



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, Met coke Division Ii and Waste heat recovery power plant I
- (ii) Industry category Primary-(STC Code) : RED, Coke making , liquefaction, coal tar distillation or fuel gas making
Secondary-(STC Code)
- (iii) Production capacity : 322000 Tonnes

| Production Name | Production Capacity | Production Unit |
|-----------------|---------------------|-----------------|
| Met Coke | 322000 | Metric Tonne |
| Power | 33 | Megawatt |

- (iv) Year of establishment :
- (v) Date of the last environment statement submitted :

PART B

1. Water consumption m3/ d

Process :

Cooling :

Domestic :

| Name of products | Process water consumption per unit of product output | |
|---------------------------|--|-----------------------------------|
| | During the previous financial year | During the current financial year |
| Power | 0.039 m3/MW hr | 0.075 m3/MW |
| Met Coke Division Cooling | 485 m3/day | 590 m3/day |
| Met Coke Domestic | 95 m3/day | 132 m3/day |
| Power Plant Cooling | 1981 m3/day | 2049.15 m3/day |
| Power plant domestic | 2 m3/day | 2.16 m3/day |
| Met Coke | 0.644 m3/T | 0.641 m3/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 |

| | | | |
|------------------------------|----------|-----------------|-----------------|
| Coking Coal | Met Coke | 1327 Kg/T | 1323 Kg/T |
| Waste heat from COFG and BFG | power | 4.083 MKcal/MWh | 3.973 MKcal/MWh |

*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 | | | |
| Water | Nil | Nil | Nil |
| Water | 248.76 m3/Day | 248 m3/day | NIL |
| Air | | | |
| Air | NIL | NIL | Monitoring is carried out as per consent conditions |
| Air | | | |
| Air | NIL | NIL | No deviation for MCD |

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 | NA | NA |
| (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. No solid waste is generated from the Process or Pollution Control facilities.

HAZARDOUS WASTE:-

- 1) Used/spent oil(Cat. 5.1)- 4.51 MT (4747L) disposed to authorized recycler against limit of 5000 L.
- 2) Oil soaked cotton waste(Cat. 5.2)- 0.021 MT disposed as per CTO provision against limit of 20 MT
- 3) Used/discarded paint tins (Cat. 33.2):- 4.057 MT (OR 1500 Nos.) disposed against limit of 2000 Nos.
- 4) Spent Ion Exchange Resin (Cat. 35.2):- NIL.

PART G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production 1. Water used for coke quenching is fully recycled.

2. AAQMS has been set up at various locations for measurement of all 12 parameters twice /week.
3. Dry fog system and fog/mist cannon provided for on site dust suppression.
4. Rain guns and sprinklers are provided at raw material and dispatch yard.
5. Bag filters installed at all major transfer points.
6. Grit arrestor provided at quench tower.
7. STP of 30 KLD is installed.
8. CAAQMS is provided towards Navelim Plant Boindary having continuous and real time data communication to SPCB and CPCB.
9. Windshields set up along coke yards.
10. Coal is always stored in closed sheds.
11. WHRPP1 utilizes waste heat from coke oven as well as blast furnace to generate clean power and is qualified as CDM under UNFCCC.
12. Excess power is given to Goa Electricity Grid which helps in meeting local power requirement. .

PART H

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

2. Flue gas from Non Recovery based coke ovens are used to generate waste heat recovery power from plant.
3. Waste Heat Recovery Based power plant is a Clean Process which generates power from waste heat. .

PART I

Any other particulars for improving the quality of the environment 1. Around 1000 saplings have been planted in premise.

2. Road sweeping machine is deployed to arrest fugitive dust.
3. Stakeholders engagement, by virtue of which, various socio-economic programs on front of education, health, infrastructure, agriculture & livelihood development for overall community development in Navelim village has been taken.
4. Work for setting up of additional bag- houses is in place.

MET COKE DIVISION:-

Raw Material Consumption:-314035 DMT Coal

Production:- 237383 DMT Met Coke

WHRPP 1:

Raw Material:-803148 MKCal

Production:- 204000 MWh

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