

EXECUTIVE SUMMARY

**FOR
PROPOSED NEW STEEL MANUFACTURING UNIT**

M/S PAWANPUTRA STEELS PVT LTD

**VILLAGE- WAJIRABAD, TEHSIL- SIRHIND, DISTRICT- FATEHGARH
SAHIB, PUNJAB.
PIN-147301**

Prepared by
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1.0 Project Name and location

The Proposed Project i.e. M/s Pawanputra Steels Pvt Ltd proposes to install a new steel manufacturing unit. The plant is located at Village- Wajirabad, Sirhind Side, Tehsil & District- Fatehgarh Sahib, Punjab.

2.0 Products and capacities

The unit will have three I.F. of capacity 15 TPH, a Concast Machine & a Rolling Mill. The capacity of the unit will be 1, 78, 200 TPA of Steel Ingots/Billets & 1, 70,000 TPA of Round, Coil, Flats, Wire Rod, TMT Bars.

The project falls within activity 3(a) Metallurgical Industries (ferrous & non-ferrous) & Non Toxic Secondary Metallurgical processing industry with capacity > 30,000 TPA, so the project is to be treated as Category 'B1', as per MoEFCC OM dated 24th December, 2013, and its Environment Clearance is to be accorded by the SEIAA, MoEF & CC, Punjab. TOR were issued vide reference number SEIAA/2020/2012 on dated 08/09/2020 for the preparation of EIA report with a condition to conduct Public Hearing, this draft EIA-EMP has therefore been prepared.

Product Name	Quantity (TPA)
Steel Ingot/ Billets (Furnace Division)	1, 78,200
Round, Coil, Flats, Wire Rod, TMT Bars:	1, 70,000

3.1 Land Area

The total land will be 8.62 Acres or 34997.67 Sqm.

3.2 Raw Material Requirement

Raw Materials	Proposed (TPA)
MS Scrap	1,56,816
Ferro Alloys	39,204

3.3 Water Requirement

Water consumption for the unit will be making up water for cooling and for domestic purpose.

Water requirement will be met through tube well. The detail of water requirement is given below:-

DESCRIPTION	PROPOSED (KLD)	
Domestic	7	
Cooling (makeup water)	38	
Total	45	
Green area water demand		
Summer (KLD)	Winter (KLD)	Rainy (KLD)
65	21	9

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 will be as given below:-

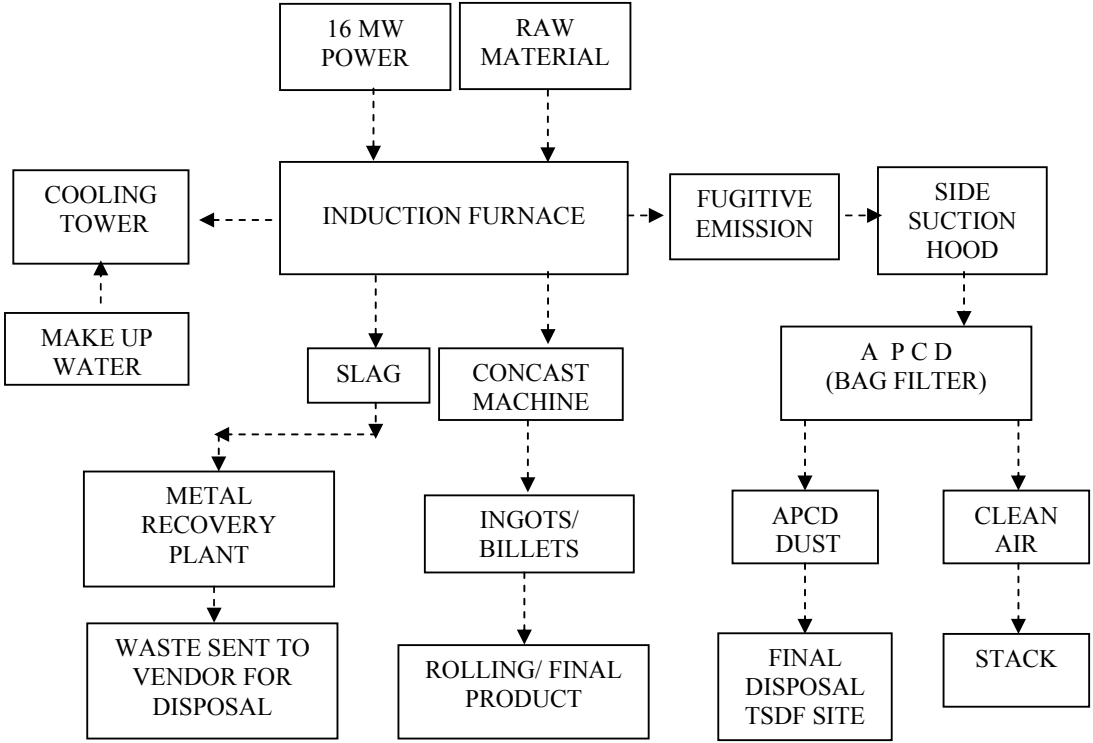
DESCRIPTION	PROPOSED (MW)
Power	16
Source	Punjab State Power Corporation Limited, Punjab

3.5 Manpower Requirement

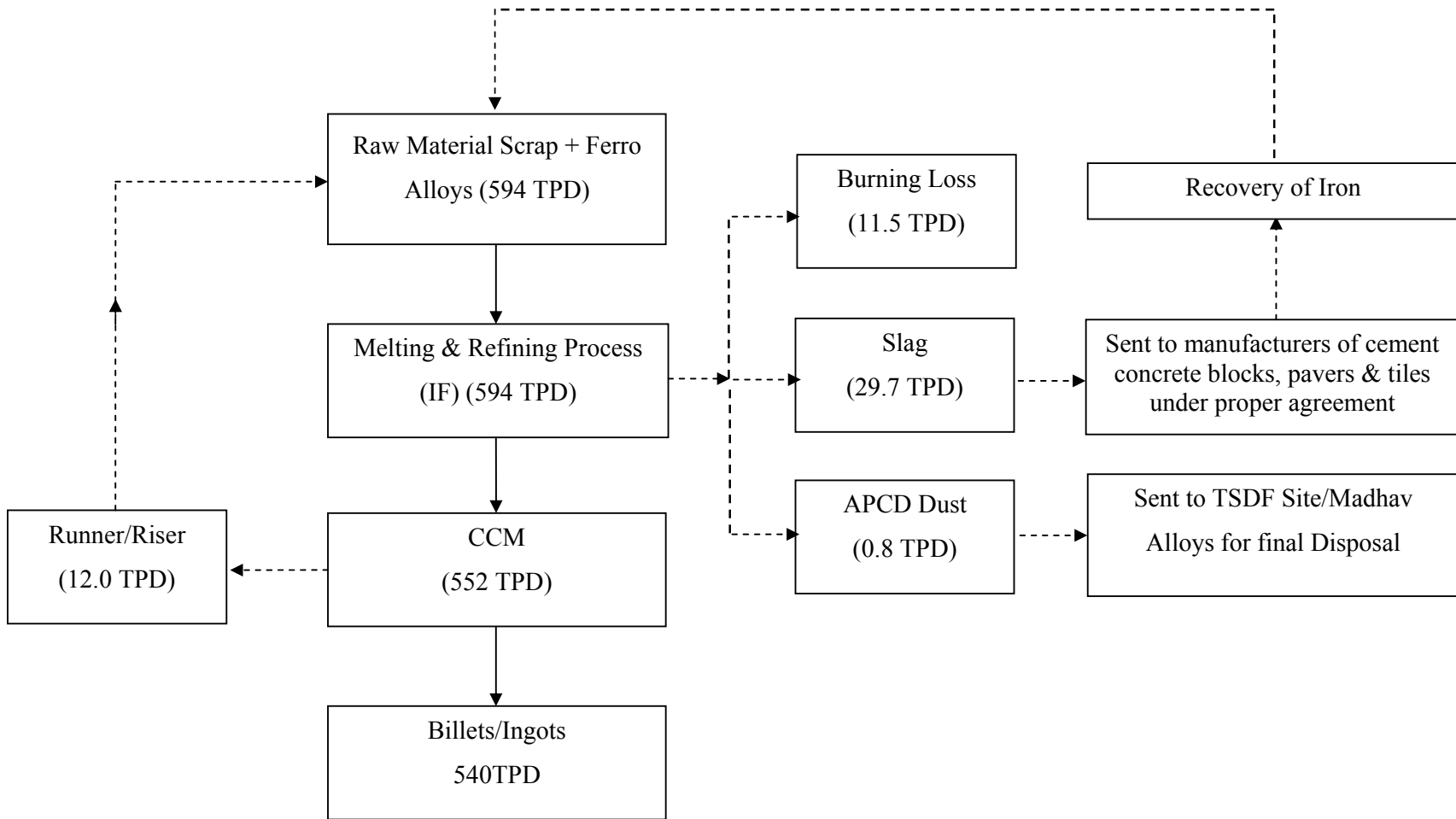
There about 150 persons will be working in the unit.

4.0 Process Description

PROCESS FLOW CHART



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 is passed through spark arrestor, air cooling and finally bag filters before its discharge to atmosphere. DG set is fitted with a canopy and adequate stack to take care of noise and particulate & gaseous emission. About 29.7 TPD of slag which is not a H.W will be generated and the same after recovering of iron will be supplied to manufacturers of cement concrete blocks, pavers & tiles under proper agreement. Treated waste water from STP will be used for plantation within the industrial premises. The industry is regularly operating and maintaining its APCD and ensuring that the emissions are adequately collected and concentration of air pollutants in its emissions conforms to the emission standards laid down by the board

6.0 Cost Details

Capital cost of the project is Rs. 30.00 crore and total cost for EMP is Rs. 181.5 Lakh.

7.0 Site Details

M/s Pawanputra Steels Pvt Ltd., Village- Wajirabad, Sirhind side, Tehsil & District- Fatehgarh Sahib, Punjab is having its global coordinates as Latitude 30°37'11.05"N, 30°37'10.92"N, 30°37'07.32"N, 30°37'08.14"N & Longitude 76°19'20.62"E, 76°19'32.45"E, 76°19'20.17"E, 76°19'32.44"E. Fatehgarh Sahib is the nearest city and Mandi Gobindgarh is the nearest railway station (about 6.2 km). Nearest Airport is Chandigarh which is at 45 km from site. No National Parks/ Wildlife Sanctuaries/ Biosphere Reserves/ Reserved Forests exist within 5 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 March to May, 2018.

8.1 Ambient Air Quality

The PM_{2.5}, PM₁₀, SO₂, NO₂, CO levels were monitored at eight locations in the study area for three months (March-May 2018). The P98 levels of criteria pollutants are as follows: PM_{2.5} is 47.6µg/m³, PM₁₀ is 89.8 µg/m³, SO₂ is 16.6µg/m³, NO₂ is 31.8µg/m³ and CO is 0.66 mg/ m³. 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 and 80µg/m³ for PM_{2.5},**

PM₁₀, SO₂ and NO₂ respectively). Proposed expansion will have less impact than existing one.

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 in the study vary from 45.8 dB (A) to 74.2 dB (A) in day time and 33.2 dB (A) to 66.1 dB (A) at night. The highest levels were observed at Project Site. The baseline noise levels are well within the National Standards. Proposed project will have less impact 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.

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.

8.6 Sensitive Ecosystem:

Within 10 km distance of the project site, no plant or animal species were found to be on the endangered list. No ecologically sensitive area like biosphere reserve, tiger reserve, and elephant reserve, migratory corridors of wild elephant, wetland, national park and wildlife sanctuary are present within 10 km distance of the project site. There is no Reserve and Protected Forests present around the project site of 10 km. Agriculture and industrial workers dominate the occupation 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 operation	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 circuits etc.	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 CER Activities (Corporate Environmental Responsibility)

Proposed project will result in growth of the surrounding areas by increased direct and indirect employment opportunities in the region including ancillary development and supporting infrastructure. Special emphasis on Financial and Social benefits will be given to the local people. Development of social amenities will be in the form of medical facilities, education to underprivileged and creation of self help groups.

The company has earmarked Rs. 60.0 lakhs towards the Corporate Environment Responsibility for undertaking the environmental activities..

12.0 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}, PM₁₀, NO_x & SO₂, 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.