



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 Metcoke and WHRPP Div I
- (ii) Industry category Primary-(STC Code) : RED, Coke making , liquefaction, coal tar distillation or fuel gas making
Secondary-(STC Code)
- (iii) Production capacity : Metallurgical Coke:3,22,000 MT/year, Generation of Power:33 MW, Coke briquetting plant 20000M T/annum Million Tonnes

Production Name	Production Capacity	Production Unit
Metallurgical Coke	3,22,000	Metric Tonnes/Year
Generation of Power	33	Megawatt
Coke briquetting	20000	Metric Tonnes/Year

- (iv) Year of establishment : 1995
- (v) Date of the last environment statement submitted : 22/08/2023

PART B

1. Water consumption m³/ d

Process : Met Coke Division#1- NIL, Waste Heat Recovery Power Plant#1-72 m³/day

Cooling : Met Coke Division#1-429 m³/day, Waste Heat Recovery Plant#1-1820 m³/day

Domestic : Met Coke Division#1-171 m³/day, Waste Heat Recovery Plant#1- 2.01 m³/day

Name of products	Process water consumption per unit of product output	
	During the previous financial year	During the current financial year
Metallurgical Coke	For Coke Quenching 0.90 m ³ /t	For Coke Quenching 0.74 m ³ /t
Generation of Power	0.139m ³ water for 1MWhr Power	0.161 m ³ water for 1MWhr Power

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
Coking Coal	Metallurgical Coke	1328 Kg/T	1333 Kg/T

Waste heat of Coke Oven flue gas and blast furnace gas	Power from waste heat of COFG & BFG of Vedanta units PID & MCD	3.863 Mil Kcal for 1 MWH generation	3.731 Mil Kcal for 1 MWH generation
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*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	Met Coke Division- No effluents discharged(Process water generated is recycled and reused in process. No water is discharged outside the plant.)	NIL (No effluents discharged)	0
Water	PP1- Avg. Cooling Tower Blow down 161 m3/day	Monitoring is carried out as per consent conditions and the results are within permissible limits. The reports are submitted to GSPCB.	0(No deviation)
Air	Metcoke division:Monitoring is carried out as per consent conditions and the results are within permissible limits. The reports are submitted to GSPCB.	Within permissible limits	NIL
Air	WHRPP-1: Monitoring is carried out as per consent conditions and the results are within permissible limits. The reports are submitted to GSPCB.	within permissible limits	0(No deviation)

Name of Pollutants : Met Coke Division- No effluents discharged,WHRPP1:Cooling Tower Blow down Water :161 m3/day.

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: Qty Generated – 1870 Kg Dispatched Qty – 1250 Kg, Cotton waste: Generated Qty -280 Kg Dispatched Qty -280 Kg, Paint tins/empty barrels: Generated Qty – 1413 Kg, Dispatched Qty -279 Kg	Used Oil: Qty Generated – 4830 Kg Dispatched Qty – 5210 Kg, Cotton waste: Generated Qty -0 Kg Dispatched Qty -0 Kg, Paint tins/empty barrels: Generated Qty – 930 Kg, Dispatched Qty- 2063 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	NIL	NIL
(b) From pollution control facility	NIL	NIL
(c)(1) Quantity recycled or re-utilised within the unit	NIL	NIL
(2) Sold	NIL	NIL
(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 Used oil is stored in empty oil barrels at a designated place disposed through authorized vendor as per consent.

Cotton waste is sent for incineration at Met coke Division as per consent

Paint Tins are stored in the designated place and same is disposed through authorized vendor as per consent.

Form-4 submitted to GSPCB on 27/06/2024. Occupier is authorized to handle Used oil/Spent oil (Category 5.1) upto 5,000 liters/annum, Waste Residues Containing Oil (Category 5.2) 20 MT/annum, Empty barrels/containers/liners contaminated with hazardous chemicals/wastes (Category 33.1) 2000 nos/annum and Spent Ion Exchange resin (Category 35.2) 400 kgs/annum.

PART G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production

1. Dust extraction system present for Coke screening plant and coke ovens for effective suction of dust at source level

2. The water used for coke quenching is recycled & recirculated, after settling in the tanks.

3. Dry fog systems are installed for dust suppression in the coke handling area

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. At coke screening plant, transfer point type bag filters are installed.

8. Grit arrestors provided at quench tower.

9. Sprinkling system are set up in coke yard

10. All conveyers are enclosed to prevent any fugitive dust emission

11. Cake-type stamped charging with moist coal is done to prevent fugitive dust emission

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

13. Waste Heat Recovery Power Plant utilizes waste heat from coke Oven Flue Gases (COFG) from Coke

Plant & Blast Furnace gas(BFG) from Pig Iron Plant to generate clean power.

14.The excess Power Generated is given to Goa Electricity (GED) which helps the state of Goa to meet part of Power Requirement.

15.Rainwater is harvested in Rainwater harvesting pits and is used for process.

PART H

Additional measures/ investment proposal for environmental protection abatement of pollution, prevention of pollution 1.WHRPP utilizes waste heat from to produce clean Power. This helps in prevention of pollution and conservation of natural resources,

2.Flue gas from Non Recovery coke ovens are used to generate waste heat recovery power plant.

3.All internal roads are black topped

4.Road sweeping machine deployed to prevent fugitive dust emissions

5.CEMS CAAQMS present for continuous air monitoring

6.Storm drains with filter beds present for channelizing rain water into the settling ponds

7.Desilting of all settling ponds ensured before monsoons as a part of storm water management plan

8.Settling ponds and rainwater harvesting pits available for settlement of rain water

9.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, business partners and in schools

3.Plantation drives in community and schools.

Remarks : .