



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 : 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 : 2,92,000 T/Annum Million Tonnes

Production Name	Production Capacity	Production Unit
Pig Iron	2,92,000	Metric Tonnes/Year

- (iv) Year of establishment : March 1992
- (v) Date of the last environment statement submitted : 28/09/2022

PART B

1. Water consumption m³/ d

Process : 91.85 m³/day

Cooling : 1624.4 m³/day

Domestic : 101.64 m³/day

Name of products	Process water consumption per unit of product output	
	During the previous financial year	During the current financial year
Pig Iron	Cooling Water:3.023 m ³ /THM	Cooling Water:3.07 m ³ /THM
Pig Iron	Process water:0.1753 m ³ /THM	Process water:0.17 m ³ /THM

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
Coke	Pig Iron	618.03 kg/THM	635.73 Kg/THM
Iron Ore	Pig Iron	1066.84 Kg/THM(Includes 4.82Kg/THM Iron Ore pellets)	1182.87 Kg/THM

Limestone	Pig Iron	77.88 Kg/THM	90.96 Kg/THM
Dolomite	Pig Iron	91.81 Kg/THM	86.22 Kg/THM
Sinter	Pig Iron	588.57 Kg/THM	419.55 Kg/THM
Quartzite	Pig Iron	39.43 Kg/THM	50.68 Kg/THM
Manganese (Mn)	Pig Iron	0.25 Kg/THM	0.9 Kg/THM
Pulverized coal	Pig Iron	43.76 Kg/THM	35.49 Kg/THM

*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 generated is recycled and reused in process. No water is discharged outside the plant. No effluents is discharged either from Blast Furnaces or Sinter Plant	NIL (No discharge)	NIL
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	NIL

Name of Pollutants : No effluents are discharged from PID.

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	From maintenance: 1.Used oil=Generated qty=0.81 MT Dispatched qty=2.47 MT 2.Cotton waste=Generated qty:0.475 MT, Dispatched qty:0.475 MT 3.Paint Tins=Generated qty:-1.96 MT, Dispatched qty:1.32 MT	From maintenance:1.Used oil=Generated qty:2.4 MT Dispatched qty:1.1 MT 2.Cotton waste=Generated qty:0.115 MT, Dispatched qty:0.115 MT 3.Paint Tins=Generated qty:2.803 MT, Dispatched qty :3.375 MT
(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	102617.706 MT	67024.89 MT
(b) From pollution control facility	Flue Dust- 4346.630 MT, Slurry:1729.7 MT	Flue Dust:3,796.88 MT,Slurry:1,081.19 MT
(c)(1) Quantity recycled or re-utilised within the unit	Sent to sinter Plant as raw material	Sent to sinter Plant as raw material
(2) Sold	Slag sold= 1,17,694 MT	Slag sold= 64,904.040 MT
(3) Disposed	Nil	Nil

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 1. Hazardous Waste:

-Used Oil is stored in empty oil barrels in an earmarked area/designated place and same is sent for disposal to authorized vendor.

-Cotton waste is disposed within plant at Met coke Division for incineration.

-Paint Tins/Empty barrels are stored in the designated place and same is disposed through authorized vendor.

2. 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; Oil-soaked cotton rags/wastes (Category 5.2) up to 5 MT/year, Used/Discarded Paint Tins (Category 33.3) up to 15 MT /year Annual Returns in Form 4 submitted to GSPCB on 15.06.2023

PART G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production •Process water is recycled and reused in a closed loop.

•New Bag house system provided for Blast furnace#1 in March'2023

•Bag house system provided for Blast Furnace#2 in 2020 and ladle dumping chamber.

•Rain guns are operated in raw material yard to prevent the fugitive dust during loading & unloading of material.

•Water sprinkling on roads to prevent fugitive dust emissions.

•Plantation is carried out during Monsoon season

•Dry fog systems is operated for dust suppression in the coke handling area, which reduced the dust levels.

•Windshields have been installed at the boundary of the plant.

•Upgraded Gas cleaning plant of Blast Furnace#2 n Feb'23

•Upgraded Gas cleaning plant of Blast Furnace#1 2022

•We have installed facility to use PCI of 70-100 kg/T hot metal which will substitute additional measures/investment proposal for environmental protection including some coke. This initiative will help to conserve scarce coking coal & consequently reduce GHG emissions.

PART H

Additional measures/ investment proposal for environmental protection abatement of pollution, prevention of pollution Wind shield all along the boundaries

Sprinklers installed on top of windshields

Fog cannons and rain guns installed at raw material yard and dispatch yard.

Road sweeping machines to prevent fugitive dust emissions.

Phase wise roads asphaltation to prevent fugitive dust.

.

PART I

Any other particulars for improving the quality of the environment .

Remarks : .