
EXECUTIVE SUMMARY
of
Draft Environmental Impact Assessment Report
Baseline Monitoring: Summer 2023

**Manufacturing of Ferro Alloys, Metals,
Tungsten Salts & oxides**

Project Proponent



M/s. Fonsmet Materials Pvt. Ltd
Survey No. 25/3, Village – Isambe, Taluka –Khalapur,
District- Raigad, Maharashtra
Pin code – 410 220.

June 2024



Environmental Consultant
Aditya Environmental Services Pvt. Ltd., Mumbai
QCI- NABET Accredited EIA Consultant
Accreditation No.: NABET/EIA/2225/RA 0262
dated 18th October 2022, valid up to 1st May 2025

EXECUTIVE SUMMARY

1 Introduction

M/S Fonsmet Materials Pvt. Ltd. is a private limited company formed by a young enthusiastic entrepreneur Adarsh N. Bhagat who is Director of the company. It was established on 31st December 2019, having Registered Office at PL6A/2/14, sector 14, Khanda colony, New Panvel, Raigad, Maharashtra, Pin code – 410 206. The proposed manufacturing facility will be set up on a NA land and declared Industrial zone by MSRDC with area of 14030 sq.mtr having Capital investment is ~Rs. 20.45 Crores, at-Survey No. 25/3, Village – Isambe, Taluka- Khalapur, District- Raigad, Pin Code – 410 220.

The proposed project is manufacturing Ferro Alloys, Metals, Tungsten Salts & oxides. This project comes under primary and secondary metallurgical manufacturing as Category “A”, and project activity ‘3(a)’ under EIA notification 2006 and its subsequent amendment. There is no interlinked or interdependent project with the proposed project.

Location & accessibility

Plant facility will be located at Survey No. 25/3, Savroli – Kharpada Road Village – Isambe, Tal: Khalapur, Dist: Raigad, Maharashtra. The site is well connected by rail and road. Nearest railway station is Rasayani at 23 km. Nearest National Highway is NH 48 at 5.16 km E and Mumbai -Pune Expressway at distance of 0.12 km E.. Major port is JNPT located at 54 km from site.

The Geographical location of this plot is at 18°51'12.64"N Latitude and 73°13'30.27"E Longitude with an elevation of 39 meter above sea level MSL.

Karnala Bird Sanctuary is at a distance of - 8.83 km in WNW. Matheran town at 12.57 km towards NNE and buffer zone of Matheran town is 5.89km.

ESA villages as per Draft Western Ghat notification: 7 Villages in Khalapur Taluka and 2 villages in Karjat Taluka.

2 Project Description

Resource Requirement:

Land

The proposed manufacturing facility will be set up on a NA land and declared Industrial zone by Maharashtra State Road Development Corporation MSRDC with area of 14030 sq.mtr, at-Survey No. 25/3, Village – Isambe, Taluka- Khalapur, District- Raigad, Pin Code – 410 220. The land is owned by M/S Aspirewings Enterprises Pvt. Ltd. A lease agreement has been made between M/S Aspirewings Enterprises Pvt. Ltd and M/S Fonsmet Materials Pvt. Ltd. for 20 years. NOC has been issued by the– Group Grampanchayat Isambe, Taluka – Khalapur, District – Raigad.

Water

Water requirement for the proposed project will be 55.15 KLD out of which 38.32 KLD of freshwater requirement will be obtained from Ground water from Bore-well and the remaining requirement of 16.83 KLD will be met from the recycled water from treated sewage and rainwater harvesting.

Fuel

Furnace oil will be used as fuel. Fuel requirement for the proposed project is 280 ltr/hr for APC and manufacturing. Total fuel requirement per annum is 1453.75 Tons.

Manpower

70 skilled and unskilled employees will be employed during all 3 phases of manufacturing.

Energy requirements

Power requirement for the proposed project will be 660 KW. Electrical power is available from MSSEDCL.

Operational activity

All unit processes and unit operations will be carried out under stringent controls and monitoring through local indicators and manual monitoring. Safety system will be provided wherever necessary.

Proposed products capacities

Phase 1			
Ferro Alloys			
Any product combination from Sr. No. 1 to 9. Based on the orders Not exceeding 1200 TPA collective & also not exceeding their individual capacities. Example FeCr - 600 TPA + FeW - 600 TPA = Total 1200 TPA FeCr - 600 TPA + FeW - 300 TPA + FeMo - 300 TPA = Total 1200 TPA	Sr. No	Product Name	Quantity (TPA) Max.
	1	Low carbon Ferro Chrome	1200
	2	Ferro Manganese	1200
	3	Ferro Tungsten	600
	4	Ferro Molybdenum	600
	5.	Ferro Titanium	600
	6.	Ferro Vanadium	600
	7.	Ferro Niobium	600
	8.	Ferro Nickel	600
	9.	Ferro Cobalt	600
Metal Ingots & Powder from Scrap - Phase 1			
Melting and refining Aluminum & Copper scrap	Sr. No.	Product Name	Quantity (TPA) Max.
	1.	Aluminum Ingots/Powder	1200
	2.	Copper Ingots/Powder	1200

Metals Reduction by Aluminum – Phase 1			
Any combinations of products from Sr. no. 1 to 10.	Sr.No.	Product Name	Quantity (TPA) Max.
	1.	Tantalum	240
Based on orders Not exceeding 240 TPA & also not exceeding their individual capacities	2.	Niobium	240
	3.	Nickel	240
	4.	Cobalt	240
	5.	Tungsten	240
	6.	Chromium	240
	7.	Vanadium	240
Example – Tantalum - 120 TPA + Niobium - 60 TPA + Vanadium - 60 TPA = Total 240 TPA Cobalt – 100 TPA + Nickel – 100 TPA + Copper- 40 TPA = Total 240 TPA	8.	Molybdenum	240
Metals By Carbon Reduction – Phase 1			
Producing both Tin and Copper	Sr. No.	Product Name	Quantity (TPA) Max.
	1	Tin	240
	2	Copper	240
Phase - 2			
Metals Reduction By Magnesium – Phase 2			
Any combinations of products from Sr no. 1 to 3	Sr.No.	Product Name	Quantity (TPA) Max.
	1.	Tungsten	240
Based on orders Not exceeding 240 TPA & also not exceeding their individual capacities	2.	Tantalum	240
	3.	Niobium	240
Example – Tungsten - 120 TPA + Tantalum - 80 TPA + Niobium - 40 TPA = 240 TPA.			

Phase 3			
Tungsten Salts & Oxides			
Any combination of products from Sr. no. 1 to 4	Sr. No	Product Name	Quantity (TPA) Max.
Based on orders			

	1	Sodium Tungstate [Na ₂ WO ₄ .2H ₂ O]	251
Not exceeding 180 TPA (WO ₃ basis) & also not exceeding their individual capacity	2	Ammonium Para tungstate [(NH ₄) ₁₀ (H ₂ W ₁₂ O ₄₂).4H ₂ O]	198.6
	3	Tungsten Trioxide [WO ₃]	180
<i>Note – Basis for tungsten salts & oxides is the WO₃ content present in them.</i>	4	Tungstic acid [H ₂ WO ₄]	194
Phase 3 -			
Sulfates of Copper, Nickel and Cobalt			
Producing Copper sulfate, nickel sulfate and cobalt sulfate Each product having individual Capacity of 300 TPA max.	Sr.No.	Product Name	Quantity (TPA) Max.
	1	Copper Sulfate [CuSO ₄ .nH ₂ O,	300
		where n = 0 to 5] Basis- CuSO ₄ .5H ₂ O	
	2	Nickel Sulfate [NiSO ₄ .nH ₂ O,	300
		where n= 0 to 7] Basis- NiSO ₄ .7H ₂ O	
	3	Cobalt Sulfate [CoSO ₄ .nH ₂ O,	300
		where n= 0 to 7] Basis- CoSO ₄ .7H ₂ O	

Effluent generation

Liquid Effluents – There are no liquid effluents as zero liquid discharge will be followed and effluents will be evaporated in multiple effect evaporators to recover sodium sulfate & calcium chloride and sold as by-products.

5 m³/day sewage will be generated, and package type sewage treatment plant (STP) will be provided for treatment of sewage with 8KLD capacity.

Solid waste generation & disposal

Wastes have been categorized as Non-Hazardous waste and Hazardous waste as per the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules 2016. Municipal Solid waste of 7 TPA, plastic waste of 27.8 TPA, E-waste of 0.11 TPA and Battery waste of 0.25 TPA will be generated.

The maximum hazardous waste generated will be 3188.15 TPA for any combination of Ferro Alloy, 662.12 TPA for any combination of metal, 183.84 TPA from Tin & Copper Reduction, 18.32 TPA Ash generated from combustion of Met. Coke/coal and 214.52 from Tungsten salts & oxide. Generated waste will be sent to CHWTDSE for secure landfill, for road construction, cement, concrete and alumina refractory brick manufacturers.

3. Description of the Environment

Considering the local and regional setting of the area surrounding the plant facility, surrounding area of 10 km of the plant site is considered as study area for setting up environmental baseline to study/ predict the impacts in surroundings due to the proposed project, as per MoEFCC guidelines. Environmental data monitoring was done during Summer 2023 (March, April, May) for meteorology, air quality, water quality, noise levels and soil characteristics, by setting up monitoring stations as prescribed. Further, existing traffic study, ecological and socio-economic features were also studied.

Soil quality (land environment)

The soil samples were collected at 10 locations having different land use. Soil in the area is mainly clay in texture. Water holding capacity ranging from 30 to 36.2%.

For most agronomic crops the suitable soil pH should be between 6.4 to 7.4. pH of soil in study area is Neutral. Hence pH is not much of a concern. Conductivity of soil is observed below Average. Potassium content in the soil samples is very less. Organic carbon is in range of Very less to less. Phosphate content of soil is in the range of Less to average. From above observation, it is observed that the soil is having low content of macro nutrient & fertilizers will be required suitably.

Meteorology & Climate

The study area experiences tropical climate and is characterized with seasonal variations of wind pattern. Site-specific micro-meteorological data has been collected for the period from March to May 2023. Average wind speed is 1.02 m/s and prominent wind direction at project site during the study period is from North East.

Month	Wind speed (m/s)	Temperature %	Relative humidity (%)	Rainfall (mm)	Cloud Cover (octas)	Glob_radiation (wh/m2)
March	1.06	30.78	59.48	0.00	1.00	231.15
April	1.06	30.81	59.49	0.00	1.00	230.80
May	0.94	31.14	61.79	0.00	1.00	217.80
Average	1.02	30.91	60.25	0.00	1.00	226.58

Ambient Air quality

The baseline air quality was established by monitoring PM10, PM2.5, SO₂, NO_x, CO, NH₃, O₃, Benzene, BAP, Pb, As, Ni, at 10 locations in Summer 2023. The air monitoring was carried out in Industrial and Residential area.

- Concentration of PM10 ranged from 51.6 µg/m³ to 88.6 µg/m³. It is noted that the PM10 results are within permissible limit of 100 µg/m³ for 24 Hrs.
- The concentration of PM2.5 ranged from 17.1 µg/m³ to 35 µg/m³. It is noted that the PM2.5 results are within permissible limit of 60 µg/m³ for 24 Hrs.
- Concentration of SO₂ ranged from 10.3 µg/m³ to 22.6 µg/m³. It is noted that the SO₂ results are within permissible limit of 80 µg/m³ for 24 Hrs.

- Concentration of Nox ranged from 19.3 µg/m³ to 35.5 µg/m³. It is noted that the Nox results are also within permissible limit of 80 µg/m³ for 24 Hrs.
- Concentration of CO ranged from 0.3 mg/m³ to 0.6 mg/m³. It is noted that the CO results are also within permissible limit of 4 mg/m³ for 1 Hr).

Results are compared with National Ambient Air Quality Standards (NAAQ) in respect of monitored parameters. As can be seen the results, ambient air is well within the NAAQS standards for Industrial and Residential areas.

Ambient Noise quality

Noise levels were monitored at 10 locations on access routes to judge the impact of industrialization and transportation on ambient noise levels.

From monitoring it is observed that noise levels were found within standard at all locations.

Water Environment

Ground water sampling includes a collection of samples from 8 locations.

Ground water quality is mostly within specified standards except for the presence of coliform & E coli at well water samples probably due to sewage contamination.

Surface water sampling was mainly carried out for 8 samples.

From results, it is observed that all samples exceeded Class A of Designated Best Use Water Quality Criteria, CPCB. Samples were meeting other class of B to E. Due to presence of coliform; water needs to be treated before utilizing for drinking purpose.

Traffic survey

Total 65 trips in PCUs/day will be generated due to the development project by passenger modes.

Biological Environment

According to "India State of Forest Report, 2021", Forest survey of India; forest cover in Raigad District is 41.10% of geographical area (km²).

According to bio-geographic zone classification of India, entire study area falls under 'Western Ghats'. Though, there are 9 villages in study area which are listed as ESAs; vide Order under section 5 of EP Act 1986 dated 13th November 2013, series of draft Notifications dated 10th March 2014, 4th September 2015, 27th February 2017, 03rd October 2018 and 6th July 2022 issued by Ministry of Environment, Forest & Climate Change (MoEFCC). Nearest Eco-Sensitive Village, 'Nigdoli' is about ~0.071 km towards NNE of site.

Of the observed species, only seven species belong to Schedule I of Indian Wildlife (Protection) Amendment Act, 2022, whereas the remaining belong to the Schedules II or have not been assigned to any of the schedules. For conservation of Schedule I species within the study area, FMPL is allocating Rs. 25 lakhs.

Socio Economic Environment

In the 10 km radius study area, there were 4 talukas (Khalapur, Panvel, Pen & Karjat) falling from Raigad district, state Maharashtra. 118 villages and 3 City areas fall within the study area. 64% of the village population was under 1000, this data indicates most of the villages were small in population size. Most of the villages (69%) come from Khalapur taluka.

According to the census 2001 & 2011 data, decadal population growth in the study area is 8.771%. Total working population decadal growth is 3.80%.

Raigad district literacy rate was 73.64% and in the study area, it was 69.75%. The male literacy rate was 9% higher than the female literacy rate.

The total working population was 56772 which was 39.26% of the total population. Male workers were 30.14% and female workers were 9.12%.

Observations from site survey:

Agriculture activities are less in the study area, most of the workforce works as a labor or engaged in private jobs. The proposed project will generate employment opportunities, the local workforce will get the advantage of employment opportunities. Any new industry setup can help to reduce the local migration for employment at other places as well as it can help to increase the women employment opportunities.

The project setup will be within the industrial area, therefore no extra land or infrastructure development is needed inside the project area. The influx into surrounding areas could occur as a result of people coming to the area seeking employment opportunities. Therefore, the local economy will be indirectly improved due to the increase in workers in the area/increase in demand for housing, etc.

In the study area, no important archaeological sites have been reported/observed. Settlement wise the study area is geographically least dense and capable to accommodate migrant workforce, infrastructure facilities also available in the study area. Overall, the proposed project will be beneficial for the study area with the help of proposed mitigation measures.

4 Anticipated Environmental Impacts & Mitigation Measures

Environmental impact identification & Mitigation measures are based on the type, scale and location of proposed project activity. Environmental components that may be affected negatively and positively due to proposed activity are identified.

Environment parameters are selected for impact assessment due to proposed activity during various phases. The maximum impacts during Construction & Operation phase were listed below:

Anticipated Impacts & Mitigation measures for different phases of project

Sr. No.	Step/Activity	Environmental Aspect	Anticipated Impact	Suggested Mitigation Measures
1.0	Construction Phase	Land Environment	<p>Transportation and handling of construction raw material and some of the plant machineries and construction equipment.</p> <p>Contamination of land due to seepage/ leakage of construction waste water and construction debris</p> <p>Disposal of sewage & garbage generated during the construction works from labour camp/ site office</p>	<p>Spray water on the unpaved areas during summer season.</p> <p>Cover the waste layer with fresh soil and compact it.</p> <p>Proper sprinkling system is to be adopted to reduce the amount of flying dust.</p>
		Air Environment	Impact on air environment will be due to dust generation and is expected to be localized and confined to plant boundaries. Impact will be localized and temporary in nature. Particulate emissions may cause occupational health like respiratory problems i.e. allergic asthma and watering of eyes	<p>Provision of PPE (dust masks, goggles) for onsite workers.</p> <p>Screening of construction area at boundary with tin sheets</p> <p>Periodic water sprinkling in the construction area.</p>
		Noise Environment	As the phase of construction and plant erection will be of temporary nature, noise pollution will be confined to plant boundaries only.	<p>Adequate PPE (ear muffs, ear plugs) for construction workers.</p> <p>Adequate barrier will be provided to prevent noise propagation.</p>
		Water Environment	Consumption of fresh water / Improper disposal of sewage	Fresh water requirement will be fulfilled from Ground water from Bore-well/Rainwater. Sewage will be treated and recycle for green belt.

Sr. No.	Step/Activity	Environmental Aspect	Anticipated Impact	Suggested Mitigation Measures
		Biological Environment	Generation of dust/ Improper disposal of sewage.	Green belt will be developed suitably.
		Socio Economic Environment	Employment generation/ Health of workers	Workers from nearby villages/ area will be employed during construction activities. Adequate provision of PPE/ Suitable infrastructure facilities for workers.
2.0	Operation Phase	Land Environment	Impact on land environment due to spillage & leakage of fuel during the course of transportation of raw material. Impacts from storage for hazardous chemicals [Used oil, spent oil, Wastes/ Residue containing oil, Pig wastes, Oil-soaked rags, Cotton waste, Discarded containers, barrels & Used Battery etc.] Municipal wastes in the form of canteen/ kitchen wastes, domestic wastes, papers, etc. will be generated.	Dust suppression equipment will be provided for efficient control of dust pollution on environment during operation phase. An efficient dust suppression system will contain dust particles before it is airborne. To augment the water supply, proponent is proposing 2 rainwater harvesting tanks of 160 and 145 cum storage capacity which are proposed to be developed during initial stage of project along with 8 recharge pits having 18.84 cum volume for each pit.
		Air Environment	Emission of PM & SO ₂ , NO _x ,	Wet scrubbers with adequate stack height will be provided for each Furnace oil fired TFH's and Boiler.
		Noise Environment	Noise generated, during operation phase from the equipment & machineries including pumps, motors,	Isolation of vibrating units & equipment/ Regular maintenance of

Sr. No.	Step/Activity	Environmental Aspect	Anticipated Impact	Suggested Mitigation Measures
			blowers, fans will add to noise level, exposing on site workers to high noise level	equipment's/ Use of vibration dampening/ Adequate PPE for workers
		Water Environment	Fresh water consumption, Effluent generation, treatment & disposal	<p>Water requirement for the proposed project will be 55.15 KLD out of which 38.32 KLD of freshwater requirement will be obtained from Tanker OR Ground water from Bore-well and the remaining requirement of 13.68 KLD will be met from the recycled water from treated sewage and rainwater harvesting.</p> <p>There are no liquid effluents as zero liquid discharge will be followed and effluents will be evaporated in multiple effect evaporators to recover sodium sulfate & calcium chloride and sold as by-products</p>
		Biological Environment	Emission of pollutant/ Solid & Hazardous waste generation/ Effluent generation & disposal	The total plot area is 14030 m ² out of which 4809.366 m ² is used for greenbelt development. Green belt will be developed along plot boundary.
		Socio Economic Environment	Employment generation/ Health of workers	Approx. 70 nos. of persons will be employed during operation phase. Preferences will be given to local employment.

Sr. No.	Step/Activity	Environmental Aspect	Anticipated Impact	Suggested Mitigation Measures
				As proposed project is green field project, Fonsmet, Isambe is allocating Rs. 40.90 lacs (2% of project investment of Rs. 20.45 crores) for CER.

5 Environment Monitoring Program

Sr. No .	Project Phase	Environment al Component	Parameters	Frequency	Locations	Conducted by
1	Construction	Air Environment				
		Ambient air	PM ₁₀ / PM _{2.5} / SO ₂ / NO _x / CO	Once/Month	Construction site	MoEFCC /NABL approved Laboratory
		Ambient Noise Level	Leq day and night time or over one work shift	Once/Month	Construction site	
		Water Quality				
		Drinking Water Quality	parameters as per IS 10500: 2012	Once/month	Construction site - drinking water locations.	MoEFCC /NABL approved Laboratory
2	Operation Phase	Air Environment				
		Stacks - Boilers and DG sets	SO ₂ / NO _x / Particulate matter	Once/ 3 month	Plant	MoEFCC/NABL approved Laboratory
		Ambient Air	PM ₁₀ / PM _{2.5} /SO ₂ / NO _x / CO / Lead / Ammonia / Arsenic/ Nickel	Once/ 3 month	At 3 locations	MoEFCC/NABL approved Laboratory
		Workroom environment	PM10/ SO ₂ / NO _x	Once/ 3 months	Plant / Storage/ handling Area	

Sr. No .	Project Phase	Environment al Component	Parameters	Frequency	Locations	Conducted by
		Water Environment				
		ETP	pH, TSS, TDS, COD, BOD and Oil & Grease, Sulphate, Phosphates	Daily	Stage wise within Plant	MoEFCC/NABLapproved Laboratory
			As per MPCB Consent to Operate	Once/3 month	At inlet and outlet of ETP	MoEFCC/NABLapproved Laboratory
		Drinking water	parameters as per IS 10500: 2012	Once / 3 month	at each drinking water locations.	MoEFCC/NABL approved Laboratory
		Noise Environment				
		Ambient Noise	Leq (day & night)	Once/ 3 month	at fence level and at nearest habitats.	MoEFCC/NABL approved Laboratory
		Workroom noise	Leq (8 hours)	Once/ 3 month	near noise producing sources like DG set, Boiler house etc.	
		Biological Environment				
		Ecological survey	Study growth of trees at site as per plan and identify new species for plantation	Once every 3 years	At site	QCI NABET approved EB expert
		Land Contamination				
		Soil / Ground water Quality	For specific contaminants of spilled chemicals	Regularly until no traces noticed	At/ near site of spillage	MoEFCC/NABL approved Laboratory

6 Additional studies

Risk Assessment studies

Safety and risk assessment studies have been conducted for chemicals to be stored and handled onsite.

Systematic study has been carried out & details of consequence analysis studies have been presented in the chapter 7. The precautions to be taken and recommendation for safe operations are mentioned at site.

Company has committed to comply with suggested recommendation.

Raw M	TLV ppm	Toxicity Level			Flammable Properties					Chemical Class (As per MSIHC Rules)
		LD50 Oral mg/Kg	LD50 Dermal mg/Kg	LC50 mg/l	LEL %	UEL %	FP °C	BP °C	Class As Perto	
HF (48%)	3	>90 mL/kg.		342 ppm/1H.	NA	NA	NA	108	NA	Highly Toxic
Sulphuric Acid	3 mg/m ³	Acute: 2140 mg/kg [Rat.].		Acute: 510 mg/m 2 hrs	NA	NA	NA	270	NA	Toxic and Corrosive
HCL 30 %	2 ppm	LD50 = >90 mL/kg		1108 ppm/1H	NA	NA	NA	57		Toxic and Corrosive
Ammonia Gas	25 ppm	NA	NA	NA						Toxic

All these are non-hazardous with respect to oral, dermal or inhalation.

The possibility is extremely low for formation of a hazardous (explosive or toxic) atmosphere inside the furnaces under the operational conditions envisaged. Any possibility is addressed by providing suction hoods and alkali scrubber.

7 Project Benefits

- Indirect improvement in public infrastructure may occur due to the CER/ CSR activities by project proponent.
- Enhanced production will also result in increased taxes to local gram panchayat and State Exchequer.
- Manpower requirement during Construction phase and Operation phase will be approximately 70 no. of persons from nearby local area.
- Green belt of 33% of the area will be developed in the plant premises as per EIA/CPCB guidelines.

- FMPL will start with indigenous supply and gradually target export markets to earn foreign exchange.

8 Environment Management Plan

The plan incorporates environment management measures during construction and operation phases. EMP Budget of 40 Lakhs will be used as Capital cost during Construction phase. EMP budget of 2.105 Crs will be used as Capital cost and 0.853 Crs as O and M cost/ Annum during Operation Phase. Corporate Environment Responsibility (CER) Budget of Fonsmet, Isambe is allocating Rs. 40.90 lacs (2% of project investment of Rs. 20.45 crores) for CER.

EMP Budget during Construction Phase

No	Description	Capital Cost Rs in Lakhs
A	Construction management	
1	Sprinkler system, top soil preservation	25
2	Construction waste safe disposal	5
3	Safe shelter for worker, Drinking water, sanitary facility and safe disposal	6
4	PPE for construction worker	4
Total		40

EMP Budget during Operation Phase

Sr. No.	Environmental Management Expenditure Particulars	Capital Cost(In Cr)	O and M Cost in Cr/Annum
1	Air Pollution Control : Stack of 30 mtr height, Gas cleaning plant, wet scrubber	0.24	0.03
	Noise Anti-vibration pads, construction of enclosure for D.G	0.02	0.012
	Water Pollution Control : Multiple effect evaporator	1	0.25
2	Occupational Health : Glares, breathing mask, gloves, boots, helmets, earplugs, body suits etc& Annual health checkup	0.01	0.008
3	Environment Monitoring : Ambient Air monitoring, Work place air monitoring, Boiler & D.G set monitoring and online Monitoring System	0.75	0.05
4	Waste Management(Disposal to CHWTSDf)	0	0.5
5	Green Belt Development & Maintenance	0.005	0.003
6	Energy conservation by installation of solar panel of 25 KW and street lights within project premise	0.08	-
TOTAL (INR)		2.105	0.853

9 Conclusion

The proposed manufacturing facility will be set up on a NA land and declared Industrial zone by Maharashtra State Road Development Corporation MSRDC with area of 14030 sq.mtr, at-Survey No. 25/3, Village – Isambe, Taluka- Khalapur, District- Raigad, Maharashtra has revealed that the upcoming activities of metallurgical activities will have minimal impacts during operation phase. All other impacts of the project will remain far below acceptable limits after necessary mitigation as described & suggested in EIA report. The major impacts will also be brought under acceptable limits by implementing the required hazard prevention & control measures as suggested in the EIA report. Thus, it has been concluded that there would not be any major impacts on environment due to the proposed project.