GROUP ERm
MINING • STEEL • POWER

Prakash Sponge Iron & Power Pvt. Ltd.

ERM HOUSE
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Ph.: +91-80-2665 5930
E-mail: psip@ermgroup.in

CIN : U27101KA2007PTC043812

No. PSIP/KSPCB/2024-25/13

17-09-2024

To,

The Environmental officer

Karnataka State Pollution Control Board

KHB Colony, behind Pragathi Gramina Bank,

Sadik Nagar Road,

Chitradurga – 577501.

Sub: Submission of Annual Environmental Statement (Form-V) for the financial year 2023-24 in respect of M/s. Prakash Sponge Iron and Power Pvt Ltd, Heggere village, Challakere taluk, Chitradurga dist.

Ref: 1. Environmental clearance F.No. J-11011/325/2010/ IA II (I) dated 22ndDecember 2011

2. Consent for operation No. AW-325409 Dated: 24.06.2021

Dear Sir,

With reference to the subject cited above, we are herewith enclosing the Annual Environmental statement in Form-V for the financial year **2023-24** in respect of M/s. Prakash Sponge Iron and Power Pvt Ltd, Heggere village, Challakere taluk, Chitradurga dist., for your perusal.

Kindly acknowledge receipt of the same.

Thanking you,

Yours faithfully

For Prakash Sponge Iron and Power Private Limited

Authorized Signatory

Encl: As above

ENVIRONMENTAL STATEMENT (FORM - V)

2023-2024.

Submitted by

M/s. Prakash Sponge Iron & Power Pvt. Ltd.

Heggere Village, Challakere Taluk

Chitradurga District

ENVIRONMENTAL STATEMENT (FORM - V)	
ENVIRONMENTAL PROTECTION RULES 1986	
Environmental Statement for the Financial Year Ending 31st March 2024	
Part-A	
i) Name & Address of the Owner/ Occupier of the industry operation or process	**R. Praveen Chandra** Managing Director **M/s. Prakash Sponge Iron and Power Private Limited** (A Division of ERM Group) Sy No. 42,43, & others Heggere & Kaparahalli Villages, Challakere Taluk, Chitradurga Dist, Karnataka, India. Pin:577522.
ii) Industry category: Primary (STC Code), Secondary (STC Code)	Red, Large
iii) Capacity (units/year)	Sponge iron – 3*100 TPD Bar and Rod Mill – 1,00,000 TPA Light structure mill- 1,00,000 TPA Induction Furnace – 3*12 T 7.1mw whrb based captive power plant- 7.1MW Bricks manufacturing unit of capacity- 10,000 bricks/day.
iv) Production (units/year)	Bars &Rods: 99278.23 TPA Light structures: 272.991 TPA MS Billets: 128789.45 TPA Sponge Iron: 89478.25 TPA Fly ash Bricks: 16,72,292 Nos/year.

v) Year of Establishment	2010
vi) Date of last Environmental Statement submitted	28-09-2023

Part-B

Water and Raw Material Consumption

i. Water consumption in m^3/day	720
Process:	Nil
Cooling:	670KL
Domestic Purpose:	50 KL

Name of Products	Process water consumption per unit of product output (m^3/T)	
	During the financial year 2022-2023 (m^3/T)	During the financial year 2023-2024 (m^3/T)
1. Sponge iron	0.35	0.4
2. Bars & Rod Mill	0.75	0.74
3. Light Structure Mill	0.75	0.74
4. Induction Furnace	0.5	0.6
5. Captive Power Plant	0.8/MW	0.8/MW

ii. Raw material consumption:

Name of Raw Material	Name of Product	Raw material consumption per unit of product output in Tons	
		During the financial year 2022-2023	During the financial year 2023-2024
Iron Ore		1.63	1.57

Coal	Sponge Iron	1.10	1.3
Dolomite		0.12	0.14
Sponge Iron		0.59	0.63
M S Scrap	M S Billet	0.54	0.69
Ferro Alloy		0.014	0.015
Pig Iron		0.001	0.009
M S Billet	T M T Bars, Rods & Structures	1.09	1.10
Coal ash			0.27
Slag	Fly ash Bricks.		0.26
Aggregates			0.24
Cement			0.08

**Industry may use codes disclosing details of Raw materials would violate contractual obligations, otherwise all industries have to name the raw material used.*

Part-C

Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

Pollutants	Quantity of pollutants discharged (mass/day)(T/day)	Concentration of Pollutants Discharged (mass/volume) (mg/nm^3	Percentage of variation from prescribed standards with reasons
AIR- PARTICULATE MATTER			Well within limits
-Stack attached to iron ore screening house	0.0067	30	
-Stack attached to coal screening house	0.0067	30	
-ESP STACK	0.1080	60	
-Stack attached to Intermediate bin	0.0120	35	
-Stack attached to product house	0.0120	35	
-Stack attached to 2*12T induction furnace	0.0414	32	
-Stack attached to 1*12T induction furnace	0.0414	32	
-Stack attached to Reheating Furnace Light Structure Mill up to 100 mm	0.0033	32	
-Stack attached to Reheating Furnace Light Structure Mill up to 300 mm	0.0064		

Sulphur Dioxide

Stack attached to iron ore screening house	0.0045
Stack attached to coal screening house	0.0056
Stack attached to Intermediate bin	0.0103
Stack attached to product house	0.0103
Stack attached to 2*12T induction furnace	0.0453 0.0453
Stack attached to 1*12T induction furnace	0.0453
Stack attached to Reheating Furnace Light Structure Mill up to 100 mm	0.0015
Stack attached to Reheating Furnace Light Structure Mill up to 300 mm	0.003

Nitrogen oxides

Stack attached to iron ore screening house	0.0022
Stack attached to coal screening house	0.0022
Stack attached to Intermediate bin	0.0069
Stack attached to product house	0.0120
Stack attached to 2*12T induction furnace	0.0388 0.0388
Stack attached to 1*12T induction furnace	0.0388
Stack attached to Reheating Furnace Light Structure Mill up to 100 mm	0.0010
Stack attached to Reheating Furnace Light Structure Mill up to 300 mm	0.002

DOMESTIC WASTEWATER

BOD	0.00015	5mg/l
COD	0.0009	30mg/l
Suspended solids	0.00015	5mg/l
NH3	0.00009	3mg/l
Total Nitrogen	0.00024	8mg/l

Part-D		
HAZARDOUS WASTE		
(As specified under Hazardous Wastes (Management & Handling) Rules 1989)		
Hazardous Wastes	Total Quantity	
	During the financial year 2022-2023	During the financial year 2023-2024
(a) Used Oil	0.363KL	0.4KL
(b) Oil-Soaked Cotton Waste	0.298MT	0.3MT

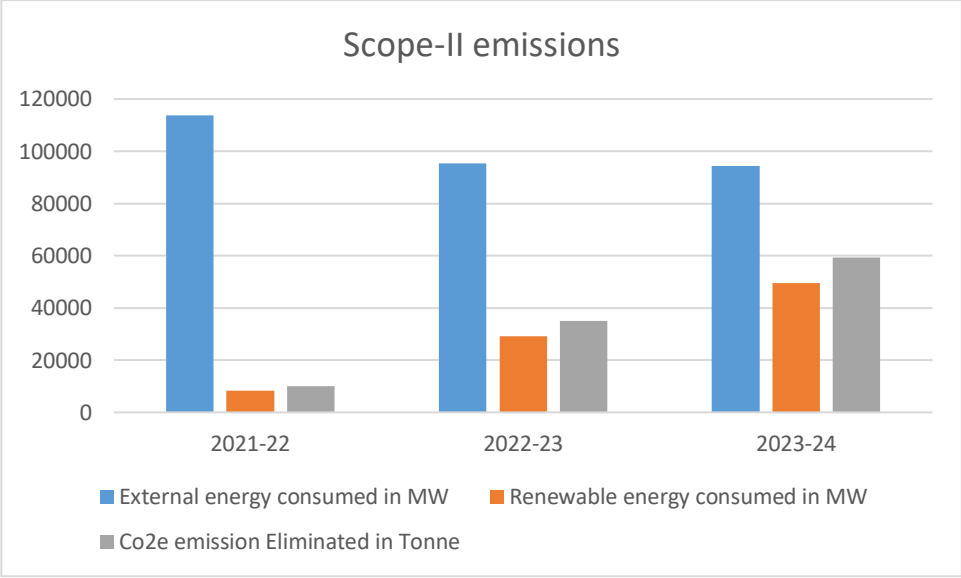
Part-E		
SOLID WASTE		
Solid Wastes	Total Quantity (Kg)	
	During the financial year 2022-2023	During the financial year 2023-2024
a. From Process	34,865.773MT	44,106.466 MT
b. From pollution control facility	26,036.94MT	22,837.083 MT
c. Quantity recycled or reutilized within the unit	16,889.5 MT	14,295.44 MT

Part-F		
Please specify the characterizations (in terms of concentration and quantum) of hazardous as well as solid waste and indicate disposal practice adopted for both these categories of wastes.		
1	Solid Waste	The solid waste generated from process and pollution control devices is non-hazardous and used in house for brick manufacturing process
2	Hazardous Waste	Small quantity of cotton waste and used oil is generated which is usually non-reactive in nature. It is being used in-house and rest sent to Authorized Hazardous waste handler.

Part-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

- Installation of refractory brick lining inside the kilns to avoid heat loss thus saving the corresponding coal consumption.
- Planting around 6000 plantations every year to develop green belt surrounding the plant. The details of the plantation till date and the photos of the plantation attached herewith as **Annexure-II.**
- Installation of 7.1 MW of waste heat recovery boiler-based power plant for captive power consumption.
- Installation of 3 MW ground mount solar and 3.6 MW roof top solar on all the production sheds and water tanks, The photos of the solar installations and WHRB is attached herewith as **Annexure-I.**
- Thus, reducing Scope -II Co2 emissions by utilizing renewable energy from waste heat recovery boiler and solar energy which is equivalent to **saving around 70,000 Tones of Co2 every year**.
- We are self-generating around 60% of our total energy requirement.
- Utilization of waste slag, DRI stones and coal ash for making concrete which is used to build concrete roads. The photos of the concrete casting using waste materials is attached herewith as **Annexure-III.**
- **Please refer the chart herewith indicating the elimination of carbon emissions.**



Part-H

Additional measures/ investment proposal for environmental protection including abatement of pollution.

Sl. No.	Additional Measures taken for abatement of pollution	Location
1	Metalling of roads inside the plant premises to avoid dust nuisance.	Inside plant premises

2	Planning to take up dig up another Rain water harvesting (RWH) tank in an extent of 12 acres to harvest rain water and reduce dependency on ground water.	Beside existing Rain water harvesting tank (RWH).
3	Increasing the inflow to our existing rain water harvesting pond to have better ground water recharge and utilise the rain water for production purpose. The photos of the RWH tank is attached as **Annexure-V**	Rain water harvesting tank(RWH).
4	Using of inhouse produced fly ash bricks for road making inside the plant premises.	Inside plant premises
5	Using in house generated solid waste like Slag and accretion materials as subgrade for road construction.	Inside plant premises
6	Partially replacing the aggregates and cement in the cement concrete by slag and accretion materials which is used for making cement concrete roads.	DRI Area.
7	Adopting Dry fog system to arrest fugitive emissions at transfer points and loading areas. The photos of the dry fog system is attached herewith as **Annexure-IV.**	DRI Area.
8	Installation of Dog House fume extraction system to increase fume extraction efficiency and better pollution control.	SMS

Part-I

Miscellaneous

Any other particulars for improving the quality of the environment

- **Taking up planting of average 6000 plantations every year in the factory premises to develop green belt and overall vegetation in the premises.**
- **Implementing of drip irrigation system for water conservation.**
- Adopting of Miyawaki method of afforestation.
- Constructed 14 Nos borewell recharge pits to recharge ground water.

ANNEXURE-I

ANNEXURE-II

Photos showing the green belt development and plantation carried out.

Photos showing the green belt development and plantation carried out.

Prakash Sponge Iron and Power Private Limited

Plantation details from2011 – September 2024.

Sl.No	Species	Inside plant	Green belt	Gap Plantation	Survival Rate in %	Total
			Local Species			
1	Rain tree	6000	4120	30	90	10150
2	Neem	124	5390	10	90	5524
3	Indian Beech Tree (Honge)	91	1386	20	90	1497
4	Jamun Fruit	49	46		90	95
5	Fig tree		80		80	80
6	Shimaruba		201		71	201
7	Great Neem		453		70	453
8	Peepal Tree		72		80	72
9	Teak		4490		82	4490
10	Jack Fruit		50		75	50
11	Tamarind		550		75	1000
12	Subabul Tree	7270	3390		86	10960
			Indigenous Species			
13	Sandal		150		70	150
	Conacrpus	3200				3200
14	Gul-Mohar		730		73	730
15	Black Gold		26		70	26
16	Show Plants		25		70	25
17	Mango		15		80	15
18	Cherry		25		70	25
19	Asoka tree		800		60	800
20	Bamboo	500	20		90	520
21	Sweet Tamarind		340		70	340
22	Custard apple		25		70	25
23	Kadu badam tree		910		80	910
24	Papaya		20		70	20
25	Ficus		40			20
	Mahagony		1600			1600
Total Till Now						42978

Annexure-III

Photo showing the concrete casting using waste materials.

Annexure-IV

Photo showing the Dry Fog gun installed at Sponge Iron Loading area.

Photos of the Dry Fog system installed at the coal and iron ore discharge points.

Annexure-V

Photo showing the RWH tank.