FORM – V (See rule 14) Environmental Audit Report for the Financial year ending the 31st March 2024			
PART – A			
1.	Name & address of the owner/occupier of the industry, operation or process.	**M/s RAIC Integrated Sponge and Power Pvt. Limited (Erstwhile M/s Bhagwati Sponge Pvt. Ltd.)** **Shri Dinesh Adukia (Director)** **Address:** **25, Ganesh Chandra Avenue, 4th Floor,** **Kolkata-700 013, West Bengal**	
2.	Industry category Primary (STC Code), Secondary (STC Code)	Primary & Secondary - Sponge Iron Plant with (3x100 TPD + 1x350 TPD) DRI Kilns; 3x15 T Induction Furnaces; 1x9 MVA Submerged Arc Furnace; 0.18 MTPA Rolling Mill & 18.5 MW Captive Power Plant (14.5 MW WHRB + 4 MW AFBC).	
3.	Production Capacity – Units	The unit Configuration & current Production capacity (as per valid CTO) is presented below, 1. DRI Kilns : 3x100 TPD + 1x350 TPD [Sponge Iron - 2,13,000 TPA] 2. Induction Furnaces (3x15 T) : 1,35,000 TPA Billets 3. Submerged Arc Furnaces (1x9 MVA) : Si-Mn - 7440 TPA or Fe-Mn - 10200 TPA or Fe-Si - 3300 TPA or Pig Iron - 6300 TPA 4. Rolling Mill : 1,80,000 TPA Structural Steel, TMT Bars, Angles, Channels, Wire Rod 5. Captive Power Plant : 18.5 MW (14.5 MW WHRB based + 4 MW AFBC based).	
4.	Year of establishment	28th February, 2003	
5.	Date of last environmental statement	-	
PART - B			
1	Water Consumption m^3/day process		
		Financial Year (2022-2023) (in m^3/day)	Financial Year (2023-24) (in m^3/day)
	Cooling	170 m^3/day	170 m^3/day
	Domestic	20 m^3/day	20 m^3/day

	Name of Products	Water consumption per unit of products	
		During the current financial year (2022-23)	During the current financial year (2023-24)
2.	Sponge Iron	1.13 m^3/T	1.14 m^3/T
	Ferro Alloys	1.50 m^3/T	1.47 m^3/T
	Structural Steel, TMT Bars, Angles, Channels, Wire Rod	0.30 m^3/T	0.32 m^3/T
3.	Raw Material Consumption	**Consumption of Raw material per unit of out put**	

Name of Raw Materials	Name of Products	During the previous financial year (2022-2023)	During the current financial year (2023-24)
1) Iron Ore/Pellet	Sponge Iron	1.512 T/T	1.514 T/T
2) Coal		0.939 T/T	0.942 T/T
3) Dolomite		0.042 T/T	0.042 T/T
1) Sponge Iron	Billets	0.920 T/T	0.919 T/T
2) Pig Iron		0.155 T/T	0.150 T/T
3) Scraps		0.218 T/T	0.223 T/T
4) Ferro Alloys		0.008 T/T	0.008 T/T
1) Billets	Structural Steel, TMT Bars, Angles, Channels, Wire Rod	1.013 T/T	1.013 T/T
1) Manganese Ore	Silico-Manganese	1.91 T/T	1.92 T/T
2) Fe - Mn Slag		0.68 T/T	0.69 T/T
3) Coal		0.41 T/T	0.41 T/T
4) Coke		0.41 T/T	0.41 T/T
5) 5) Quartz		0.40 T/T	0.40 T/T
	OR		
1) Manganese Ore	Ferro - Manganese	2.61 T/T	2.63 T/T
2) Coal		0.41 T/T	0.41 T/T
3) Coke		0.42 T/T	0.41 T/T
4) Dolomite		0.03 T/T	0.03 T/T
	OR		

1) Quartz	Ferro-Silicon	1.70 T/T	1.69 T/T
2) Mill Scrap		0.43 T/T	0.44 T/T
3) M S Scrap		0.02 T/T	0.03 T/T
4) Charcoal		0.90 T/T	0.90 T/T
5) Lam Coke		0.55 T/T	0.55 T/T
	OR		
1) Mill Scale	Pig Iron	0.09 T/T	0.09 T/T
2) Iron Ore Sinter		1.00 T/T	1.02 T/T
3) Quartz		0.03 T/T	0.03 T/T
4) Dolomite/Limestone		0.30 T/T	0.30 T/T
5) Pearl Coke		0.20 T/T	0.21 T/T
6) Steam Coal		0.50 T/T	0.51 T/T
7) Flur Spar		0.04 T/T	0.04 T/T
8) Electrode Paste		0.015 T/T	0.015 T/T

PART – C Pollution Generated (Parameters as specified in the consent issued)			
	Pollutants	Quantity of pollution generated	Percentage of variation from prescribed standards with reason
a	Water (Domestic Effluent)	16 KLD through Septic Tank - Soak Pit system	No variation
b	Air	PM <50 mg/Nm³ for Sponge Iron Plant, Induction Furnaces, Submerged Arc Furnaces. PM <30 mg/Nm³ for 4 MW AFBC Boiler.	No variation

PART – D Hazardous waste [as specified under Hazardous Wastes (Management & Handling) Rules 1989]			
	Hazardous Wastes	Total Quantity (in Kg)	
		During the previous Financial year	During the current Financial year
a.	From Process	No Hazardous waste produced.	No Hazardous waste produced.
b.	From Pollution Control Facilities	Nil	Nil
PART – E Solid Wastes			
		Total Quantity	
		During the previous Financial year (April, 2022 to March, 2023)	During the current Financial year (April,2023 to March,2024)
a.	From process	➢ Dolochar - 60,000 TPA ➢ Slag from Induction Furnaces - 14,350 TPA ➢ Fe-Mn Slag from Ferro Alloy Plant - 9600 TPA ➢ Si-Mn Slag from Ferro Alloy Plant - 7500 TPA ➢ Fly Ash - 7,930 TPA ➢ Bottom Ash - 2000 TPA	➢ Dolochar - 60,040 TPA ➢ Slag from Induction Furnaces - 14,387 TPA ➢ Fe-Mn Slag from Ferro Alloy Plant - 9587 TPA ➢ Si-Mn Slag from Ferro Alloy Plant - 7500 TPA ➢ Fly Ash - 7,927 TPA ➢ Bottom Ash - 2000 TPA
b.	From pollution control facility	NA	NA
c.	Quantity recycled or re-utilized.	➢ Dolochar is being used in AFBC Boiler for power generation ➢ Slag from Induction	➢ Dolochar is being used in AFBC Boiler for power generation ➢ Slag from Induction

		Furnaces & Ferro Alloy plant is being used in Land filling / Road making purposes. ➢ Fly Ash from AFBC Boiler is being used in Brick making / Cement plant. ➢ Bottom Ash from AFBC Boiler is being used for road making.	Furnaces & Ferro Alloy plant is being used in Land filling / Road making purposes. ➢ Fly Ash from AFBC Boiler is being used in Brick making / Cement plant. ➢ Bottom Ash from AFBC Boiler is being used for road making.

PART – F

Please specify the characteristics (in terms of concentration and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

The solid waste which are generated from various sources mainly Dolochar, Induction Furnace & Ferro Alloy plant slags, Fly ash & Bottom Ash, belongs in the group of non hazardous category.

PART – G

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

1. There are 5 nos. of stacks attached with WHRB Boilers, AFBC Boiler, Induction Furnaces & Submerged Arc Furnace for continuous emission of PM, SO_2 & NOx.
2. To reduce dust emissions, ESP & Bag Filters has been used with the stacks.
3. Diesel Generator sets (3x500 KVA + 1x725 KVA + 2x125 KVA) is being used during the power failure.
4. Under “Zero discharge” concept no industrial effluent discharge outside the plant premises. Treated industrial waste water is being used in the plant premises. Domestic waste water is being treated through Septic Tank - Soak Pit system.
5. To reduce the use of conventional source of energy for conservation of natural resources, the Company has taken several measures.

PART – H

Additional investment proposal for environmental protection including abatement of pollution

The Environment (Protection) Rules 1986

PART – I

Miscellaneous

Any other particulates in respect of environment protection and abatement of pollution

1.	All transfer points are fully enclosed.
2.	There is water spray arrangement to control fugitive emissions.
3.	ESP & Bag Filters is provided with the stacks with desired capacity.
4.	Conveyors are provided with conveyor cover.
5.	The company has developed green belt within the plant area.
6.	World environment day is celebrated to promote awareness of environment issues.