EXECUTIVE SUMMARY

FOR

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

M/S br chopra multimetals PVT. LTD.

VI LLAGE- MULLANPUR KALAN,
TEHSIL-AMLOH, DISTRICT- FATEHGARH SAHIB, PUNJAB

Prepared by
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June, 2023

1.0 Project Name and location

The proposed project, M/s BR Chopra Multimetals Pvt. Ltd., a new steel manufacturing unit, will be set up in revenue estate of Village- Mullanpur Kalan, Tehsil- Amloh, District- Fatehgarh Sahib, Punjab.

2.0 Products and capacities

It proposes to install induction furnace of capacity 25 TPH, a concast machine, a pipe plant & a rolling mill of 20TPH capacity.

The production details will be as under:

Sr. No.	Product	Capacity (TPA)
1.	Steel Ingots/Billets	1,22,500
2.	Round, Coil, Flats, Wire Rod, TMT Bars	1,10,250
3	ERW Pipe	1,05,000

3.1 Land Area

The industry is already having 6.83 acres or 27634 Sqm of land. The land is enough to set up the project.

3.2 Raw Material Requirement

The raw materials and finished goods will be transported through trucks. There is well developed road structure on, Mandi Gobindgarh as well as within premises also. No additional road infrastructure will be required for transportation. The raw material details are given as under:

Sr. No.	Raw Material	Capacity(TPA)
1.	MS Scrap	1,13,546
2.	Ferro Alloys	21,204
Source & Transport		**Local & International Markets & transport through covered trucks.**

3.3 Water Requirement

Water consumption in the unit will be for twin purposes, 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: -

Water Requirement

Total water requirement (KLD)	40
Domestic water requirement (KLD)	7
Cooling water requirement (KLD)	33

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 details of power requirement are given below: -

Power Requirement

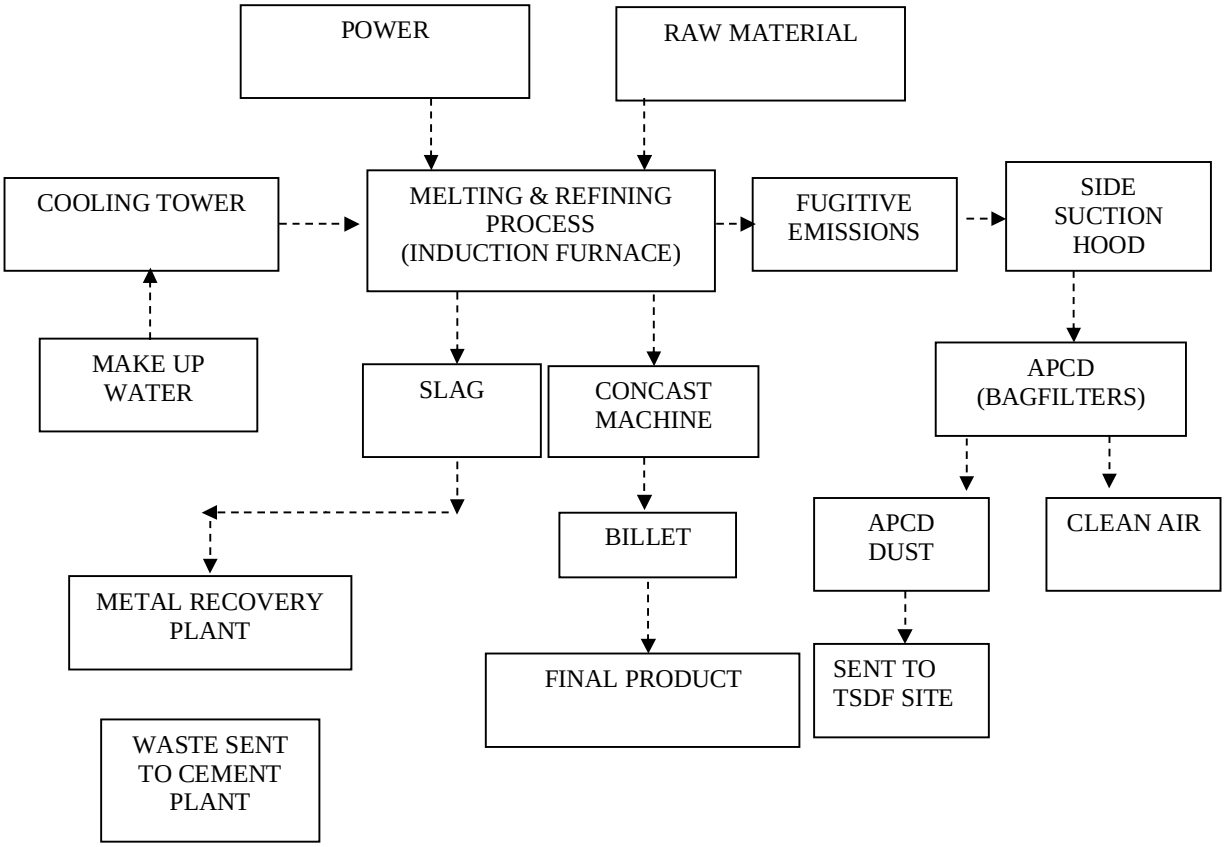
DESCRIPTION	PROPOSED (KW)
Power	14000
Source	Punjab State Power Corporation Limited, Punjab

3.5 Manpower Requirement

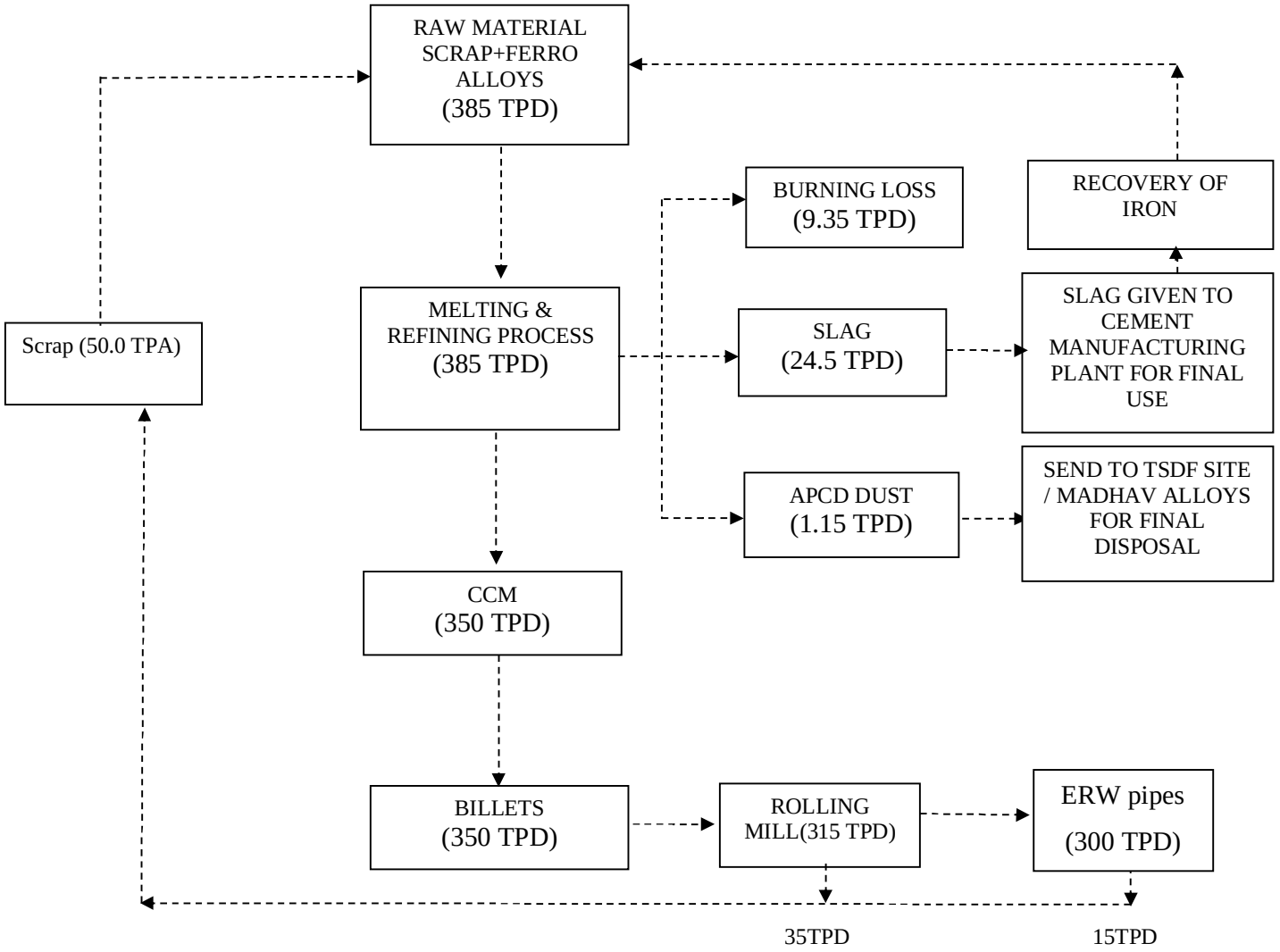
There will be about 150 persons working in the unit once it will be operational.

4.0 Process Description

FLOW DIAGRAM OF 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 is 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 height to take care of noise and particulate & gaseous emission. About 24.5 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 septic tank will be used for plantation within the industrial premises. The industry will regularly maintain its APCD and ensure that the emissions will be adequately collected and concentration of air pollutants in its emissions conforms to the emission standards laid down by the board. The tabular presentation of mitigation measures for emission, effluents & H.W. is given below:

The following are the details for proposed facility:

PARTICULARS	**CAPACITY**	**FUEL USED**	**STACK HEIGHT**	**APCD**
INDUCTION FURNACE	25 TPH	Electricity	30 mtr	Bag Filters
DG SET STACK	500 KVA	HSD	5 mtr	Canopy
DG SET STACK	125 KVA	HSD	5 mtr	Canopy

Effluents			
S. No.	**Description**	**Proposed**	**Mitigation Measures/Remarks**
1.	Industrial Effluent	NIL	No generation of industrial effluent
2.	Domestic	5.6 KLD	STP of 15 KLD will be installed & treated water used in Plantation/Green area

Hazardous Waste			
S. No.	**Waste Category**	**Source of Waste**	**DISPOSAL**
1.	APCD Dust – 1.15 TPD	IF	Sent to M/s Jogindra Castings Private Limited
2.	Used Oil - 0.02kl/annum	DG Sets	Sold to authorized recyclers

Solid Waste			
1.	24.5 TPD of Slag	Melting of Steel (IF)	M/s Vohra Industries will collect slag as per the agreement.

6.0 Cost Details

The total cost of the project after expansion will be ₹ 77.85 Crores including cost of expansion. The proposed expansion will be done within one year after granting of Environment Clearance

7.0 Site Details

The proposed project site is located at **Village-Mullanpur Kalan, Tehsil-Amloh, District-Fatehgarh Sahib, Punjab.**

The location coordinates are as follows:

Latitude	Longitude
30°37'40.04"N	76°18’46.35"E
30°37'42.00"N	76°18’52.19"E
30°37'36.74"N	76°18’55.09"E
30°37'35.53"N	76°18’49.12"E

Mandi Gobindgarh is the nearest city (about 3.5 Km) and also the nearest railway station (about 3.6 km). Nearest airport is at Chandigarh which is at 46 km from the 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 existing in the study area, which are liable to be affected by the project activities, have been assessed both quantitatively and qualitatively. Baseline environmental data generation of study area was carried out from February, 2023 to April, 2023.

8.1 Ambient Air Quality

$PM_{2.5}$, PM_{10}, SO_2, NO_2, CO levels were monitored at eight locations in the study area for three months (February-April 2023). The P98 levels of criteria pollutants are as follows: $PM_{2.5}$ is 48.05 μg/m^3, PM_{10} is 87.07 μg /m^3, SO_2 is 9.71 μg/m^3, NO_2 is 16.88 μg/m^3 and CO is 0.56 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 expansion 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 68.1 dB (A) in day time and 54.2 dB (A) at night. The highest levels were observed at project site. The baseline noise levels are well within the National Standards.

8.4 Soil Quality

Eight soil samples were collected from the study area and analyzed. The texture of soil is sandy loam. 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 due to proposed project 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.N	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 CER Activities (Corporate Environmental Responsibility)

The corporate environment responsibility & Enterprise Social Commitment based on issued raised during the public hearing and those prescribed by the competent authority shall be executed as part of EMP, the detail of which shall be provided in final EIA report.

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 $PM_{2.5}$, 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.