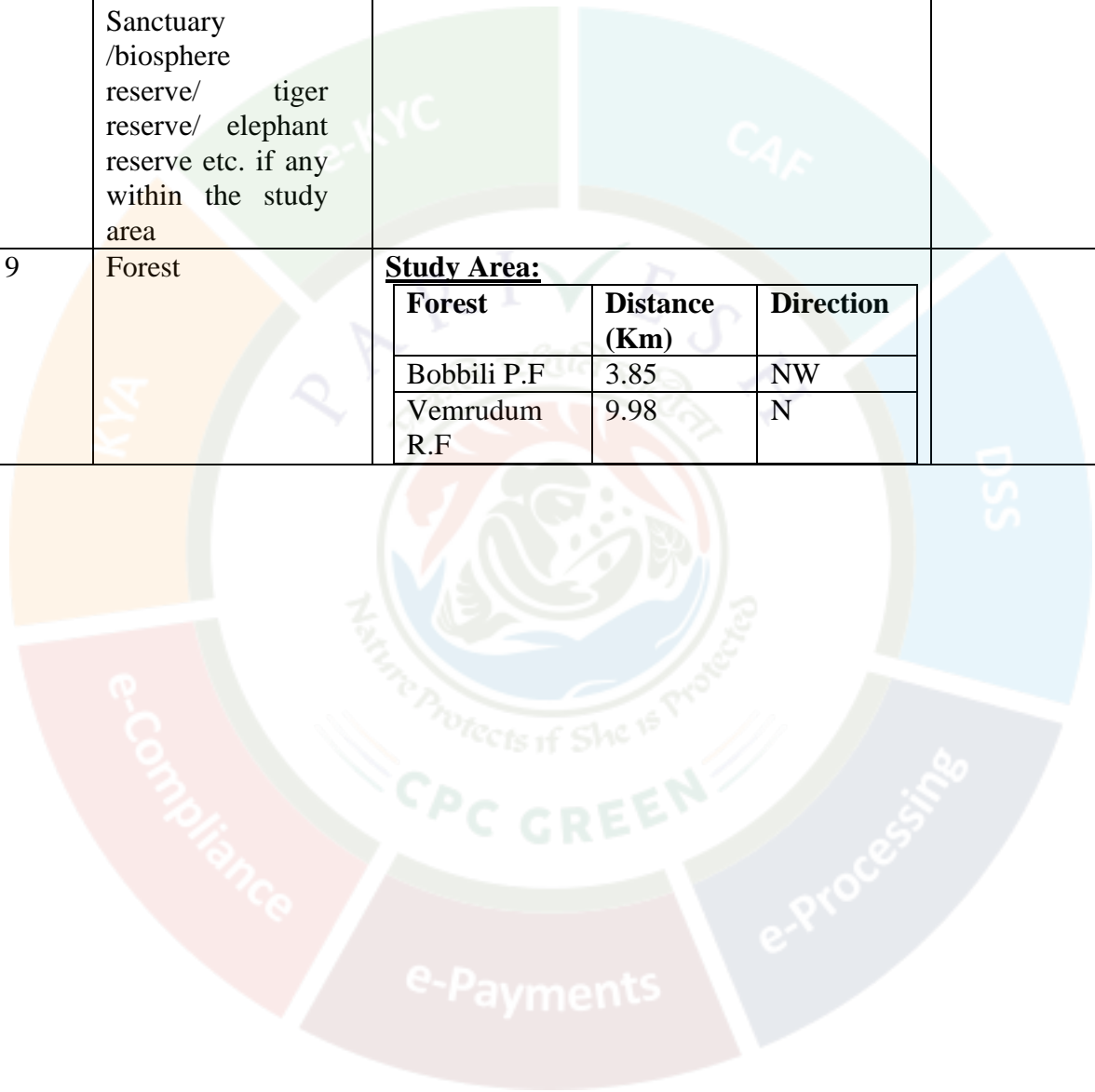
This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.



Environmental site settings:

S. No.	Particulars	Details	Remarks																											
1	Total Land	23.72 Acres	Land Use: Industrial																											
2	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Land already acquired The proposed project is planned within the existing unit which is spread over an area of 23.72 acres. The land has been allotted by Andhra Pradesh Industrial Infrastructure Corporation Limited vide allotment Letter no. 2137/RVR/GC/bbl/06 dated 11.07.2007 for establishment of industry.																												
3	Existence of habitation & involvement of R&R, if any.	<p><b>Project Site:</b> Nil</p> <p><b>Study Area:</b></p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Gorla Seetharampuram</td> <td>0.5 Km</td> <td>W</td> </tr> <tr> <td>Pankuvalasa</td> <td>0.75 Km</td> <td>SE</td> </tr> <tr> <td>Bobbili</td> <td>4.5 Km</td> <td>NE</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Gorla Seetharampuram	0.5 Km	W	Pankuvalasa	0.75 Km	SE	Bobbili	4.5 Km	NE																
Habitation	Distance	Direction																												
Gorla Seetharampuram	0.5 Km	W																												
Pankuvalasa	0.75 Km	SE																												
Bobbili	4.5 Km	NE																												
4	Latitude and Longitude of all four corners of the project site	<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>18°32'28.18"N</td> <td>83°20'31.66"E</td> </tr> <tr> <td>B</td> <td>18°32'21.41"N</td> <td>83°20'31.25"E</td> </tr> <tr> <td>C</td> <td>18°32'22.31"N</td> <td>83°20'14.75"E</td> </tr> <tr> <td>D</td> <td>18°32'29.05"N</td> <td>83°20'15.19"E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	A	18°32'28.18"N	83°20'31.66"E	B	18°32'21.41"N	83°20'31.25"E	C	18°32'22.31"N	83°20'14.75"E	D	18°32'29.05"N	83°20'15.19"E													
Point	Latitude	Longitude																												
A	18°32'28.18"N	83°20'31.66"E																												
B	18°32'21.41"N	83°20'31.25"E																												
C	18°32'22.31"N	83°20'14.75"E																												
D	18°32'29.05"N	83°20'15.19"E																												
5	Elevation of the project site	135 m above mean sea level																												
6	Involvement of Forest land if any.	Not Applicable																												
7	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project	<p><b>Project Site:</b> None</p> <p><b>Study Area:</b></p> <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance (Km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Season Pond</td> <td>0.3</td> <td>SE</td> </tr> <tr> <td>Pond</td> <td>0.65</td> <td>NE</td> </tr> <tr> <td>Pond</td> <td>1.30</td> <td>NW</td> </tr> <tr> <td>Canal</td> <td>1.35</td> <td>SE</td> </tr> <tr> <td>Vegavati River</td> <td>1.60</td> <td>S</td> </tr> <tr> <td>Pond</td> <td>2.60</td> <td>NE</td> </tr> <tr> <td>Pond</td> <td>4.05</td> <td>NE</td> </tr> <tr> <td>Appalanaidu Cheruvu</td> <td>4.60</td> <td>SE</td> </tr> </tbody> </table>	Water Body	Distance (Km)	Direction	Season Pond	0.3	SE	Pond	0.65	NE	Pond	1.30	NW	Canal	1.35	SE	Vegavati River	1.60	S	Pond	2.60	NE	Pond	4.05	NE	Appalanaidu Cheruvu	4.60	SE	
Water Body	Distance (Km)	Direction																												
Season Pond	0.3	SE																												
Pond	0.65	NE																												
Pond	1.30	NW																												
Canal	1.35	SE																												
Vegavati River	1.60	S																												
Pond	2.60	NE																												
Pond	4.05	NE																												
Appalanaidu Cheruvu	4.60	SE																												

S. No.	Particulars	Details			Remarks
		Tallendra Cheruvu	4.60	SE	
		Chuttu Cheruvu	5.55	NE	
8	Existence of ESZ/ESA/national Park/Wildlife Sanctuary /biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	None			
9	Forest	<b><u>Study Area:</u></b>			
		<b>Forest</b>	<b>Distance (Km)</b>	<b>Direction</b>	
		Bobbili P.F	3.85	NW	
		Vemrudum R.F	9.98	N	



**Annexure II**

The unit configuration and capacity of proposed project

Particular	Production				CLU (TPA)	Thermit (TPA)	Boiler (TPH)	Furnace (MVA)		
	Fe-Mn	Si-Mn	Fe-Cr	Total Quantity	Including 83682 (TPA)			Total Capacity	Total Capacity	Total Capacity
				In TPA						
<b>As per EC dated 28.02.2008</b>	100877	Nil	Nil	100877	NIL	NIL	NIL	1x6 MVA, 2x9 MVA & 2x16.5 MVA	57 MVA	
	Nil	100877	Nil	100877						
	44032	Nil	56845	100877						
	Nil	44032	56845	100877						
	44032		56845	100877						
<b>As per Latest CFO</b>	100877	Nil	Nil	100877	NIL	NIL	NIL	2 x 6 MVA	12 MVA	
	Nil	100877	Nil	100877						
	44032	Nil	56845	100877						
	Nil	44032	56845	100877						
	44032		56845	100877						
<b>Existing As per current manufacturing</b>	33472.8	Nil	Nil	33472.8	NIL	NIL	NIL	2 x 6 MVA	12 MVA	
<b>After Proposed Change in Configuration</b>	83682	Nil	Nil	83682	60000	1800	2.5	5 x 6 MVA	30 MVA	
	Nil	83682	Nil	83682						
	83682		Nil	83682						



## Specific conditions and general conditions

**A. Specific Condition:**

- i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- ii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iii. The nearest habitation to plant is Gorla Seetharampuram Village (0.5 km, W) and Pankuvalasa Village (0.75 km, SE) within the study area of the project site. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include these locations in its environmental monitoring programme.
- iv. There are number of water bodies including ponds, canal and Vegavati river within study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- v. The water requirement of 300 KLD shall be sourced from APIIC supply and ground water after obtaining necessary permission from the Competent Authority. PP shall explore the possibility to shift to alternate source of water to reduce its dependency on ground water.
- vi. Three tier Green Belt shall be developed and maintained in at least 33% of the project area with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. As committed, industry will enhance tree plantation to increase the density of trees within the plant area upto October, 2023. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Gorla Seetharampuram and Pankuvalasa Village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- vii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the

- Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- viii. PP shall adopt undertake village adoption programme, prepare and implement the action plan to develop them into model villages.
  - ix. PP shall improvise the housekeeping and adopt best practices.
  - x. The recommendations of the approved Site-Specific Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

**B. General conditions:**

**I. Statutory compliance:**

- i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.
- ii. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

**II. Air quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvi. The particulate matter emissions from the process stacks shall be less than  $30 \text{ mg/Nm}^3$  and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xvii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xviii. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
- xix. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.
- xx. The 4<sup>th</sup> hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.
- xxi. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control

silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m<sup>3</sup> for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.

### **III. Water quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 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 recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall 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 recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Garland drains and collection pits shall be provided 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.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

### **IV. Noise monitoring and prevention**

- i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

### **V. Energy Conservation measures**

- i. 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;
- ii. Provide LED lights in their offices and residential areas.

## **VI. Waste management**

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
- ii. Kitchen waste shall be composted or converted to biogas for further use.
- iii. 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 in this regard shall be submitted to the Ministry's Regional Office.
- iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at <https://cpcb.nic.in/technical-guidelines-3/>. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
- v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- vi. Solid waste utilization
  - a. PP shall recycle/reuse solid waste generated in the plant as far as possible.
  - b. Used refractories shall be recycled as far as possible.

## **VII. Green Belt**

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
- ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.
- iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.
- iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and

dust pollution from exposed soil surface.

### **VIII. Public hearing and Human health issues**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. 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.
- iii. 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

### **IX. Environment Management**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

### **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of

which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, 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.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall 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. The project proponent 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, commencing the land development work and start of production operation by the project.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- xii. 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).

- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvii. 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.

