



## GOA STATE POLLUTION CONTROL BOARD

### FORM V

(See Rule 14)

Environmental Statement for the financial year ending on 31st March on or before 30th of September every year.

#### PART A

- (i) Name and address of the owner/ occupier of the industry operation or process : Arun Mishra, Vedanta Ltd. Pig iron Plant
- (ii) Industry category Primary-(STC Code) : RED, Iron & Steel (involving processing from ore/ integrated steel plants) and or  
Secondary-(STC Code) : Sponge Iron units
- (iii) Production capacity : 350000 Million Tonnes

Production Name	Production Capacity	Production Unit
Pig Iron	350000	Metric Tonnes/Year

- (iv) Year of establishment : 1992
- (v) Date of the last environment statement submitted : 07/09/2023

#### PART B

##### 1. Water consumption m<sup>3</sup>/ d

Process : 67 m<sup>3</sup>/day

Cooling : 1933 m<sup>3</sup>/day

Domestic : 93 m<sup>3</sup>/day

Name of products	Process water consumption per unit of product output	
	During the previous financial year	During the current financial year
Pig Iron	Process water- 0.17 m <sup>3</sup> /T	Process water- 0.1 m <sup>3</sup> /T
Pig Iron	Cooling water- 3.07 m <sup>3</sup> /T	Cooling water- 2.93 m <sup>3</sup> /T
Pig Iron	Domestic water- 0.19 m <sup>3</sup> /T	Domestic water- 0.14 m <sup>3</sup> /T

##### 2. Raw material consumption

Name of raw materials	Name of products	Consumption of raw material per unit	
		During the previous financial year	During the current financial year
Metallurgical Coke	Pig Iron	635.73 Kg/T	608.98 Kg/T
Iron Ore	Pig Iron	1182.87 Kg/T	1205.6 Kg/T
Limestone	Pig Iron	90.96 Kg/T	99.98 Kg/T
Dolomite	Pig Iron	86.22 Kg/T	74.5 Kg/T

Sinter	Pig Iron	419.55 Kg/T	377.64 Kg/T
Quartzite	Pig Iron	50.68 Kg/T	69.2 Kg/T
Manganese Ore	Pig Iron	0.9 Kg/T	19.38 Kg/T
Pulverized coal	Pig Iron	35.49 Kg/T	44.38 Kg/T

\*Industry may use codes if 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.

Pollution	Quantity of pollutants discharged(mass/day)	Concentration of pollutants in discharges(mass/volume)	Percentage of variation from prescribed standards with reasons
Water	Process water is recycled and reused in process. No water is discharged outside the plant	NIL(No discharge)	0(No deviation)
Air	Monitoring carried out as per Consent conditions and is within permissible limit, and results submitted to GSPCB	Monitoring carried out as per Consent conditions and is within permissible limit, and results submitted to GSPCB	0(No deviation)

Name of Pollutants : No pollutants discharged outside the plant.

### PART D

#### Hazardous Wastes

(as specified under Hazardous Wastes (Management and Handling) Rules, 1989)

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year	During the current financial year
(a) From process	Used oil: Generation – 2400 Kg Disposal– 1100 Kg,Cotton waste residue: Generation – 115 Kg Disposal – 115 Kg,Paint Tins/empty barrels: Generation- 2803 Kg Disposal - 3375 Kg	Used oil: Generation – 1690 Kg Disposal – 2830 Kg,Cotton waste residue: Generation – 150 Kg Disposal - 150 Kg,Paint Tins/empty barrels: Generation - 2471 Kg Disposal - 1889 Kg
(b) From pollution control facilities	NA	NA

### PART E

#### Solid Wastes

	Total Quantity	
	During the previous financial year	During the current financial year
(a) From process	Non-hazardous waste: Slag-67024890	Non-hazardous waste: Slag-81622280

(b) From pollution control facility	Non-hazardous waste: Flue Dust:3796880,Slurry:1081190	Non-hazardous waste:Flue Dust:5512760,Slurry: 1,405695
(c)(1) Quantity recycled or re-utilised within the unit	3796880	5512760
(2) Sold	Slag sold:64,904040	Slag sold=:86,394070 Kg
(3) Disposed	-	-

### **PART F**

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes •Used Oil is stored in empty oil barrels in designated place and same is sent for disposal to authorized vendor.

- Cotton waste is disposed within plant at Met coke Division for incineration as per consent authorization.
- Paint Tins/Empty barrels are stored in the designated place and same is disposed through authorized vendor.

Sludge: Gas Cleaning Plant Water is treated in Settling Pond & Thickener. The Settled solids in thickener & settling pond are removed, dried and sent to Sinter Plant for use as raw material. Occupier is authorized to handle Used oil/Spent oil (Category 5.1) up to 13.5 MT /Annum 20MT as per expansion CTO; Oil-soaked cotton rags/wastes (Category 5.2) up to 5 MT/year 2MT as per expansion CTO, Used/Discarded Paint Tins (Category 33.3) up to 15 MT /year and 10MT as per expansion CTO

Annual Returns in Form 4 submitted to GSPCB on 07.06.2024

### **PART G**

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production 1.Process water is recycled and reused.

- 2.Bag house system present for Blast Furnace 1 & 2 and for ladle dumping chamber. Dust collected is reused in sintering process as raw material
- 3.Rainwater is harvested in Rain water harvesting pits and is used for process.
- 4.Water sprinkling on roads is done to prevent fugitive dust emissions
- 5.Road sweeping machine deployed for preventing fugitive dust emissions
- 6.Plantation is carried out during monsoon season for increasing green belt density
- 7.Dry fog systems is present for dust suppression in the coke handling area
- 8.Windshields have been installed at the boundary of the plant.
- 9.Sprinklers are provided above the windshield at the Blast Furnace 1 & 2 area

### **PART H**

Additional measures/ investment proposal for environmental protection abatement of pollution, prevention of pollution 1.All internal roads are black topped

- 2.Road sweeping machine deployed to prevent fugitive dust emissions
- 3.CEMS CAAQMS present for continuous air monitoring
- 4.Storm drains with filter beds present for channelizing rain water into the settling ponds
- 5.Desilting of all settling ponds ensured before monsoons as a part of storm water management plan
- 6.Settling ponds and rainwater harvesting pits available for settlement of rain water
- 7.Rain guns, fog cannons, sprinklers present for dust suppression.

## **PART I**

Any other particulars for improving the quality of the environment

- 1.Plantation carried out during monsoons for greenbelt development
- 2.Environment Awareness sessions conducted for employees and in schools
- 3.Plantation drives in community and schools.

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Remarks : .