EXECUTIVE SUMMARY

FOR

PROPOSED STEEL MANUFACTURING PLANT INSTALLING INDUCTION FURNACE, CONCAST AND ROLLING MILL

M/S ECO SPECIAL PLATES & FLATS PRIVATE LIMITED

VI LLAGE- CHATTARPUR, BACKSIDE FOCAL POINT, TEHSIL-AMLOH, DISTRICT- FATEHGARH SAHIB, PUNJAB

Prepared by

Chandigarh Pollution Testing Laboratory- EIA Division

(QCI/ NABET Certificate No: NABET/EIA/2225/RA 0250)

Address: E- 126, Phase- VII, Industrial Area, Mohali, Punjab- 160055.

Contacts: 0172-4669295, 5090312

E-mail: eia@cptl.co.in / cptleia@gmail.com

APRIL, 2023

EXECUTIVE SUMMARY

1.0 Project Name and location

The proposed project of M/s Eco Special Plates & Flats Pvt. Ltd. is going to set up a new steel manufacturing unit in revenue estate of Village- Chattarpur, backside Focal Point, Tehsil- Amloh, District- Fatehgarh Sahib, Punjab.

It is a **Category 'B'** project under schedule 3(a) in EIA Notification, 2006.

2.0 Products and capacities

The capacity of unit will be 2,36,250 TPA of Steel Ingots/billets, Angles, Channels, Rounds, Square, TMT Bars, Flats, Patra, Bloom, Slab, Plates.

After expansion the production details will be as under:

Product Name	**Proposed (TPA)**
Steel Ingots/billets, Angles, Channels, Rounds, Square, TMT Bars, Flats, Patra, Bloom, Slab, Plates	2,36,250

3.1 Land Area

The project will have 6.58 Acres or 26547.94 Sqm

3.2 Raw Material Requirement

The raw materials and finished goods will be transported through trucks. There is well developed road structure on NH-44, HF Super road as well as within premises also. No additional road infrastructure will be required for transportation. The number of trucks per day for raw material and finished product transportation will be approx. 35 trucks. The raw material source will be standard manufacturer or supplier. The raw material details are given as under:

Raw Materials	**Proposed (TPA)**
MS Scrap	2,48,500
Ferro Alloys	

3.3 Water Requirement

Water consumption in the unit shall be for twin purpose namely domestic and make up water for cooling tower (CT). Water requirement will be met through existing tube well. The detail of water requirement and water balance is given below:-

Source of water supply	Own Tube- well
Consumption of Water (KLD) – Summer season	
	Proposed
Domestic	9.0 KLD
Cooling	290 KLD
Total	**299 KLD**
Consumption of Water (KLD) – Winter and rainy season	
Domestic	9.0 KLD
Cooling	200 KLD
Total	**209 KLD**

3.4 Power Requirement

The Power Requirement will be met by sourcing the power from Punjab State Power Corporation Limited from nearby Sub-station. The detail of power requirement is given below: -

Power Requirement

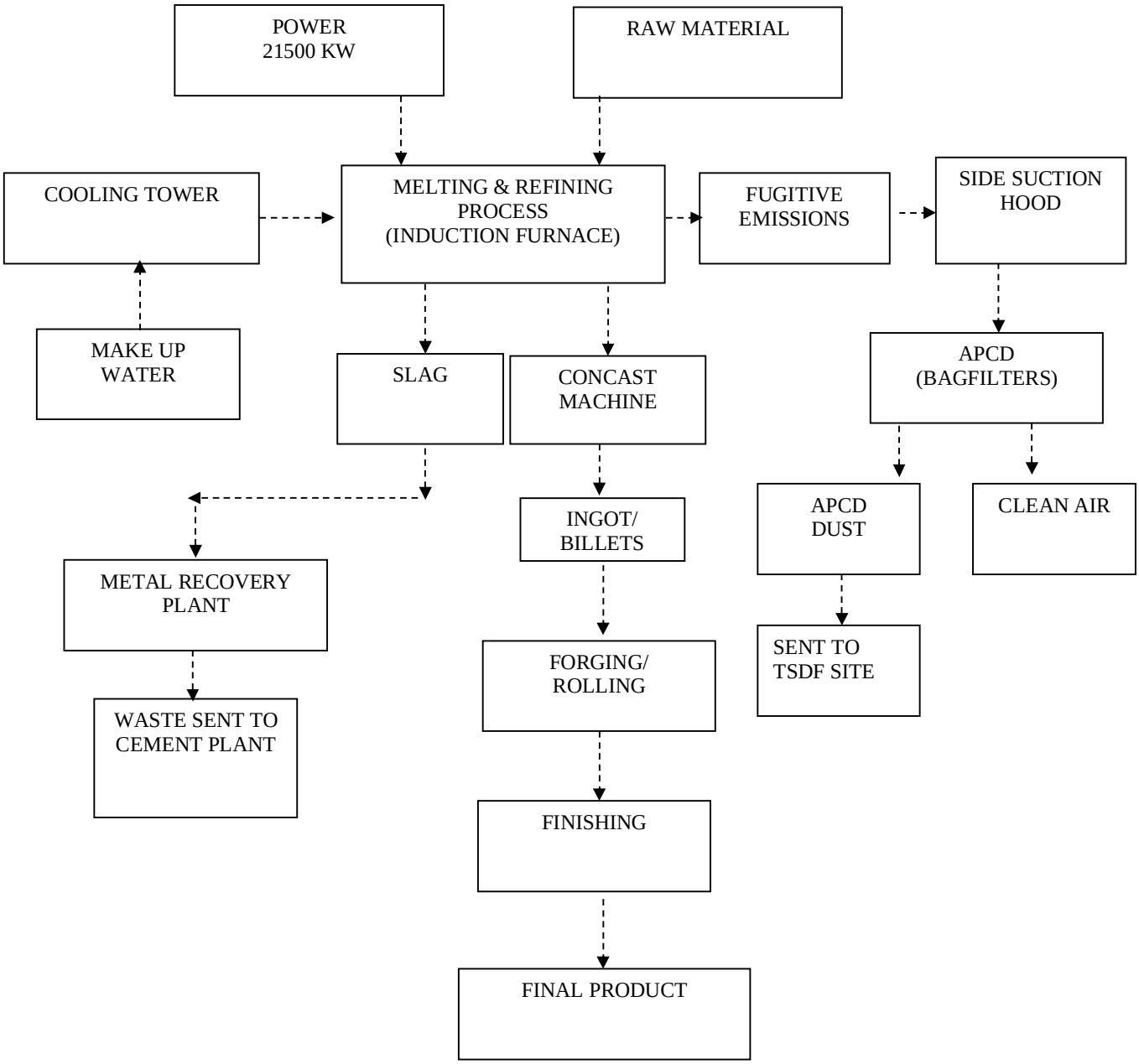
DESCRIPTION	PROPOSED (MW)
Power	Phase-I – 9500 KW Phase-II – 12000 KW Total – 21500 KW
Source	Punjab State Power Corporation Limited, Punjab
Power Backup	One DG set of capacity 500 KVA

3.5 Manpower Requirement

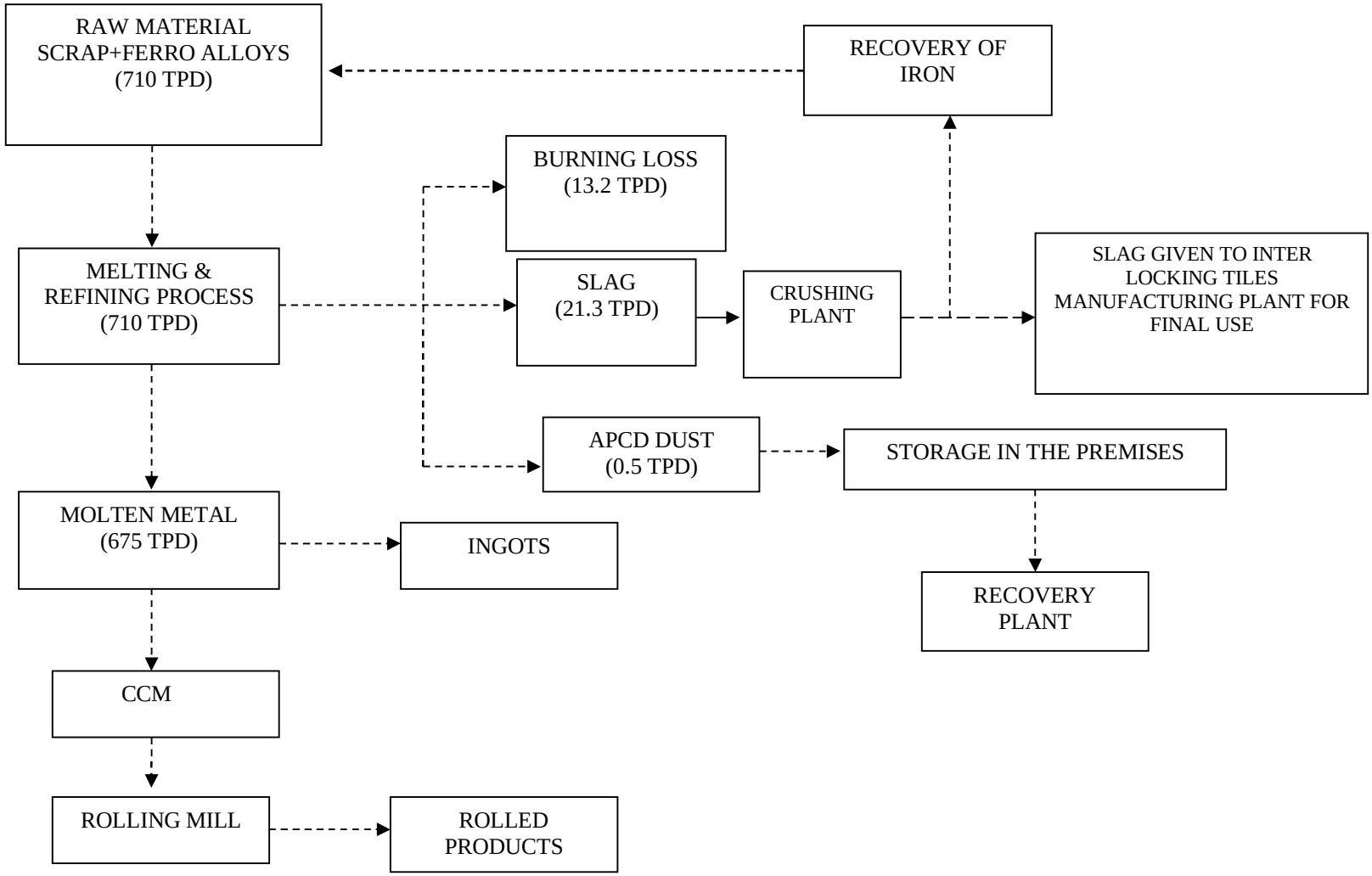
With proposed new unit coming into being, there will be significant improvement in socio-economic conditions of nearby people. The new project will generate employment for 200 people.

4.0 Process Description

Flow Chart of Manufacturing Process



Material Balance



5.0 Description of Mitigation Measures

The purpose of mitigation measures is to avoid, reduce or minimize unwanted impacts on the environment. To minimize & control the emission from I.F, the exhaust after suction through side suction hood will be passed through spark arrestor, air cooling and finally bag filters before its discharge to atmosphere. DG set will be fitted with a canopy and adequate stack to take care of noise and particulate & gaseous emission.

- Total quantity of slag generated after proposed project coming into being will be 21.3 TPD which will be sent to M/s A.S. Industries manufacturing all kinds of Interlocking tiles under proper agreement
- APCD of quantity 0.5 TPD dust will be sent to M/s Madhav KRG Environmental Solution Pvt Ltd for recovery of Zn metal.
- Used oil from DG sets will be used as lubricant in the industry

6.0 Cost Details

- The total cost of the project after proposed project coming into being will be ₹ 49.8144.
- The proposed project will be implemented after two year after the granting of Environment Clearance.

7.0 Site Details

The proposed project site is located at Village- Chattarpur, back side Focal point, Tehsil- Amloh, District- Fatehgarh Sahib, Punjab is having its global coordinates as Latitude 30°38'25.82"N, 30°38'24.01"N, 30°38'17.35"N, 30°38'17.29"N, 30°38'18.83"N, 30°38'19.79"N, 30°38'24.06"N & Longitude 76°17’32.09"E, 76°17’34.07"E, 76°17’33.44"E, 76°17’26.41"E, 76°17’26.41"E, 76°17’31.16"E, 76°17’29.67"E. Mandigobindgarh is the nearest city (about 2.14 Km) and also the nearest railway station (about 3.25 km). Nearest Airport is Chandigarh which is at 46 km from site. No National Parks/ Wildlife Sanctuaries/ Biosphere Reserves/ Reserved Forests exist within 10 km radius of project site.

8.0 Baseline Environmental Data and their impacts

Various Environmental factors as existing in the study area which are liable to be affected by the activities have been assessed both quantitatively and qualitatively. Baseline environmental data generation of study area was carried out during the period January-March, 2023.

8.1 Ambient Air Quality

The $PM_{2.5}$, PM_{10}, SO_2, NO_2, CO levels were monitored at eight locations in the study area for three months (January-March 2023). The P98 levels of criteria pollutants are as follows: $PM_{2.5}$ is 40.6 μg/m^3, PM_{10} is 73.4 μg /m^3, SO_2 is 11.7 μg/m^3, NO_2 is 14.8 μg/m^3 and CO is 0.71 mg/ m^3. The baseline air quality level is within the National Ambient Air Quality Standards prescribed for industrial, residential, rural & other area and also satisfies the air quality index (AQI) w.r.t. health bracket for all the monitoring. **(Standards are 60, 100, 80, 80μg/m^3 and 4.0mg/m^3 for $PM_{2.5}$, PM_{10}, SO_2, NO_x and CO respectively).** Due to better pollution abatement facilities, proposed project will have insignificant impact on existing air quality.

8.2 Water Quality:

Eight groundwater samples and one surface water sample were collected from the study area for physical, chemical and bacteriological analysis. The groundwater quality of the study is satisfactory. No physical or bacterial contamination was found in the water quality. But bacterial contamination is found in surface water. Since, no waste water will be discharged on land, water quality is not likely to be impacted.

8.3 Noise Environment

Ambient noise levels were monitored at 8 locations in the study area. Noise levels at the Project site was found to be 69.8 dB (A) in day time and 55.5 dB (A) at night. The highest levels were observed at Project Site. The baseline noise levels are well within the National Standards. Proposed expansion will have less impact than existing one due to better pollution control facility.

8.4 Soil Quality

Eight soil samples were collected from the study area and analyzed. The texture of soil is sandy loam. The organic matter, nitrogen, potassium and phosphorus content of the soil are moderate. The pH of all the soil samples is within the acceptable range. No impact on soil will be there for proposed plant as no waste will be discharged on land.

8.5 Ecological environment

Ecological data has been collected through secondary sources and by site visits. The tree species kikar, Jamun, Peepal and Mango etc are the dominant plant species of the study area. Mongoose, porcupine, jungle cat, cobra, krait, snakes, hare, pigeon and variety of birds are the

common animals of the study area. No endangered species of plants and animals are found in the study area, so no impact on ecological environment.

Within the study area, no plant or animal species were found to be on the endangered list. No ecologically sensitive area like biosphere reserve, tiger reserve, and migratory corridors of wild elephant, wetland, national park and wildlife sanctuary are present in the study area. Agriculture and industrial workers dominate the occupational structure of the study area. Several induction furnaces, rolling mills, ferroalloy plants, brick kilns, and other small units are present in the study area.

8.7 Socioeconomic Condition:

Socioeconomic status has been studied through secondary sources and by site visits. The social requirements identified such as Drinking water requirement, Promotion of Educational institutions and Medical facilities to the villagers (especially Senior Citizens and infants or pregnant ladies). Community centers, recreation facilities etc will also be developed as part of social responsibility.

9.0 Possible Hazards & Risks from Secondary Metallurgical Industries

The various process operations, which are having potentially high risk to human exposure and which have high levels of attention area identified in **Table.**

Table: Possible Risk

S.No.	Plant Area	Possible Deviation from normal	Likely Causes	Consequences
1	Furnace	Re-circulating and cooling water coming in contact with the molten iron or slag.	Leakage of water from the walls Spurting of metal/ slag.	Explosion under extreme cases.
		Presence of Oil & Grease and other Impurities in raw materials.	Fire	Sudden catches fire & flames
2	High Power Transformer	Oil temperature being very high.	Varying room Temperatures.	Sudden flashing of fire or bursting.
3	High Tension Electrical Installation	Heavy sparking at the pot heads and the joints.	Loose joints, cable cut, burning of fuses, short	Sparks in the beginning, devastating fire if neglected.

10.0 Emergency Plan

Emergency planning is primary for the protection of plant personnel and people in nearby areas and the environment that could be affected by unplanned hazardous events. Furnaces are associated with fire and electrical hazard due to sudden generation of pressure or temperature that leads to damage, injury and death. Temperature and pressure are closely related, and when flammable or combustible mixture is present in process equipment that leads to worst consequences. Thus, an engineering evaluation will be done for worst-case scenario.

11.0 EMP Budget

S. No	Title	Capital Cost Rs. Lakh	Recurring Cost Rs. Lakh
1	Pollution Control during construction stage	5.0	2.0
2	Air Pollution Control (Installation of APCD)	140.0	10.0
3	Water Pollution Control/ STP up-gradation	20	5.0
4	Noise Pollution Control	5.0	1.0
5	Landscaping/ Green Belt Development	13.2	13.2 (for Three years)
6	Solid Waste Management	10.0	5.0
7	Environment Monitoring and Management	5.0	3.0
8	Occupational Health, Safety and Risk Management	10.0	2.0
9	RWH	10.0	0.50
10	Miscellaneous	4.0	--
	TOTAL	**222.2**	**41.7**

12.0 CER Activities (Corporate Environmental Responsibility)

In lieu of Corporate Environmental Responsibility, the OM dated 30th Sept., 2020 issued by MOEF&CC superseding OM dated 1st May, 2018 shall be followed and commitments made by project proponent to address the concerns raised during public hearing will be part of EMP.

13.0 Environment Monitoring Plan

Regular monitoring of all significant environmental parameters is essential to check the compliance status vis-à-vis the environmental laws and regulation. The frequency of the monitoring will be as follows:

- The ambient Air quality shall be monitored at project site and two upward and downstream locations once every quarter for $PM_{2.5}$, PM_{10}, NO_x & SO_2, and CO levels during the Construction Phase and Operational Phase.

- The Ambient Noise Levels, Water Quality, Effluent etc. shall also be monitored once every six months or as per EC conditions.