Executive Summary

For

Establishment of Proposed Steel Plant (Green Field) with 8 × 650 TPD DRI Kilns-Sponge Iron (17,16,000 TPA), 1 × 65T Electric Arc Furnace (5,40,000 TPA) along with 1 × 65T LRF, 1 × 4-Strand Billet Caster (5,24,000 TPA), Rolling Mill (Bar & Rod Mill 5,00,000 TPA) And with 6 × 30T Induction Furnaces, 2 × 30T LRFs, 2 × 3-Strand Billet Casters, and Rolling Mill (Light Medium Structural Mill 5, 00,000 TPA), WHRB based Power Plant 4x35MW and AFBC based Power Plant 2 x 35 MW

At

Khasra No. 3 to 15, 30 to 32, 273 -Village Laxmanpur and Khasra No. 12 to 14, 17 to 33 -Village Mudholi Chak No. 2, Taluka Chamorshi, District Gadchiroli.

Project Proponent

Finecrafts Steel & Power Private Limited

Environmental Consultant:

Pollution and Ecology Control Services

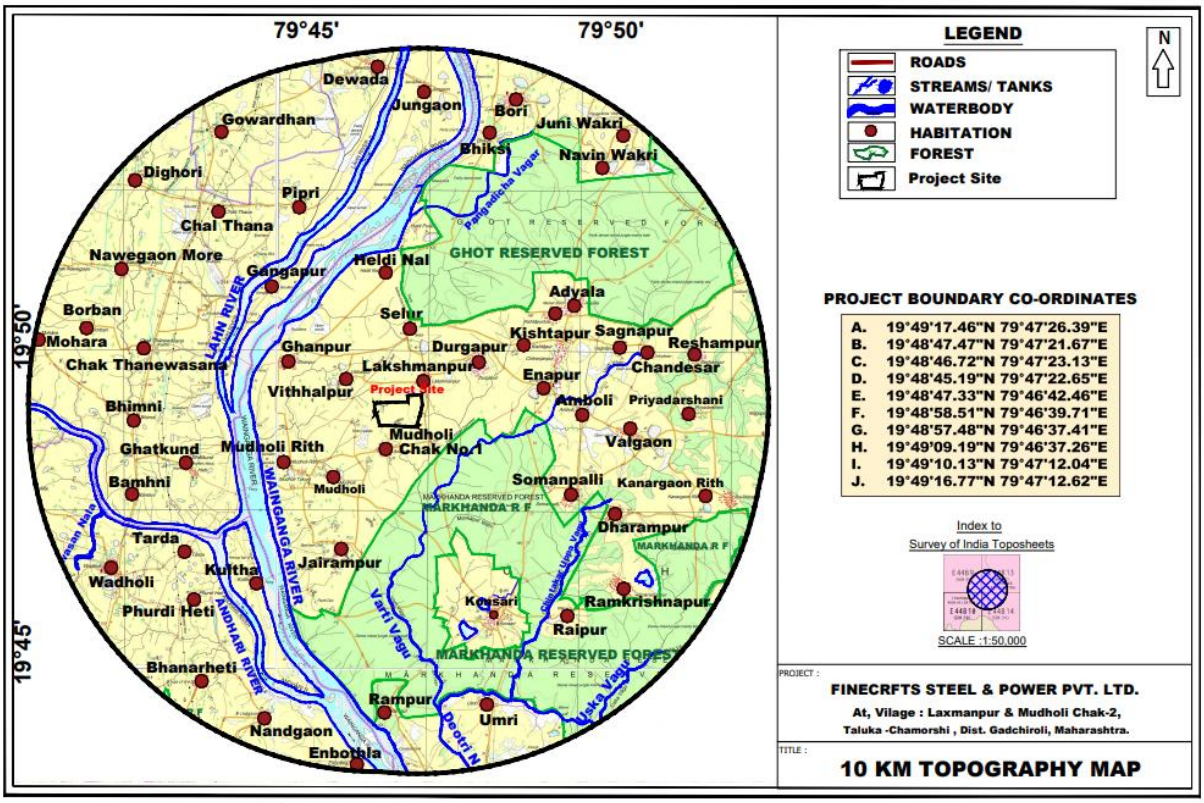
Near Dhantoli Police Station, Dhantoli, Nagpur
Email: pecsnagpur@gmail.com
Accreditation no.: NABET/EIA/25-28/RA 0474 Valid upto: 16th October 2028

Executive Summary

1.0 INTRODUCTION & PROJECT DETAILS

Fine Crafts Steel & Power Private Limited is a private limited company incorporated on 23.01.2024 with its registered office located in Bangalore, Karnataka. The proposed project is Green Field Project for 8×650 TPD DRI Kilns (17,16,000 TPA), 1×65T Electric Arc Furnace (5,40,000 TPA) along with 1×65T LRF, 1×4 -Strand Billet Caster (5,24,000 TPA), Rolling Mill (Bar & Rod Mill 5,00,000 TPA). And Induction Furnace Route (5,40,000 TPA) with 6×30T IFs, 2×30T LRFs, 2×3 -Strand Billet Casters, and Rolling Mill (Bars, Rod & Light Structural Mill -5,00,000 TPA), WHRB based Power Plant 4x35MW, AFBC based Power Plant 2x35 MW and Slag Crusher (1,00,000 TPA) is proposed at Khasra No. 3 to 8, 10 to 15, 30 to 32, 273 in Village Laxmanpur and Khasra No. 12 to 14, 17 to 33 in Village Mudholi Chak No. 2, Taluka Chamorshi, District Gadchiroli.

The proposed project falls in, 3(a) Metallurgical (Ferrous & nonferrous) and 1(d) Thermal power plant Category of MoEF&CC EIA Notification. This EIA/EMP report has been prepared in accordance with the Terms of Reference as recommended by MoEF&CC vide ToR letter No. IA-J-11011/313/2025-1A-II(I) dated 6th April 2026.



Source: *Survey of India (SOI) Toposheet*

Topographical map (10 km radius)

PROJECT DETAILS

Sr. No.	Description	Product Details
1.	Project Production Capacity	Sponge Iron (8x650 TPD DRI Kilns): 17,16,000 TPA Electric Arc Furnace (1 x 65 T): 5,40,000 TPA LRF : (1 x 65 T): 5,40,000 TPA Billet Caster (1 x 4-Strand): 5,24,000 TPA Induction Furnace (6 x 30 T) : 5,40,000 TPA LRF : (2 x 30 T): 5,40,000 TPA Billet Caster (2 x 3-Strand): 5,24,000 TPA Rolling Mill 1 – Bars & Wire Rods: 5,00,000 TPA Rolling Mill 2 – Structural Sections : 5,00,000 TPA Power Plant (210 MW) : WHRB 4X 35 MW & AFBC 2X35 MW Slag Crusher : 1,00,000 TPA
2.	Plant Location	Khasra No. 3 to 15, 30 to 32, 273 -Village Laxmanpur and Khasra No. 12 to 14, 17 to 33 -Village Mudholi Chak No. 2, Taluka Chamorshi, District Gadchiroli
3.	Raw Material Details	The major raw materials which will be handled are Pellet, coal (imported and Indian), sponge iron, scrap, dolomite etc. All raw materials will be received at plant site by rail/road

4.	Water requirement for the proposed project & Source	Total water requirement for plant operation shall be 31560 m^3/hr. Source: Wainganga River Permission is obtain vide letter 89/TA/2025 dated 18.09.2025 from Irrigation Department Allapalli (Chamorshi)
5.	Power requirement & Source	Requirement: 150 MW Source: Captive Power plant and MSEDCL grid substation
6.	Land	100.24 ha.
7.	Manpower	1200-1500 Nos
8.	Environmental Aspects	i) Air Pollution Control ii) Water Pollution Control iii) Noise Pollution Control iv) Solid Waste Management
9.	Estimated Cost of the project	Rs. 5489 Crores

2.0 PROCESS DESCRIPTION

The proposed project is a DRI-based integrated steel plant designed for efficient conversion of iron ore into finished steel products through a well-structured material flow. The process begins with 8 × 650 TPD coal-based DRI kilns, utilizing iron ore, pellets, dolomite, and coal to produce about 1.716 MTPA of DRI, along with by-products such as char, ash, and dolochar. The generated DRI is partly sold and partly routed to the steel melting shops: SMS-1 (EAF route) and SMS-2 (Induction Furnace route).

In SMS-1, DRI along with scrap, pig iron substitutes, and additives is processed in a 65T EAF, followed by refining in a Ladle Refining Furnace (LRF) to produce billets through a 4-strand continuous caster. Similarly, SMS-2 utilizes 6 × 30 T induction furnaces, refined through 2 × 30 T LRFs, and cast into billets using 2 × 3 strand casters. The billets from both routes are then fed into rolling mills: 1 no. Bar & Rod Mill and 1 no. Light Merchant Mill to produce finished products such as TMT bars, rods, and light structural sections. The system also incorporates recycling of internal scrap, use of ferro-alloys, lime, and electrodes, and generation of slag as a by-product, ensuring material efficiency and circular utilization within the plant.

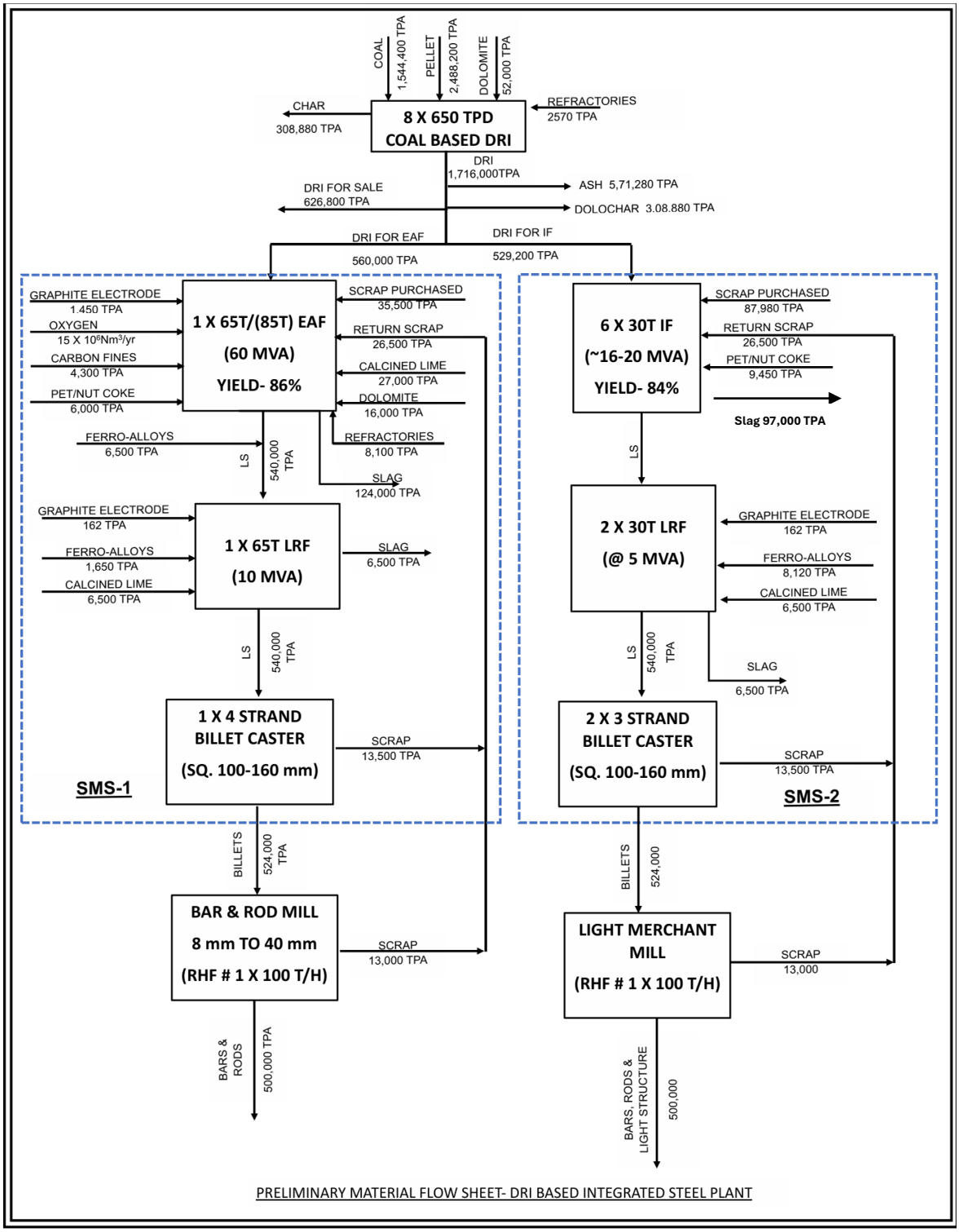


Figure: Complete Process flowchart

3.0 DESCRIPTION OF BASELINE ENVIRONMENT

Air Environment

Baseline environmental monitoring was conducted over a three-month period, from 3rd October 2025 to December 2025 (post monsoon season), covering a 10 km radius surrounding the proposed project site.The predominant wind direction is NE. The ambient air quality monitored at 10 locations selected based on predominant wind direction, indicated the following ranges;

PM_{10}	-	41.1 to 68.9 µg/m³
$PM_{2.5}$	-	17.1 to 31.3 µg/m³
SO_2	-	9.0 to 21.2 µg/m³
NOx	-	12.4 to 32.0 µg/m³

The concentrations of PM_{10}, $PM_{2.5}$, SO_2 and NO_x were found within the National Ambient Air Quality Standards (NAAQS).

As per TOR conditions 1.17, additional one month baseline data collected in the month of April 2026 in which include air, water, noise and soil monitoring data and it details are given in chapter 3 of draft EIA Report.

Water Environment

A total of 16 samples including eight surface & eight ground water samples were collected and analyzed. The water samples were analyzed as per Standard Methods for Analysis of Water and Wastewater, American Public Health Association (APHA) Publication. The data indicates that the ground water as well as the surface water quality are below the stipulated standard for drinking water (BIS 10500 – 2012).

Noise Environment

Noise levels measured at eight locations are within limit of 55.0 dB (A) for Residential Area or 75.0 dB (A) for Industrial Area as given in MoEF Gazette notification for National Ambient Noise Level Standard.

Land Environment

Eight Soil samples were collected analyzed for physico-chemical characteristics at selected locations in the study area to assess the existing soil conditions around the

proposed project site. The soils in the study area are fertile, non-saline, and environmentally clean, with good agricultural potential. The main limitations are moderate organic carbon and relatively low phosphorous levels, which can be improved through appropriate soil management practices. From an EIA perspective, the baseline soil quality is suitable, and any future project activities must ensure that this existing soil health is preserved by preventing contamination, erosion, and nutrient depletion.

Biological Environment

The biodiversity study within 10 km of the project site recorded a total of 151 floral species were recorded from the study area during survey out of which 76 are trees, 18 are shrubs, 43 are herbs, climbers and 12 species of Grasses & bamboos and 2 were agriculture crops. Total 284 faunal species have been recorded from field survey and secondary information documented in forest working plan and other relevant literatures. Out of these 38 were Mammals, Aves (Birds) (140), Herpatofauna (reptiles) (21), Pisces (Fishes) (24), Invertebrates (51) and amphibians (10). 36 faunal species fall under Schedule I category as per WPA 1972 updated on 01.04.2023.

The boundary of eco sensitive zones of Chaprala WLD is 7.15 km from the proposed project site and the Protected boundary of the Chaprala WLS is 11.62 km from the proposed project site.

The project proponent will contribute ₹2 crore over 5 years for wildlife conservation activities in the buffer zone.

Socio Economic Environment

The project area has a diverse rural population with moderate socio-economic conditions, and based on community feedback, CER initiatives worth ₹7 crores have been planned to improve water supply, agriculture, health facility, sanitation facility, road repairing/construction, and livelihood opportunities in nearby villages.

4.0 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES.

Impact on Air Quality

- Stack emissions can releases particulate matter, NOx, SOx, and other pollutants into the atmosphere, affecting air quality and contributing to respiratory issues.

- Fugitive emissions from raw material handling, crushing, screening, and storage can lead to dust pollution, reduced visibility, and health hazards for workers and nearby communities.

Mitigation measures

- ESPs will be installed in DRI and CPP units to control particulate emissions.
- Bag Filters will be installed in IF and EAF units to control particulate emissions.
- Stack heights will be provided as per CPCB guidelines.
- Fugitive emissions will be controlled through water sprinklers, dust suppression systems, and covered conveyors.
- Continuous Emission Monitoring Systems (CEMS) will be installed on major stacks.

Impact on Noise Levels and Mitigation Measures

During operation, the major noise generating sources are operation of scrap metal handling, rolling mill, cooling fans, motors, pumps etc. which leads to increase in ambient noise affecting workers working in the plant.

Noise levels generated in the project site will be confined to the noise generating plant units hence the impact of noise levels on surroundings will be insignificant. Equipment will have built-in noise control, noisy equipment will be covered. Ear plugs will be provided, rotating parts will be lubricated, and vibration isolators will be installed. Ensure compliance with CPCB standards.

Impact on Water and Mitigation Measures

The project will implement zero liquid discharge. Hence there will not be any impact on water. No ground water will be abstracted in the proposed project.

Solid Waste Generation

Solid wastes that will be generated from plant and their disposal method is given in following table:

S.N.	Waste	Quantity (TPA)	Proposed method of disposal
Sponge Iron Plant			
1.	Char	3,08,880	In house consumption.
2.	Ash	5,71,280	It will be sold to nearby cement plant and brick manufacturing unit.
3.	Dust from ESP	1,14,286	It will be used for brick manufacturing and land filling
EAF & Rolling Mill			
1.	Slag from EAF	1,24,000	It will be sold to construction industry after metal recovery.
2.	Return Scrap	26,500	End cuttings will be charged in Steel Melting Shop.
Induction Furnace & Rolling Mill			
1.	IF Slag	97,000	It will be sold to construction industry after metal recovery
3.	End cuttings from Rolling Mill	26000	End cuttings will be charged in Steel Melting Shop.
Power Plant			
1.	Ash	1,25,615	It will be sold to nearby cement plant/brick manufacturing unit.

Impact on Socio-Economic Environment

Fine Crafts Steel & Power Private Limited will generate 1200–1500 direct and indirect jobs, giving preference in employment as per the qualification and technical competencies. To address social impacts, the company will maintain regular communication with locals, conduct environmental awareness programs, and collaborate with local authorities for effective implementation of social welfare activities.

5.0 ENVIRONMENTAL MONITORING PROGRAMME

Environmental monitoring refers to systematic sampling of Air, Water, Soil, and biological environment in order to observe and study the environmental components.

The methodologies adopted for environmental monitoring are in accordance with the CPCB guidelines. The purpose of post project environmental monitoring program is to evaluate the performance of mitigation measures implemented and to check how well the installed pollution control systems are working.

6.0 ADDITIONAL STUDIES

The additional studies as per the ToR issued by MoEF&CC are Social Impact Assessment, Risk Assessment, & Disaster Management Plan are included in the draft EIA report. Public Hearing and its compliance along with budgetary allocation will be included in the final EIA report.

7.0 PROJECT BENEFITS

The proposed project will create more job opportunities and improve the local economy. Local people will be given priority for employment. A separate budget will be set aside for various socio-economic development activities, which will be carried out in nearby villages.

8.0 ENVIRONMENTAL MANAGEMENT PLAN

The cost of the proposed project is Rs. 5489 Crore. The project will allocate Rs. 220 Crores for capital works pertaining to environment protection. In addition to capital budget, a recurring amount of Rs.15 Crores/Annum will be allocated for operation and maintenance.

9.0 GREEN BELT DEVELOPMENT

Avenue plantation within the plant and green belt development will be done. Green Belt shall be developed in 25.06 ha of land. Total area of green belt of the project shall constitute 25% of the total plant area. Total 62,650 no. of trees will be planted in the proposed plant @ 2500 per ha.