Executive Summary of Environmental Impact Assessment Report

For The Proposed Expansion of MS Ingots

Promoted By

RAN INDIA STEELS (P) Ltd., UNIT -II

Nallur Village,

Paramathi Velur Taluk ,

Namakkal District,

TAMIL NADU.

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1. PROJECT DESCRIPTION

1.1 Introduction

M/s. Ran India Steels (P) Ltd., Unit-II has an existing foundry at Nallur Village, Paramathi Vellur Taluk, Namakkal District. The existing unit is M.S. Ingots manufacturing unit. The proposed expansion unit will increase its capacity as 4300 TPM from 3000 TPM. The proposed production quantity of the unit is 1300 TPM of MS Ingots, with project cost of Rs.8.34 Crores (after expansion).

1.2 Project Location

Ran India Steels (P) Ltd., Unit-II is located at S.Nos. 254/1A1, 254/2A1A, 255/4B, 255/5A, 255/5B, 255/6A1 & 255/6A2, Nallur Village, Paramathi Velur Taluk, Namakkal District, Tamil Nadu. The site is located about 14 Km from Tiruchengode town. The nearest railway station is located at Sankari at a distance of 22 Km. The nearest airport is Trichy Airport (95 Km). The proposed site falls under Nallur Village, Paramathi Velur Taluk, Namakkal District, Tamil Nadu.

Connectivity

Railways

The nearest major railway station is Sankari - 22 Kms away from the project site.

Roads

The site is connected by the road connecting Velur and Thiruchengode. The raw material needed for the industry can be conveniently transported via this road.

Airways

The nearest airport is at Trichy around 95 kms away from the site.

Communication

Already this area is well connected with the district headquarters Namakkal and nearest city Tiruchengode. So there will not be any constraints for communications like telephone, tele-fax, telex, internet etc.

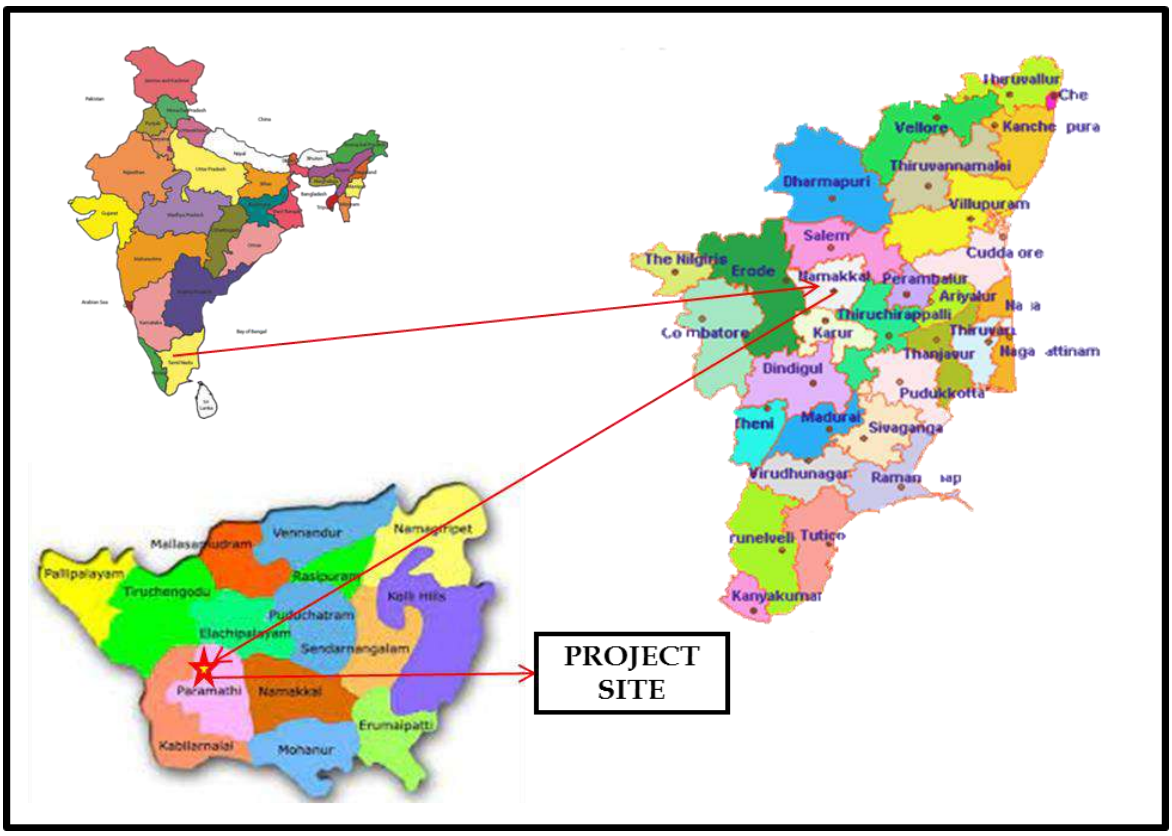


Fig 1.1 Location Map of the Project Site

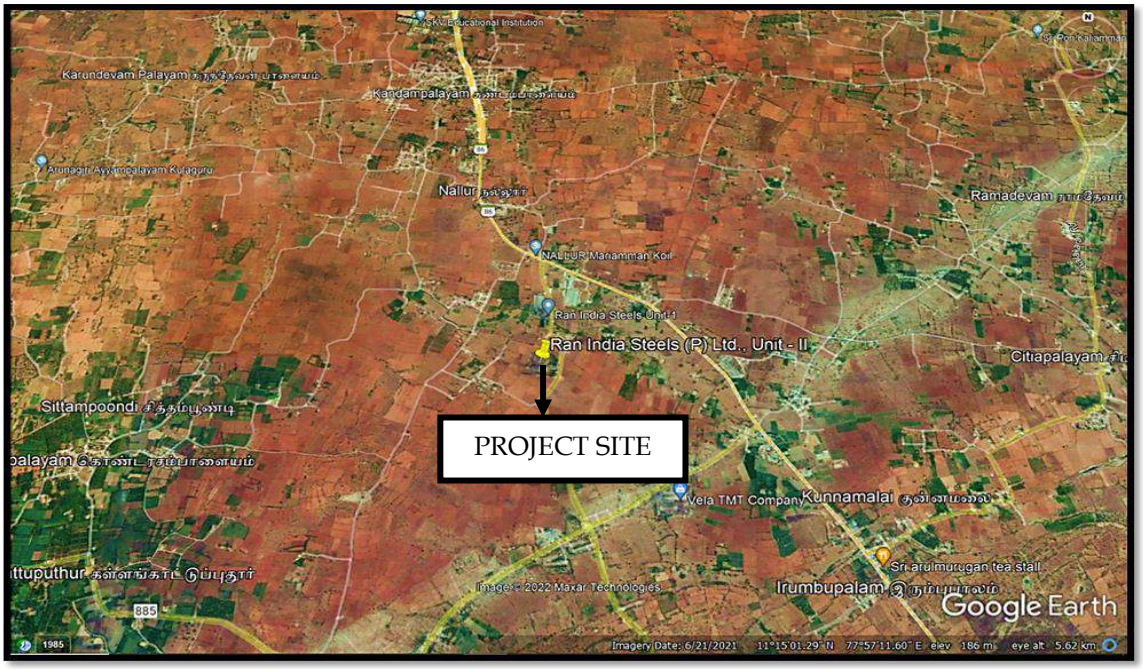


Fig.1.2 Satellite Imagery of the Project Site

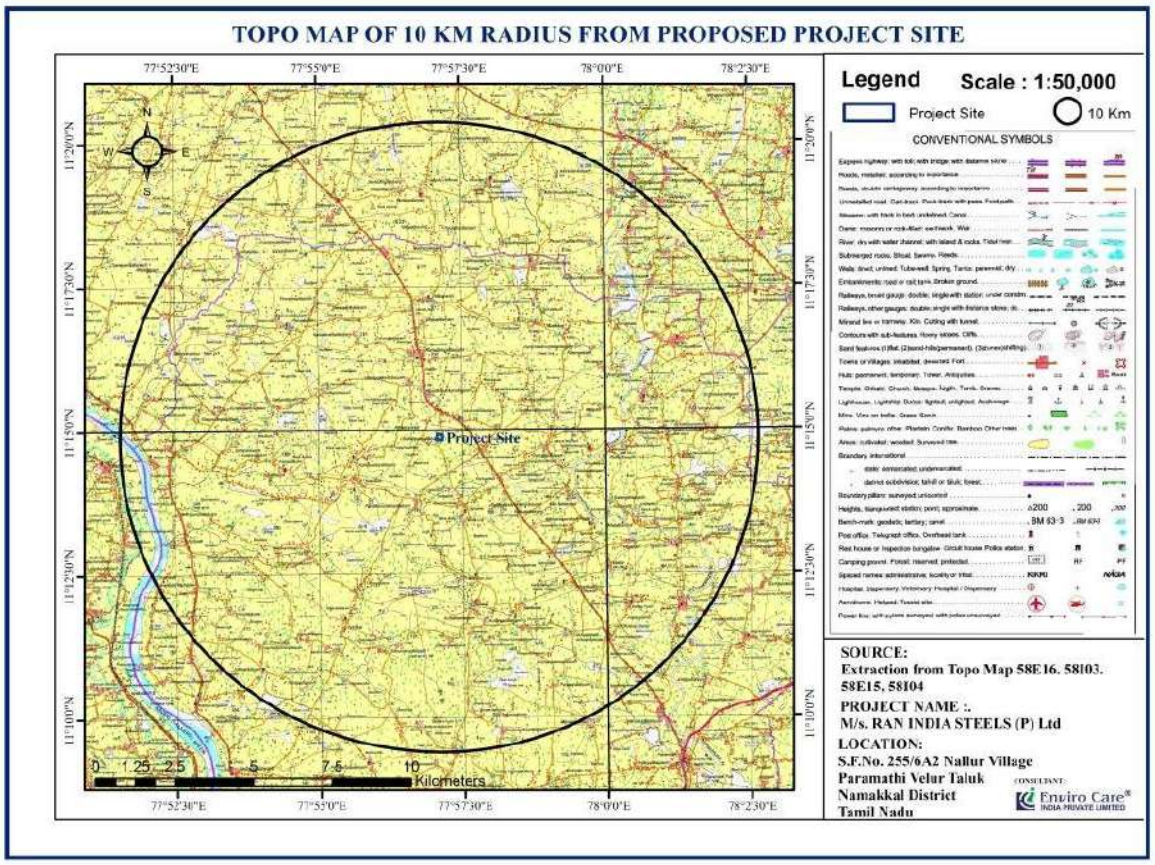


Fig 1.3 Topo Map of the Project Site within 10 Km Radius

Fig. 1.4 Satellite Imagery of boundary of the Project Site

Fig. 1.5 Layout Co-ordinates

Layout Co-ordinates	
A	11°14'54.86"N, 77°57'9.34"E
B	11°14'55.79"N, 77°57'3.86"E
C	11°14'51.39"N, 77°57'2.70"E
D	11°14'50.20"N, 77°57'1.93"E
E	11°14'49.35"N, 77°57'9.17"E
F	11°14'54.15"N, 77°57'9.84"E
G	11°14'54.31"N, 77°57'9.25"E
Greenbelt Co-ordinates	
G1	11°14'54.45"N, 77°57'5.61"E
G2	11°14'53.06"N, 77°57'5.29"E
G3	11°14'52.66"N, 77°57'8.15"E
G4	11°14'54.16"N, 77°57'8.35"E

1.3 Product Manufacturing

Product	Existing (TPM)	Expansion (TPM)	Total After Expansion (TPM)
MS Ingots	3000	1300	4300

1.4 Raw Materials

Raw Material for MS Ingots

S.NO.	Raw Material	Existing (TPM)	Proposed (TPM)	After Expansion (TPA)
1	Sponge Iron	245	555	800
2	Ferro Alloys	5	25	30
3	MS Scraps	3250	820	4070
	Total	**3500**	**1400**	**4900**

1.5 Project description with Process Details

Process Description

M.S. Ingots are manufactured by melting of M.S. scraps in Electric Induction Furnaces and casted in cast iron moulds to get ingots. The molten metal in the Induction Furnaces is poured into the Cast Iron Moulds. The Ingots are cooled and separated from the Moulds. The raw material required for the manufacture of M.S. Ingots are M.S.Scrap, Ferro alloys and Sponge Iron obtained from the open market. Required quantities of M.S. scraps from the stock yard are transported through Mobile crane and EOT cranes into the furnace yard. By the electro magnet and crane fed into furnace. A minimum manual shoveling is required. The Electric Furnace is open type, with a capacity of 12 tonnes. There are two furnaces (Crucible) out of which one is standby. The furnace has solid state medium frequency induction generator. The scrap charged into the furnace gets heated and melted at a temperature of about 1600^{o}C.

When the required temperature is attained, the furnace crucible is tilted by means of hydraulic system and the molten material is poured into laddle and

then into the Iron moulds through ladder. This gets cooled to form the finished product – M.S. Ingots.

PROCESS FLOW CHART

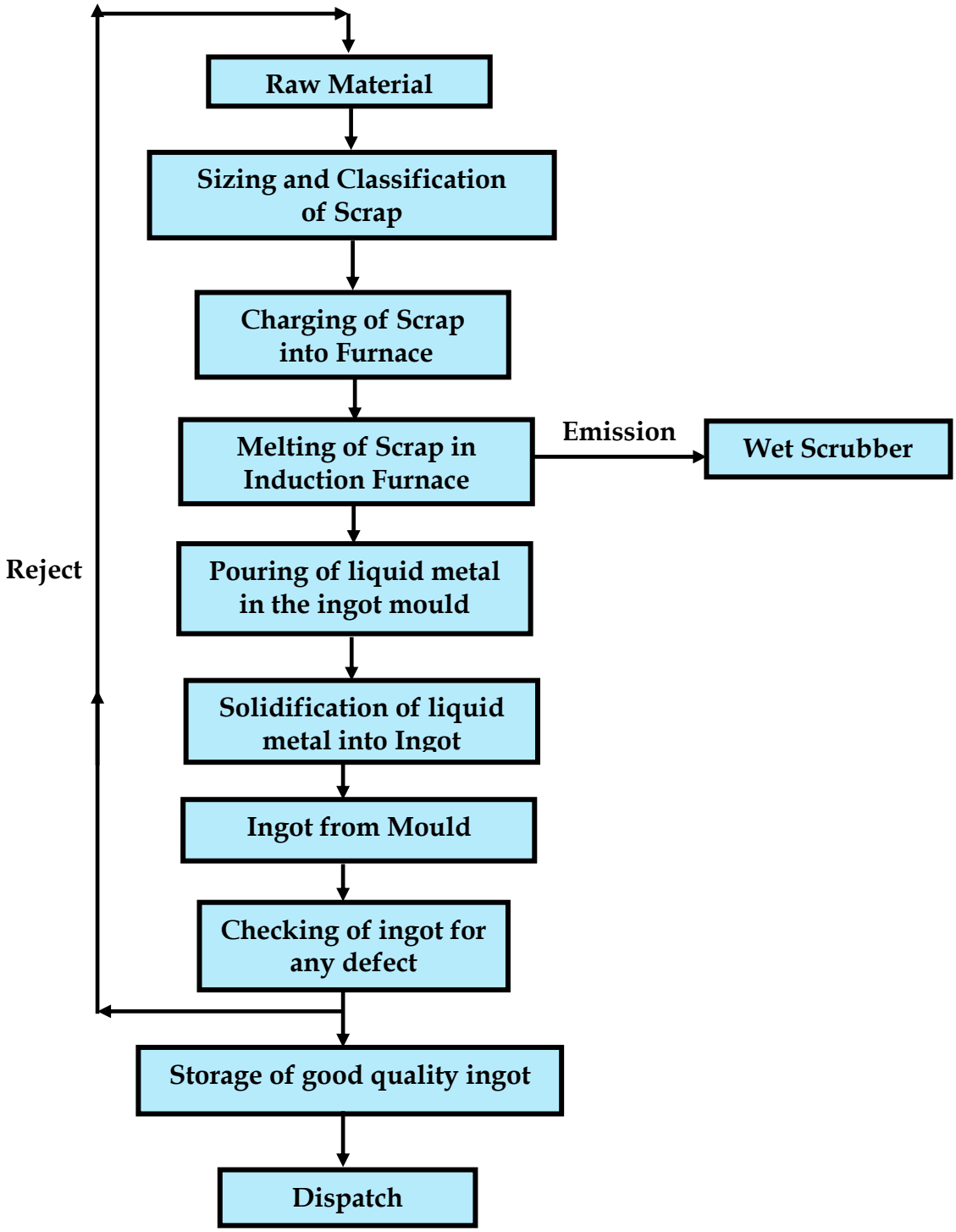


Fig. 1.6 Process Flow Chart

1.6 Source of Water/ Energy and Power requirement

The total raw water required for the unit will be around 17 KLD. The entire raw water for the unit is to be met from Bore-wells and rain water. The existing power demand is 4000 KVA with a standby diesel generator of capacity 250 KVA. The total power demand of this unit after expansion will be 4900 KVA. During shutdown/maintenance power will be drawn from diesel generator capacity of 250 KVA.

1.7 Land Use pattern

The land requirement for the proposed expansion of the plant structures is 3.39 Hectares. The land selected for the proposed project is classified as "Unclassified Area" by Department Local Planning Authority, Government of Tamil Nadu. The land proposed to be used for establishment of expansion unit belongs to the project proponent.

Table 2.2 Land Requirement for the Project

Description	Existing (Hectares)	After Expansion (Hectares)
Building area	0.173	0.173
Solid Waste Storage	0.96	0.96
Green belt area	1.10	1.10
Vacant area	1.157	1.157
Total area	3.39	3.39

1.8 Topography

The area exhibits plain topography and the average elevation of the area is about 230 metre from Mean Sea Level (**MSL**). The detailed Topo Map for 10 Km radius is given in Fig 1.3.

1.9 Existing Infrastructure

The Industrial site is well connected by road and rail. The important townships falling within 60 km radius are Namakkal, Erode, Velur,

Truchengode, and Sankari. The nearest major railway station is Sankari (22 km) and Airport is Trichy (95 km).The site is connected by the Tiruchengode – Velur road. The raw material can be conveniently transported by road.

1.10 Soil Classification

Major part of the district covered by Red Soil. Block soils are mostly seen in Namakkal taluk. Brown Soil occupies only a small portion of Tiruchengode taluk and the Alluvial Soil is seen along the river courses in Namakkal, Paramathi and Tiruchengode taluks. Mixed soil is the second major soil type occurring all the taluks of the districts

1.11 Climatic data from Secondary sources

May is the hottest month with maximum temperature of 39^{o}C. December is the coolest month with minimum temperature of 17.4^{o}C.

2. Description of the Environment

2.1 Climate

The average daily maximum and minimum temperature for each of the 12 months are 39 ^{0}C (May) and 17.40 ^{0}C (December). The minimum and maximum mean relative humidity for 0830 hrs observed in this area during the year 2003 and 2007 is 55% and 87% respectively, whereas minimum and maximum mean relative humidity for 1730 hrs observed in this area during the year 2001 and 2005 is 27% and 81% respectively.

2.2 Ecology

There is no endangered species of flora and fauna noticed in this area. The area does not shelter any specific wildlife. Being proposed in existing industrial premises, there is no tree cutting or removal of plantations, etc. involved. There is no significant impact is anticipated on the land environment due to the construction activities.

2.3 Water Quality

Water samples were collected from different locations, and analyzed for pH, Colour (Visual), Odour, Turbidity (NTU), Electrical Conductivity, Total Suspended Solids, Total Dissolved Solids, Chlorides (as Cl), Sulphates (as SO_4), Calcium (as Ca), Magnesium (as Mg), Total Hardness(as $CaCO_3$), Total Alkalinity (as $CaCO_3$), Fluorides (as F).

2.4 Ambient Air Quality and Noise Levels

The baseline status of the ambient air quality has been assessed for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, Lead, Arsenic, Benzene, Nickel etc. The PM_{10} and $PM_{2.5}$ among the eight sampling stations covering the study region varied from 46 to 73 µg/m^3 and 21 to 33 µg/m^3 respectively. The SO_2 concentration is from 7 to 18 µg/m^3 Nitrogen dioxide was in the range of 13 to 31 µg/ m^3. The other

parameters are found to be below detection limit. The noise levels recorded at various locations indicate that it is mostly less than the limits of MoEF norms.

2.5 Soil Quality

For studying soil profile of the region, sampling location was selected to assess the existing soil condition in and around the plant representing various land use conditions. The physical, chemical and heavy metal concentrations were determined. The samples were collected by ramming a core-cutter into the soil up to a depth of 90 cm. Simultaneously, in-situ infiltration test using double ring infiltrometer was carried out at all location to determine the permeability. The quality of the soil were as per the MoEF norms.

2.6 Drainage

Cauvery river, which is perennial in nature, flows along the western and southern boundaries of the district. Tirumanimuttar river, which is the most important tributary of Cauvery in the district, has its origin in Manjavadi area of Shevroy hills in Salem district and traverses the district before its confluence with Cauvery at Nanjai Edayar village of Paramathi taluk.

2.7 Irrigation Practices

The data available indicate that an area of about 74318 ha (22%) is under irrigated agriculture. Dug wells are the major source of water for irrigation in the district, accounting for about 55% of the total area irrigated in the district. Tube wells accounting for about 29% of the total area irrigated in the district. Canals and tanks account for about 8% each.

2.9 Groundwater Quality

Ground water in phreatic aquifers in Namakkal district is in general colorless, odorless and predominantly alkaline in nature. The specific electrical conductance of ground water in phreatic zone (in Micro Seimens at 25°C) during May 2006 was in the range of 1300 to 7080 in the district. It is between

2000 and 4000 µS/cm at 25°C in the major part of the district. It is observed that only in selected places of the district, the ground water is suitable for drinking and domestic uses in respect of all the constituents.

2.9 LAND USE

Table 2.1 Land Use Classification

S. No.	Land Classification	Area (Hectares)			
		2015-2016	2016-2017	2017-2018	2019-2020
1	Geographical Area	3,36,719			
2	Forest	1401.39			
3	Reserve Forest	42507.602			
4	Barren and Uncultivable Lands	24454.355	24454.355	24539.015	24539
5	Area under Non-Agricultural Use	38738.32	38738.015	38763.849	63557
6	Cultivable Waste Lands	4759.73	4759.73	4776.74	4777
7	Permanent Pastures and other Grazing Land	6663.29	6663.29	6663.99	6663
8	Land under miscellaneous Tree Crops and Groves not included in the Net Area Sown	3767.74	3767.74	3271.25	3200
9	Current Fallow	49130.62	65726.3	52265.73	37017
10	Other Fallow Lands	9321.455	9321.455	14084.136	22850
11	Net Area Sown	155974.93	139330.555	147995.730	154746
12	Total Cropped Area	207844.835	165910.085	202844.296	212768
13	Area sown more than once	51869.905	26579.525	54848.566	58022

Source : District Statistics Handbook

3. Anticipated Environmental Impacts and Mitigation Measures

3.1 Impacts during Construction Phase

Impact on Land Use

The proposed expansion project does not involve any removing of vegetation and reshaping topography as the land is vacant under Unclassified Area land use category. Thus, the overall impact will be beneficial in nature.

Impact on Soil

The soil at the plant site predominantly consists of Red Soil. The construction activities will results in minimum loss of top soil to some extent in the plant area. The top soil requires proper handling like separate stacking so that it can be used for green belt development. Apart from localized constructional impacts at the proposed plant site, no significant adverse impact on soil in the surrounding area is anticipated.

Mitigation Measures

As soon as construction is over, construction debris and surplus earth will be utilized to fill up low-lying areas. The rubbish will be cleared and all un-built surface reinstated. During construction phase, the top soil from excavated areas shall be preserved in separate stack for reuse during additional plantation. Development of green belt shall be taken up along with construction works, so plantation will grow to adequate height by the time of plant commission. Thus green belt will be effective.

Impact on Air Quality

During the construction phase, suspended particulate matter will be the main pollutant which would be generated from the site development activities and vehicular movement on the road. Further concentration of NO_x and CO may also slightly increase due to increased vehicular traffic movement. However the increase in ambient concentrations of air quality will be negligible.

Mitigation Measures

To mitigate the constructional impacts, regular sprinkling of water will be done at the site. The approach roads will be black carpeted and vehicle kept in good order to minimize automobile exhaust. Construction equipment shall be maintained and serviced regularly such that the gaseous emissions from this equipment are maintained within the design specification. Sufficient vegetation around the site is some of the measures will be taken to reduce the impacts during the construction phase.

Impact due to Noise Level

The major sources of noise during the construction phase are vehicular traffic, construction equipment like dozers, scrapers, concrete mixers, cranes, pumps, compressors, pneumatic tolls, vibrators etc. The operation of these equipments will generate noise ranging between 85-90 db (A) near the source at 1.0 m distance. These noises will be generated within the plant boundary and will be transient in nature.

Mitigation Measures

Equipments will be maintained appropriately to keep the noise level within 85 db (A). Whenever possible, equipment will be provided with silencers and mufflers. Construction activities will be restricted to day time only. Green belt will be developed from construction stage. Further, workers working in high noise areas will be provided with necessary protective devices example ear - plug, ear - muffs etc.

Impact on Water Quality

The estimated water requirement during construction phase will be met from Bore-wells and rain water. The wastewater generation during construction phase will be from sanitary units provided for the workers. This wastewater will be treated in the existing sewage treatment plant and used for greenbelt. Hence there will not be any impact on the water regime due to discharge of sanitary treated waste water.

Mitigation Measures

The earthwork (cutting and filling) will be avoided during rainy season and will be completed during summer season. Soil binding and fast growing vegetation will be grown within the plant premises to arrest the soil erosion.

Impact on Ecology

The expansion activities will be carried out in the existing plant premises. In addition, the topographical map shows that the surroundings of the plant area are barren and vacant land. There is no fauna habitat recorded in the proposed project area. The site is neither an ecologically sensitive nor a place of ecological importance. Therefore, it is envisaged that the expansion activities doesn't make significant impact on biotic and abiotic environment.

Impact on Socio Economic Environment

The construction workers will be mainly employed from the adjacent villages. There will be considerable beneficiary impact on social life of the people around the site. Displacement of the people is not required, as site is free of habitation. Therefore, livelihood of the people will not alter. Hence rehabilitation & resettlement (R&R) is not required.

3.2 Impacts during Operation Phase

Land Use

No significant change in land use was observed in the project site. The existing plant features the good infrastructure development and hence, any additional impact on land use will be insignificant.

Soil Quality

The soil quality remains the same as the proposed expansion project doesn't involve a change in land use pattern. The solid waste generated from the plant includes the following.

Solid Wastes

Runners & risers will be re-used in the process and slag from furnace will be pulverized for metal recovery and sizing disposed for earth filling and aggregate use.

Hazardous Wastes

The spent oil will be sent to authorized HW recyclers. The exhaust air or gas cleaning residue will be packed in HDPE bags and stored in closed shed with impervious platform and disposed to authorized HW pre-processors.

Impact on Air Quality

Being a scrap melting plant, the major source of air pollution is from melting machineries like furnace. The furnaces generate pollutant like SO_2, NO_x, and PM. Air pollution dispersion modeling has been carried out for SO_2, NO_x, and PM. These emissions will disperse in the atmosphere depending on the atmospheric conditions.

Mitigation Measures

Wet scrubber is proposed to be installed to control the emissions from the Induction Furnaces. Common stack of 42 m height, bag filters and dust collectors are installed in the process. Stack height of 7.5 m has been provided for exiting DG set of capacity 250 KVA. The DG set is provided with acoustic enclosure to reduce the noise level.

Impact on Water Quality

As scrap melting plant will be operated on the process, water is mainly used at certain stages in the process like cooling tower make up. No wastewater is generated from the process and there is no cooling blow down and the entire quantity of makeup water lost into the atmosphere due to evaporation.

Mitigation Measures

The wastewater from the wet scrubbers will be sent solar evaporation pans. Sewage wastewater of 4 KLD will be generated from the domestic uses and will be treated in the Sewage Treatment Plant which is a septic tank followed by a dispersion trench.

Impact on Noise levels

The major source of noise in a process will be due to furnace operation, motor, engine, DG sets etc. No worker is working continuously at high noise generating source, however the workers going for the inspection of such machines are provided with earplugs. For computing the noise levels due to the proposed project at various distances with respect to the plant site, noise levels are predicted using a user-friendly model.

Mitigation Measures

Adequate protective measures in the form of ear muffs/ear plugs will be provided to personnel working in high noise areas. All the necessary noise protective equipment will be supplied to workmen operating near high noise generating sources. In addition, reduction in noise levels in the high noise machinery areas could be achieved by adoption of suitable preventive measures such as suitable building layout in which the equipment are to be located. The greenbelt proposed around the boundary of the plant will attenuate the noise emitted by the various sources in the plant.

Impact on Ecology

There are no ecologically sensitive areas like wildlife sanctuaries in 10 km radius from the plant. Similarly there is no endangered or rare species of flora and fauna are reported or observed in the study area. The impact on terrestrial ecology will be due to emission of pollutants like SPM, NOx and SO2. However, the incremental concentrations of these pollutants are less and the impacts on terrestrial ecology will be insignificant.

Mitigation Measures

Land area of 2.71 acres from the total land is allotted for extensive greenbelt to reduce the impact on ecological environment. Greenbelt is a set of row of trees planted in such a way that they form an effective barrier between the working zone and the surroundings.

Impact on Socio-Economic Environment

Human Settlements

The proposed project will be carried in the existing plant area and hence no impact on human settlement is envisaged.

Population Growth

This project will not have any impact on the population growth, as there is no increase in manpower for the expansion project. Hence, increase in the population and related strain on infrastructure of the study area is not anticipated.

Economic Aspects

The impact of industrialization on the economic aspects was clearly observed. The existing plant activities already provided the employment to persons of different skills and trades. The local population is the largest beneficiary among the employees. The proposed expansion will enhance the opportunities in both directly and indirectly in the area surrounding the project site.

Human Health

Impact on health, if any, will be primarily due to air pollution i.e. emissions of PM, NOX and SO2 and noise generation. Adequate air pollution and noise pollution control measures will be provided to conform to regulatory standards. Employees working in high noise work place will be provided protective with Personal Protective Equipments (PPEs) like ear plugs/ear muffs for ensuring minimum impact on human health. The environmental management and emergency preparedness plans are proposed to ensure that the probability of undesired events and consequences are greatly reduced and adequate mitigation is provided to face any emergency.

4. Environmental Management Plan

4.1 Water Consumption

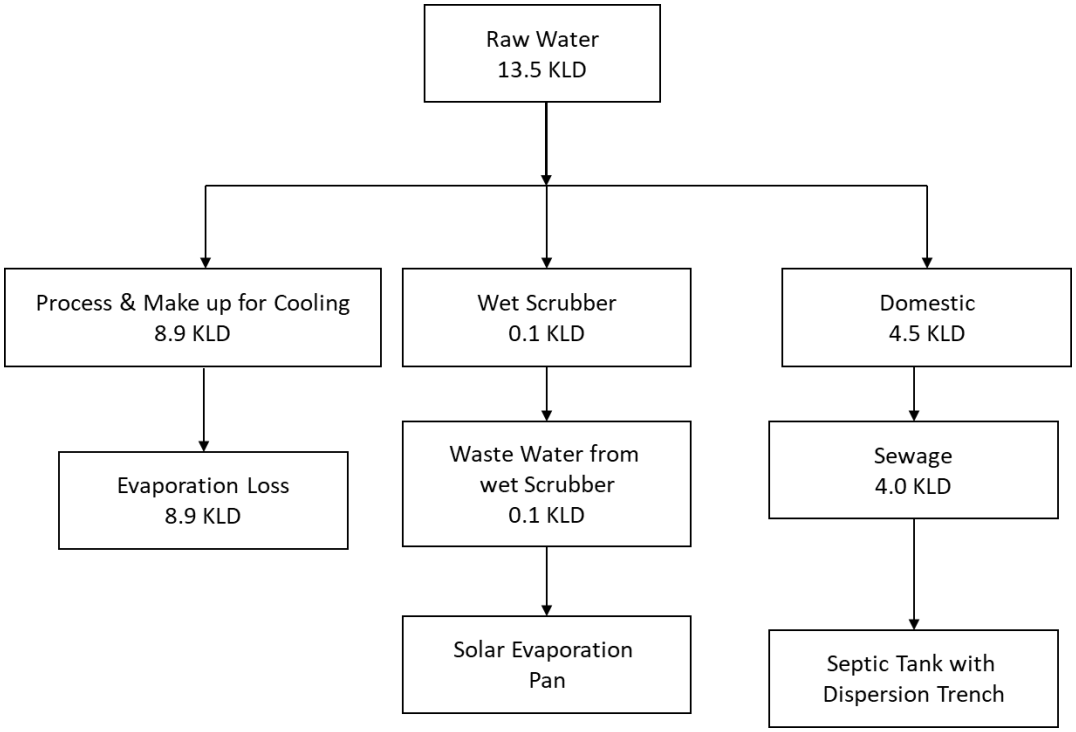
Purpose	Existing (KLD)	Proposed (KLD)	Total After Expansion (KLD)
Process	4.5	-	4.5
Cooling & Boiler	4.5	0.5	5
Domestic	4.5	1.0	5.5
Greenbelt	-	2.0	2.0
Total	**13.5**	**3.5**	**17.0**

4.2 Wastewater generation

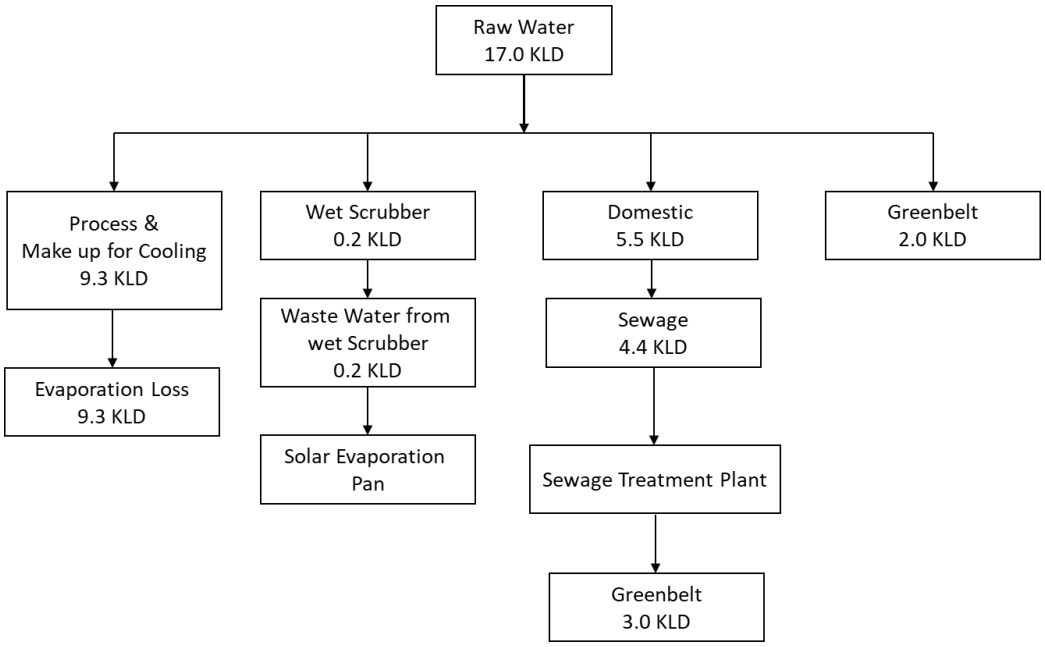
Wastewater	Existing (KLD)	After Expansion (KLD)	Method of Treatment
Sewage	4.0	4.4	Sewage Treatment Plant followed by Greenbelt development
Trade Effluent	0.1	0.2	Solar Evaporation Pan 4.8 x 3.4 – 2 Nos 12.6 x 1.1 – 1 No
Total	**4.1**	**4.6**	

4.3 WATER BALANCE CHART

For Existing Activity

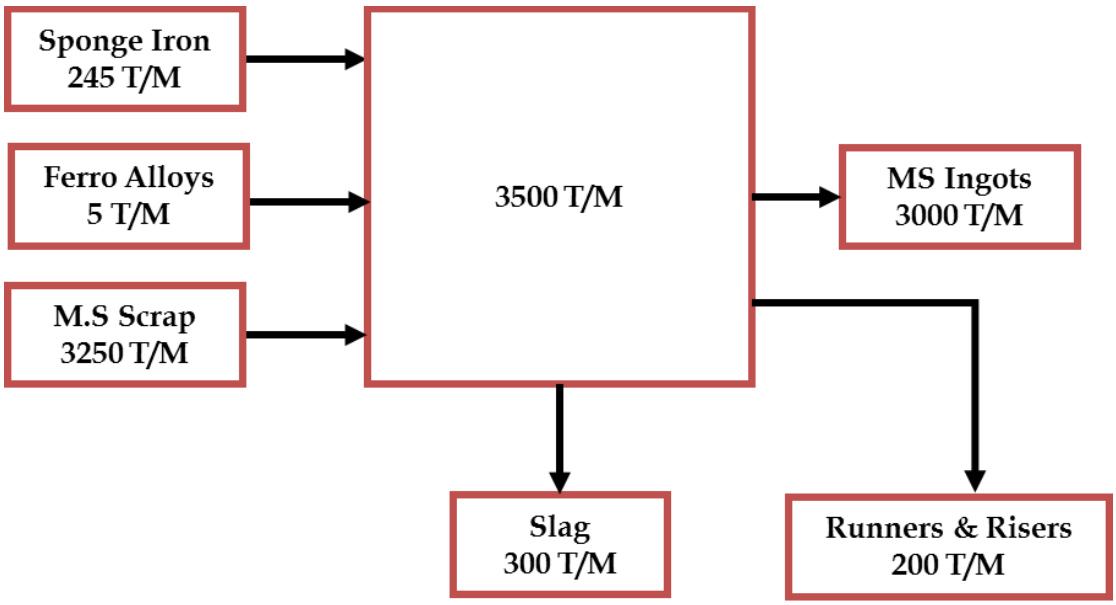


For Expansion Activity

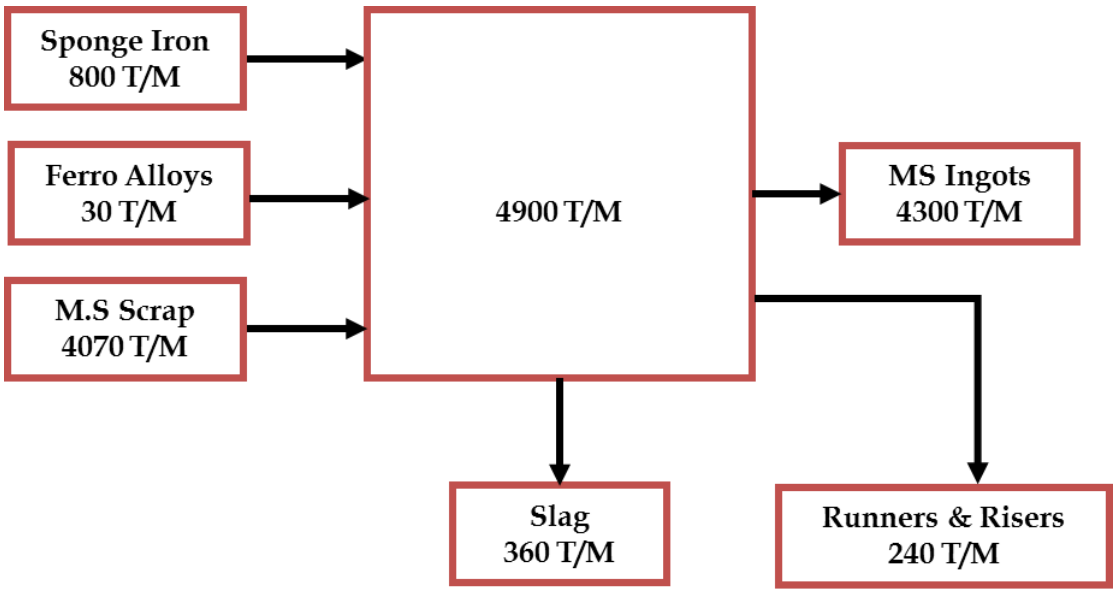


4.4 MATERIAL BALANCE CHART

For Existing Activity



For Expansion Activity



4.5 Solid waste Generation

S.No.	Solid Wastes	Quantity (TPM)		Method of Disposal
		Existing	After Expansion	
1	Runners and Riser	200	240	Re-used in the Process
2	Slag from Furnace	300	360	Pulverized for metal recovery and sizing disposed for earth filling and aggregate use

4.6 HAZARDOUS WASTE GENERATION

S.No.	Description	Quantity (T/A)		Method of Disposal
		Existing	After Expansion	
1	5.1-Used or spent oil	0.2	0.2	Send to authorised HW recyclers
2	35.1-Exhaust Air or Gas cleaning residue	5.0	5.5	Packed in HDPE bags and storage in closed shed with impervious platform and disposed to Authorised HW pre-processors
3	35.3-Chemical sludge from waste water treatment	0.3	0.5	Packed in HDPE bags and storage in closed shed with impervious platform and disposed to Authorised HW pre-processors.

4.7 Air Pollution Control Measure

Existing

Stack No.	Sources of Emission	Details of APC measures
1	Induction Furnace – 10 TPH (2 crucible)	42 m height 0.8 m dia of stack with wet scrubber has been provided.
2	DG Set (250 KVA)	Stack height of 2.3 m with acoustic enclosures has been provided.

After Expansion

Stack No.	Sources of Emission	Details of APC measures
1	Induction Furnace – 12 TPH (2 crucible)	Existing 42 m height 0.8 m dia of stack with wet scrubber will be used.
2	DG SET (250 KVA)	Stack height of 7.5 m with acoustic enclosures will be provided.

4.8 Land Degradation

Since, the quantity of wastewater will be generated from domestic usages and treated by the sewage treatment plant and the treated sewage will be used for gardening, the chances of contamination of soil will be nil. The vacant area will be used for landscape tree plantation to improve the surrounding environment.

4.9 Greenbelt Development

The greenbelt development contribute remarkable advantages especially in pollution abatement process like arresting various pollution sources like control of mist, fume, noise etc., an increasing the ecological and aesthetic characteristics of the area. Besides, it helps to block the harmful effects of heavy precipitation due to soil washout etc. The area allocated for green belt development is 1.1 hectares.

The project authorities will plant trees to greenbelt development in peripheral portions and inside vacant plots of the plant for afforestation.

Greenbelt Development for Existing & After Expansion

Existing	
Categories	**Number of Trees**
Cocunut Tree	57
Chavuku Tree	21
Pungai Tree	85
Poovarsu Maram	50
Guava Tree	1
Mango Tree	1
Neem Tree	45
Ashoka Tree	11
Sapota Tree	4
Total	**275**

Proposed	
Categories	**Number of Trees**
Pungai Tree	95
Poovarsu Maram	75
Neem Tree	145
Ashoka Tree	11
Arasa Maram	4
Total	**330**

5. Environmental Monitoring Programme

5.1 Environmental Monitoring

(a) A technical plan which spells out in detail the methodologies for measurement, the required frequencies of measurement, the planned location of measurement, data storage and analysis, reporting schedules and emergency procedures, and

(b) Detailed budgets and procurement schedules for, necessary equipment and supplies, technical and administrative manpower.

The environmental monitoring for the proposed plant operations shall be conducted as follows:

- Air quality;
- Water and wastewater quality;
- Noise levels;
- Soil Quality; and
- Greenbelt Development.

5.2 Environmental Monitoring Cell

A Centralized environmental monitoring cell will be established for monitoring of important and crucial environmental parameters which are of immense importance to assess the status of environment during Plant operation. With the knowledge of baseline conditions, the monitoring program can serve as an indicator for any deterioration in environmental conditions due to operation of the plant, and helps in planning suitable mitigatory steps that of control of pollution since the efficiency of control measures can only be determined by monitoring. The following routine monitoring program will be implemented under the post-project monitoring in the proposed plant. The Monitoring program proposed to be implemented is given below.

Equipment Details for Environmental Management

Name of the Equipment	Purpose
High Volume/ Respirable Dust Sampler	AAQ Monitoring
Stack Monitor	Particulates, SO_2, NOx and Fluoride
Automatic Weather monitor	Meteorological data collection at Site
Sound level meter	Noise levels
UV-Spectrophotometer	Chemical Analysis
Atomic Absorption Spectrophotometer (AAS)	Chemical Analysis
Micro Balance	Chemical Analysis
BOD Incubator	BOD Estimation
COD Reflux set up	COD Estimation
Refrigerator	Preserving Samples
Oven	Heating
pH Meter	pH Analysis
Distilling Unit	Distilled water
DO Analyser	DO Analysis
Burette & Pipette Box	Chemical Analysis
Titration Setup & Chemicals	Chemical Analysis

5.3 Environmental Management Reviews

The senior management shall periodically review the Environmental Management System (EMS) to ensure its suitability and effectiveness. The need for possible changes in the environmental policy and objectives for continuous improvement shall be ascertained and revisions made accordingly.

5.4 Budgetary Allocation for CER Activities

Description	Rs. In Lakh
Toilet Facility for nearby government school	10.0
Water treatment plant for nearby government school	2.0
Electrification including solar power & Roads	4.0
Avenue Plantation	2.0
Total	**18.0**

5.5 Budgetary Allocation for Environmental Management programme

Category	Capital Investment	Annual Operating Costs
	(Rupees in lakhs)	
Air Pollution Management	15.00	2.0
Water and Wastewater Management	2.0	0.5
Solid Waste Management	3.00	0.5
Greenbelt	10.00	5.0
Environmental Monitoring and Training	15.00	7.5
Total	**45.00**	**15.5**