



File No: IA-J-11011/257/2013-IA-II(IND-I)

Government of India  
Ministry of Environment, Forest and Climate Change  
IA Division

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Date 29/07/2024



To,

M/s. SLR Metaliks Limited  
A-2/452, SECTOR-8, ROHINI, NEW DELHI-110 085 A-2/452, SECTOR-8, ROHINI, NEW DELHI-110 085, Shop No. G-19, Mangalam Paradise Mall 502, Sector 3, Rohini,, NEW DELHI, DELHI, -, 583222  
Email: info@slrm.co.in

**Subject:** Expansion of production capacity from existing 0.32 MTPA to 0.73 MTPA by addition of new units - Sinter Plant of 75 m<sup>2</sup>, Mini Blast Furnace (MBF) 380 m<sup>3</sup>, Steel Melt Shop (SMS) of 0.425 MTPA and Rolling Mill of 0.41 MTPA m Proposed expansion of mini steel plant increase of steel production from 0.32 MTPA TO 0.73 MTPA [By addition of New Units - Sinter Plant of 75 m<sup>2</sup> , Mini Blast Furnace (MBF) 380 m<sup>3</sup> , Steel Melt Shop (SMS) of 0.425 MTPA & Rolling Mill of 0.41 MTPA with Allied Products] by M/s SLR Metaliks Limited, located at Village Narayan Devara Kere & Lokappana Hola, (Near Mariyammana Halli), Hagari Bommana Halli Taluk, Vijayanagar (D), Karnataka –Grant of Environmental Clearance

Sir/Madam,

M/s SLR Metaliks Limited has made an online application vide proposal no. IA/KA/IND1/453349/2023 dated 11.12.2023 along with copy of EIA/EMP report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A1001KA5652653N
(ii) File No.	IA-J-11011/257/2013-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 Expansion of Mini Steel Plant for Increase of Steel production from 0.32 MTPA to 0.73 MTPA by SLR Metaliks Limited

<b>(viii) Name of Company/Organization</b>	SLR Metaliks Limited
<b>(ix) Location of Project (District, State)</b>	VIJAYANAGAR, KARNATAKA
<b>(x) Issuing Authority</b>	MoEF&CC
<b>(xi) Applicability of General Conditions as per EIA Notification, 2006</b>	No

3. The proposed project activity is listed at S. 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 instant Proposal was initially considered by the EAC 51st meeting of the EAC for Industry-I sector held on 2nd - 4th January, 2024 further in 57th meeting of the EAC for Industry-I sector held on 24th – 25th April 2024 wherein EAC deferred the proposal seeking additional information. Based on the additional information submitted the proposal was re-considered during the 61st meeting of the EAC for Industry-I sector held on 18th – 19th June, 2024. 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 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 at Annexure-II.

6. The Unit configuration and capacity of the proposed project is at Annexure-III.

7. The EAC, in its 61st meeting held during 18th -19th June, 2024, inter-alia, deliberated the following:

i. The instant proposal is for expansion of the Steel Plant by increasing the capacity of Steel production from 0.32 MTPA to 0.73 MTPA [By Addition of New Units - Sinter Plant of 75 m2, Mini Blast Furnace (MBF) 380 m3, Steel Melt Shop (SMS) of 0.425 MTPA & Rolling Mill of 0.41 MTPA WITH Allied Products and ancillary units.

ii. M/s SLR Metaliks Limited was granted environmental Clearance by MoEF&CC vide letter No. J-11011/257/2013-IA II(I) dated 31.03.2015 for expansion of existing pig iron manufacturing industry consisting of 262 m3 blast furnace, 33 m2 sinter plant and 6 MW blast furnace off gas power plant by installation of 0.30 MTPA steel, 0.32 MTPA Rolling Mill, 0.12 MTPA coke oven plant, 9 MW coke oven off gas based power plant, 120 TPD oxygen plant and Producer Gas Plant. Further, amendment to EC was obtained vide letter dated 09/03/2016 for change of fuel in 1x6 MW Captive power plant from BF gas to imported coal, change of fuel in reheating furnace of 0.32 MTPA Rolling mill from Furnace Oil to Blast Furnace gas and reduction in capacity of Producer gas plant from 15000 to 5500 Nm3/hr. The project proponent also obtained extension of the validity of above EC vide letter no. J-11011/257/2013-IA. II(I) dated 22.04.2022 valid up to 30/03/2025. SLRM further obtained amendment in Environmental clearances vide letter dated 09.01.2023 from MoEFCC for reduction of plant area. The Consent for Operation (CFO) of Steel Plant was obtained from time to time and latest CFO obtained from Karnataka State Pollution Control Board, CFO issued vide Order No. AW-332167 dated 08.07.2022 valid upto 03.06.2027.

iii. 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 EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

iv. 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 EIA/EMP 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.

v. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

- vi. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
- vii. Total project area is 94.73 Ha. (234 Acres) comprising KIADB land of 62.29 ha, Govt. Land of 14.53 ha, and SLRM own land of 17.91 ha. SLRM has created a guard pond over an extent of 2.37 Acres land leased from TB Board.
- viii. Lokappanahola is at a distance of 0.63 km in SE of project site along with other sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- ix. As reported, Tungabhadra Reservoir is at a distance of 0.16 km in NW of the project site along with several water bodies within the study area of the project site. EAC opined that 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.
- x. The PP reported that water to the tune of 6200 m<sup>3</sup>/day will be needed for the proposed expansion project (Existing: 2200 m<sup>3</sup>/day + Expansion: 4000 m<sup>3</sup>/day). The water will be sourced from Tungabhadra Reservoir backwater and ND Kere reservoir. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard.
- xi. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.
- xii. Based on the information obtained from the Forest Department, the 13 nos. of Schedule – I species are reported in the study area. To protect these Schedule – I Fauna, a Conservation Plan has been prepared and submitted to Karnataka Forest Department for approval and the same is under process. The EAC opined that PP shall strictly comply with the recommendations made in the Wildlife Conservation Plan as per the approval.
- xiii. The PP has submitted that they have developed an extensive green belt in and around the plant and planted around 90,730 nos. of saplings covering an extent of 33.20 Ha. (82 acres) out of total 94.73 Ha resulting in 35% coverage. Trees are developed on either side of the internal roads as well on all approach roads to the industry, Lawns are developed around plant and administrative buildings. Mass plantation is made at 15 acres area in 2022. No additional area for greenbelt is proposed. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that greenbelt shall be maintained as per the norms.
- xiv. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
- xv. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
- xvi. The EAC deliberated on the CCR obtained from IRO, MoEF&CC and found it satisfactory.
- xvii. The EAC also deliberated on the ADS reply of the project proponent and found it satisfactory.
- xviii. 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.
- xix. 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.

xx. 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 (Industry-1 Sector), in its 61th meeting held during 18th -19th June, 2024, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Environment Clearance subject to stipulation of specific and general EC conditions.

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 decides to grant Environment Clearance to instant proposal of M/s SLR Metaliks Limited. under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions ( Annexure-I)

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.

Dinesh Runiwal  
Scientist 'F'/ Director  
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#### **Copy To**

1. The Secretary, Department of Forest, Environment & Ecology, Government of Karnataka, Room No. 708, Gate 2, Multi Storey Building, Dr. Ambedkar Veedhi, Bangalore -560 001.

2. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi

3. The Member Secretary, Karnataka State Pollution Control Board, No. 25, 6- 9<sup>th</sup> Floor, Public Utility Building, M.G. Road, Bangalore – 560 001.

4. The Deputy Director General of Forests (C), Integrated Regional Office, Ministry of Environment, Forest and Climate

Change, Kendriya Sadan, 4<sup>th</sup> Floor, E&F Wings, 17<sup>th</sup> Main Road, Koramangala II Block, Bangalore - 560034

5. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.

6. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001

7. The Chief Wildlife Warden, Govt. of Karnataka, Aranya Bhawan, 18<sup>th</sup> Cross, Malleswaram, Bangalore-560003

8. The District Collector, Vijayannagar District, Karnataka

9. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.

10. Guard File/Monitoring File/Website/Record File/Parivesh Portal.

(Dinesh Runiwal)  
Scientist 'F'/ Director

## Annexure 1

### Specific EC Conditions for (Metallurgical Industries (Ferrous And Non Ferrous))

#### 1. Specific

S. No	EC Conditions
1.1	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.
1.2	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.
1.3	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.
1.4	Lokappannahola is at a distance of 0.63 km in SE of project site along with other sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
1.5	As reported, Tungabhadra Reservoir is at a distance of 0.16 km in NW of the project site along with several water bodies within the 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.

S. No	EC Conditions
1.6	Total water requirement is 6200 m <sup>3</sup> /day, shall be obtained from Tungabhadra Reservoir backwater and ND Kere reservoir. PP shall obtain necessary permission from the Competent Authority in this regard. No ground water abstraction is permitted.
1.7	Three tier Green Belt shall be maintained in atleast 33% of the project area of adequate width and tree density shall not be less than 2500 per ha. 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 sensitive areas nearby project site. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
1.8	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 amounting to Rs. 17.25 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
1.9	The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
1.10	Project proponent shall explore the possibility to collaborate with the nearby educational institutions to undertake different works related to academic social responsibility for overall educational development of the area.
1.11	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.
1.12	The PP shall instal detectors for CO gas at strategic locations inside the Plant.
1.13	The PP shall monitor the health of the soil in the vicinity of the Plant (5 km radius) periodically (once in a year) and submit the Report to IRO, MoEFCC.
1.14	The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive will be other than Green belt development.

**Standard EC Conditions for (Metallurgical Industries (ferrous and non ferrous))**

**1. Statutory Compliance**

S. No	EC Conditions
1.1	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

S. No	EC Conditions
	be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

## 2. Air Quality Monitoring And Preservation

S. No	EC Conditions
2.1	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 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. (case to case basis small plants: Manual; Large plants: Continuous and their no's.)
2.2	The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx 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.
2.3	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.
2.4	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
2.5	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.
2.6	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
2.7	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
2.8	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.
2.9	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.
2.10	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

S. No	EC Conditions
2.11	The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
2.12	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
2.13	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
2.14	Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
2.15	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.
2.16	Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
2.17	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.
2.18	The particulate matter emissions from the process stacks shall be less than 30 mg/Nm <sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
2.19	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.

### 3. Air Quality Monitoring And Preservation In Case Of Ferro Alloy Plants

S. No	EC Conditions
3.1	Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
3.2	The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.
3.3	The 4th hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.
3.4	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

S. No	EC Conditions
	recommended to monitor personal and area exposures for silica quartz dust in the process plants. (in case of Silico Manganese and Ferro Silicon alloy steel)
3.5	No Ferro-chrome production shall be carried out without prior Environmental clearance from MOEF&CC.
3.6	During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
3.7	The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m <sup>3</sup> , respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
3.8	Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
3.9	Low NO <sub>x</sub> Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

#### 4. Air Quality Monitoring And Preservation In Case Of Bof

S. No	EC Conditions
4.1	Basic Oxygen Furnace (BOF) gas shall be cleaned dry

#### 5. Water Quality Monitoring And Preservation

S. No	EC Conditions
5.1	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.
5.2	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.
5.3	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.
5.4	Water meters shall be provided at the inlet to all unit processes in the steel plants.
5.5	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

S. No	EC Conditions
5.6	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.
5.7	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.
5.8	Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
5.9	Air Cooled condensers shall be used in the captive power plant.

#### 6. Water Quality Monitoring And Preservation In Case Of Rolling Mills

S. No	EC Conditions
6.1	The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time. (in case of rolling mills)

#### 7. Noise Monitoring And Prevention

S. No	EC Conditions
7.1	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.
7.2	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.
7.3	PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

#### 8. Energy Conservation Measures

S. No	EC Conditions
8.1	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
8.2	Restrict Gas flaring to < 1%.
8.3	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;

S. No	EC Conditions
8.4	Provide LED lights in their offices and residential areas.

#### 9. Energy Conservation Measures In Case Of Reheating Furnace

S. No	EC Conditions
9.1	The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
9.2	Practice hot charging of slabs and billets/blooms as far as possible.
9.3	Ensure installation of regenerative type burners on all reheating furnaces

#### 10. Energy Conservation Measures In Case Of Blast Furnace

S. No	EC Conditions
10.1	Blast Furnaces shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.

#### 11. Waste Management

S. No	EC Conditions
11.1	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
11.2	Kitchen waste shall be composted or converted to biogas for further use.
11.3	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.
11.4	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 <a href="https://cpcb.nic.in/technical-guidelines-3/">https://cpcb.nic.in/technical-guidelines-3/</a> . 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.
11.5	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
11.6	Solid waste utilization: a. PP shall install a slag crusher to convert steel slag into aggregate for use

S. No	EC Conditions
	in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making. b. PP shall recycle/reuse solid waste generated in the plant as far as possible. c. Used refractories shall be recycled as far as possible.

## 12. Waste Management In Case Of Sinter Plant

S. No	EC Conditions
12.1	SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
12.2	Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
12.3	Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.

## 13. Green Belt

S. No	EC Conditions
13.1	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.
13.2	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.
13.3	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

## 14. Public Hearing And Human Health Issues

S. No	EC Conditions
14.1	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
14.2	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.
14.3	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

S. No	EC Conditions
	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.
14.4	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

### 15. Environment Management

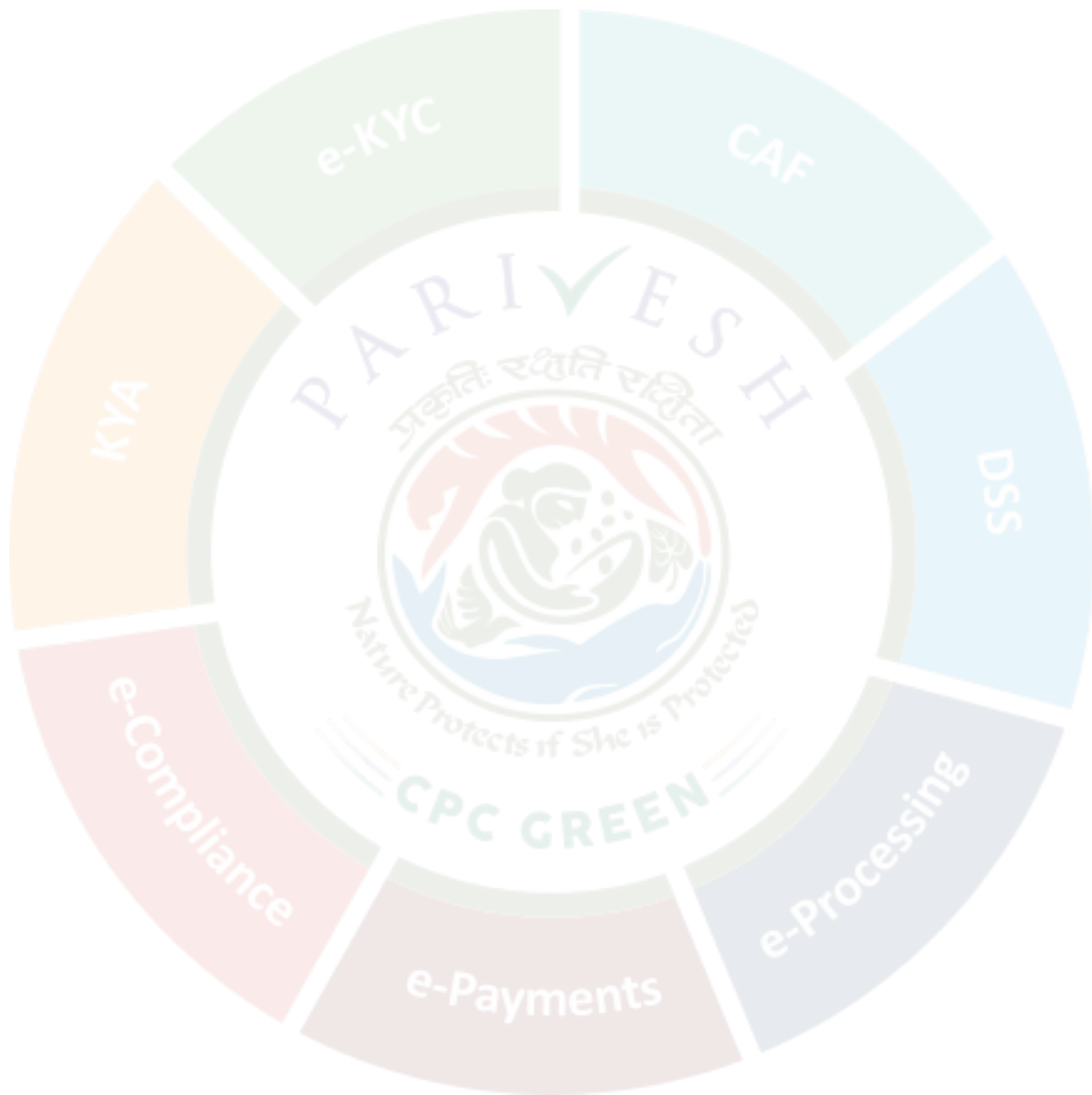
S. No	EC Conditions
15.1	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
15.2	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.
15.3	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.
15.4	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.

### 16. Miscellaneous

S. No	EC Conditions
16.1	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.
16.2	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.
16.3	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.

S. No	EC Conditions
16.4	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.
16.5	Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
16.6	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.
16.7	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.
16.8	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.
16.9	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.
16.10	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.
16.11	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.
16.12	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).
16.13	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.
16.14	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
16.15	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
16.16	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

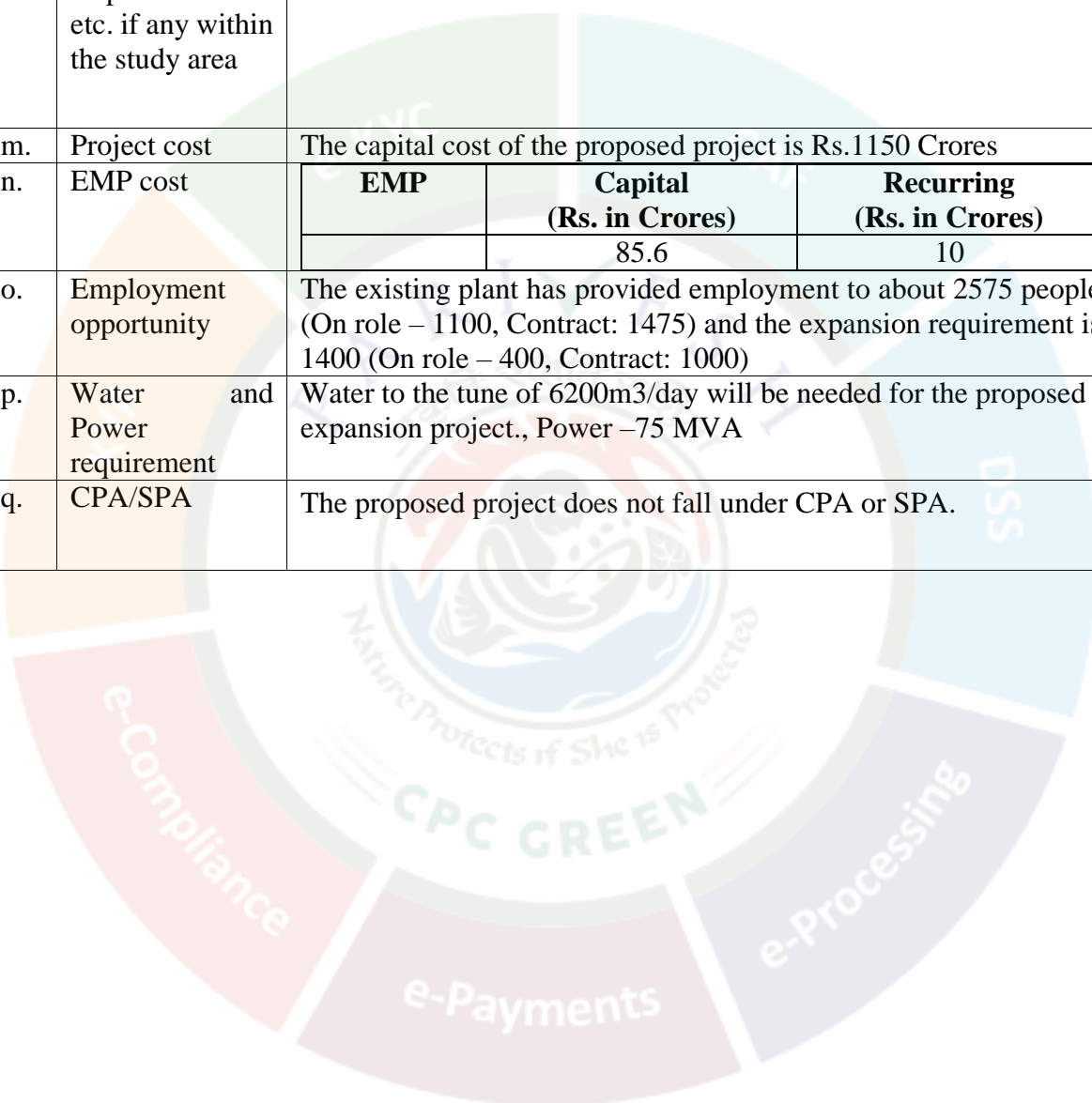
S. No	EC Conditions
	furnishing the requisite data / information/monitoring reports.
16.17	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



**Details of the proposal are as per the EIA/EMP report**

S. No.	Particulars	Details
a.	Terms of Reference for undertaking EIA study	15.02.2023
b.	Period of baseline data collection	Summer (March, April, May) Season, 2023
c.	Date of Public Consultation	17.10.2023
d.	Action plan to address the PH issues	Public Hearing and need based activities detail proposed are attached as <b>Annexure IV</b> .
e.	Location of the project	Located at Village Narayan Devara Kere & Lokappana Hola, (Near Mariyammana Halli), Hagari Bommana Halli Taluk, Vijayanagar (D), Karnataka
f.	Total land	SLRM plant is located in 94.73 ha (234 Acres) comprising KIADB land of 62.29 ha, Govt. Land of 14.53 ha, and SLRM own land of 17.91 ha. SLRM has created a guard pond over an extent of 2.37 Acres land leased from TB Board.
g.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total land: 94.73 Ha. (234 Acres) comprising KIADB land of 62.29 ha, Govt. Land of 14.53 ha, and SLRM own land of 17.91 ha). SLRM has created a guard pond over an extent of 2.37 Acres land leased from TB Board.
h.	Existence of habitation & involvement of R&R, if any	None, No R&R is involved
i.	Elevation of the project site	518 m above mean sea level (MSL)
j.	Involvement of Forest land if any.	No involvement of Forest Land
k.	Water body exists within the project site as well as study area	Project site: None  Study area: 1. Tungabhadra Reservoir HFL - 0.16 km - NW 2. Dhanayakana Kere – 7.00 km – SE 3. Tungabhadra Left Bank Main Canal – 8.60 km – NNE 4. Tungabhadra Right Bank Main Canal – 8.22 km – NNE 5. Tungabhadra High Level Canal – 8.13 km – NNE

S. No.	Particulars	Details		
l.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	Nil		
m.	Project cost	The capital cost of the proposed project is Rs.1150 Crores		
n.	EMP cost	<b>EMP</b>	<b>Capital (Rs. in Crores)</b>	<b>Recurring (Rs. in Crores)</b>
			85.6	10
o.	Employment opportunity	The existing plant has provided employment to about 2575 people (On role – 1100, Contract: 1475) and the expansion requirement is 1400 (On role – 400, Contract: 1000)		
p.	Water and Power requirement	Water to the tune of 6200m <sup>3</sup> /day will be needed for the proposed expansion project., Power –75 MVA		
q.	CPA/SPA	The proposed project does not fall under CPA or SPA.		



## Unit configuration and capacity

S. No	Type of product	Product	Existing capacity in TPA	Proposed capacity addition in TPA	Total production after expansion in TPA
1	Blast Furnace	Hot Metal/ Pig Iron	2,00,000 (262 m <sup>3</sup> )	4,65,000 (380 m <sup>3</sup> )	665000
2	Sinter Plant	Sinter	3,31,000 (33 m <sup>2</sup> )	6,00,000 (75 m <sup>2</sup> )	9,31,000
3	Captive Power Plant – with BF gas fired, MW	Electric Power	6 MW (31 TPH Boiler)	9 MW (42 TPH Boiler)	15 MW
4	Steel melt shop (SMS)	Billets	300000	425000 EOF/EAF – 1 X 50 T per heat LRF – 2 X 50 T per heat VD - 2 X 50 T per heat Continuous casting machine CCM – 3 strands	7,25,000
5	Rolling Mill	Rolled Steel Products	320000 RHF (Fuel: BF gas)	410000 RHF – 60 TPH Annealing – 25000 TPA Hardening and Tempering – 25000 TPA Bright Bar – 60000	<b>730000</b>
6	Slag /Skull Crusher – 2 X 50 TPH	By Product	-	5,00,000	5,00,000
<b>AUXILIARY UNITS</b>					
1	Air Separation (oxygen) Plant	Auxiliary units	120 TPD	<b>750 TPD</b> (Air Separation - 150 TPD & VPSA - 600 TPD)	870 TPD
2	Pulverized Coal Injection		10 TPH	20TPH	30TPH

S. No	Type of product	Product	Existing capacity in TPA	Proposed capacity addition in TPA	Total production after expansion in TPA
3	Ore washing		20 TPH		20 TPH
4	Ore/stone crusher		-	100 TPD	100 TPD

*Note: EOF: Energy optimizing Furnace, EAF: Electric Arc Furnace, VD: vacuum de-gassing, CCM: Continuous Casting Machine, RHF: Re-heating Furnace, VPSA: Vacuum Pressure Swing Adsorption, MTPA: Million tons Per Annum, TPD: Tone per day, MW: Mega Watt*

