# 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 | : | Susanta Ganguli,Vedanta Iron &Steel Ltd VAB |
| **(ii)** | Industry category Primary-(STC Code) Secondary-(STC Code) | : | RED, Iron & Steel (involving processing from ore/ integrated steel plants) and or 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 | : | 22/09/2025 |

## PART B

1. Water consumption m3/ d

Process : 65m3/day

Cooling : 2240m3/day

Domestic : 97m3/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- 2.6m3/T | Cooling water- 2.84m3/T |
| Pig Iron | Process water- 0.08 m3/T | Process water- 0.08 m3/T |
| Pig Iron | Domestic water- 0.12m3/T | Domestic water- 0.12m3/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 | 610.187 Kg/T | 595 Kg/T |
| Iron Ore | Pig Iron | 1312.406 Kg/T | 1353 Kg/T |
| Limestone | Pig Iron | 99.924 Kg/T | 106 Kg/T |
| Dolomite | Pig Iron | 88.805 Kg/T | 80Kg/T |

| | | | |
|---|---|---|---|
| Sinter | Pig Iron | 379.048 Kg/T | 340 Kg/T |
| Quartzite | Pig Iron | 39.404 Kg/T | 37Kg/T |
| Manganese Ore | Pig Iron | 4.072 Kg/T | 2 Kg/T |
| Pulverized coal | Pig Iron | 41.434 Kg/T | 64 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.During Monsoons, only the storm water is let out through storm water drains after achieving proper settling in the settling pond** | **NIL** | **NIL** |
| **Air** | **Monitoring carried out as per Consent conditions and is within permissible limit, and results submitted to GSPCB** | **Within permissible limits** | **No variation observed from the prescribed standards, all within limits** |

Name of Pollutants : .

## 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 – 2630 Kg Disposal – 1990Kg,Cotton waste residue: Generation – 180Kg Disposal - 180Kg,Paint Tins/empty barrels: Generation -799 Kg Disposal - 1849 Kg** | **Used oil: Generation – 2210 Kg Disposal – 2740Kg,Cotton waste residue: Generation – 345Kg Disposal - 345Kg,Paint Tins/empty barrels: Generation -1080 Kg Disposal - 1100 Kg,Oil contaminated with cargo sludge residue, washing water and sludge Generation -2440 Kg Disposal - 2420Kg** |
| **(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-104189905.6** | **Non-hazardous waste: Slag-101842127.20** |
| **(b) From pollution control facility** | **Non-hazardous waste:Flue Dust: 5290190Kg,Sludge/Slurry-1629119 Kg** | **Non-hazardous waste: Flue Dust: 6768000Kg,Sludge/Slurry-2910885.46Kg** |
| **(c)(1) Quantity recycled or re-utilised within the unit** | **Dust:5290190kg** | **Dust:6768000Kg** |
| **(2) Sold** | **Slag sold=106349290Kg** | **Slag sold=:116579290Kg** |
| **(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 1. Hazardous Waste:
•Used oil/Oil contaminated with cargo sludge residue, washing water and sludge. is stored in barrels at a designated place on secondary containment and same is sent for disposal to authorized vendor as per consent.
•Oil soaked cotton waste is incinerated in coke ovens as per the consent authorization
•Paint Tins/Empty barrels are stored in the designated place and same is disposed through authorized vendor
2.Solid waste Sludge: Gas Cleaning Plant Water is treated in Settling Pond & Thickener. The Settled solids in thickener & settling pond are removed, dried and is reused in Sinter Plant 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/annum, Used/Discarded Paint Tins (Category 33.1) up to 15 MT /annum, Filters Contaminated with oil (Category 3.3) up to 2MT/annum, Oil contaminated with cargo sludge residue, washing water and sludge(Category 3.1) 2800 Kgs/annum.

## 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 are installed for Blast Furnace 1 & 2 and for ladle dumping chamber. Dust collected from baghouse is reused in sintering process as raw material
3.Rainwater is harvested in Rainwater harvesting pits and is used for process.
4.Plantation is carried out during monsoon season for increasing green belt density
5.Pulverized coal injection done in Blast furnace as an additive to replace some quantity of coke
6.Blast furnace gas is used in power plant for generation of power
7.Slag generated as by product of BF process is sold to cement industries
8.Reduction in total carbon bearing material in blast furnaces through process optimization
9.Use of sinter in the blast furnace helps in
•Low grade Goan iron ore fines utilization effectively for a value-added product.
•Productivity of blast furnace increases
•Better operation of blast furnace
.

## PART H

Additional measures/ investment proposal for environmental protection abatement of pollution, prevention of pollution 1.Internal roads are black topped
2.Road sweeping machine deployed to prevent fugitive dust emissions
3.Storm drains with filter beds present for channelising rainwater into the settling ponds
4.Desilting of all settling ponds ensured before monsoons as a part of storm water management plan
5.Settling ponds and rainwater harvesting pits available for rainwater harvesting
6.Rain guns, fog cannons, sprinklers present for dust suppression.
7.Closed conveyor system for transfer of material
8.Fog mist in dedusting dust discharge hoppers for dust suppressions during evacuation of dust
9.Covering of the transportation trucks with tarpaulin and Speed limit is maintained at 20km/hr within plant premises
10.Windshields have been installed at the boundary of the plant.
11.Sprinklers are provided above the windshield at the Blast Furnace 1 & 2 area
.

## 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
4.EV vehicle for employee internal/external transportation for official work
5.EV wheel loader for operational work handling
6.Free EV charging station at Navelim for employees & community .

Remarks : Environment statement of M/s. Vedanta Iron and Steel Ltd, Value Added Business, Pig Iron Plant for FY 25-26 . .