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,M/s. Vedanta Iron and Steel Ltd
(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	:	0.65MTPA of Pig Iron,1MTPA Sinter,5000MTPA Ferrosilicon,50TPD Nitrogen and 250TPD Oxygen Million Tonnes

Production Name	Production Capacity	Production Unit
Sinter from Sinterplant	1000000	Metric Tonnes/Year
Ferrosilicon	5000	Metric Tonnes/Year
Nitrogen	50	Metric Tonnes/Day
Pig Iron from BF3	650000	Metric Tonnes/Year
Oxygen Plant 1,2	250	Metric Tonnes/Day

(iv)	Year of establishment	:	2012
(v)	Date of the last environment statement submitted	:	13/09/2025

PART B

1. Water consumption m3/ d

Process : 123 m3/day

Cooling : 3173m3/day

Domestic : 111 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 :2.06 m3/t of Pig Iron	Cooling Water :1.89m3/t of Pig Iron
Pig Iron	Domestic water-0.06 m3/t	Domestic water-0.07 m3/t
Sinter	Process Water – 0.05 m3/t	Process Water – 0.05m3/t of Sinter
Sinter	Cooling water consumption :0.01 m3/t	Cooling water consumption :0.01 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
Metallurgical Coke	Pig Iron	404.75 Kg/T	419.09 Kg/T
Lumpy High-Grade Ore	Pig Iron	531.37 Kg/T	539.12 Kg/T
Coke Breeze	Sinter	55.62 Kg/T	59.99 Kg/T
Sinter Dust & Sinter Fines	Sinter	36.92 Kg/T	18.380 Kg/T
Flue dust from Blast Furnace	Sinter	12.13 Kg/T	16.16 Kg/T
Limestone	Pig Iron	2.58 Kg/T	3.64 Kg/T
Dolomite	Pig Iron	11.71 Kg/T	16.13 Kg/T
Manganese Ore	Pig Iron	0.09 Kg/T	0 Kg/T
Siliceous ore,Quartz	Pig Iron	20.57 Kg/T	74.73 Kg/T
Sinter	Pig Iron	1249.32 Kg/T	1170.99 Kg/T
Pulverized coal	Pig Iron	170.70 Kg/T	166.74 Kg/T
Low Grade Iron Ore Fines	Sinter	464.24 Kg/T	457.032 Kg/T
High Grade Low Mn Iron Ore Fines	Sinter	443.20 Kg/T	458.21 Kg/T
Limestone(lumps crushed)	Sinter	117.55 Kg/T	112.911 Kg/T
Dolomite(lumps crsuhed)	Sinter	58.69 Kg/T	68.12 Kg/T
Pig Iron 10/50 mm Goli & -10mm Goli	Sinter	16.43 Kg/T	20.92 Kg/T
Quick Lime	Sinter	31.12 Kg/T	24.6 Kg/T
Mill Scale	Sinter	0 Kg/T	1.15 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	**No effluents are discharged all water is recycled and reused for process.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-Generated qty:9690kg Disposal qty: 5480kg,Cotton waste – Generated qty 785kg, Disposal qty :785kg,Paint Tins generated qty-3991kg, Disposal qty: 4661kg**	**Used oil-Generated qty:7010kg Disposal qty: 1111kg,Cotton waste – Generated qty 426kg, Disposal qty :426kg,Paint Tins generated qty-3870kg, Disposal qty: 3900kg**
(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-234526881.6 Kg**	**Non-hazardous waste: Slag-259375585.04Kg**
(b) From pollution control facility	**Non-hazardous waste: Flue Dust BF3-7677950kg, Sinter dust-30507000kg**	**Non-hazardous waste: Flue Dust BF3-12203990kg, Sinter dust-28358000kg**
(c)(1) Quantity recycled or re-utilised within the unit	**Dust:46473207Kg**	**Dust:34253460Kg**
(2) Sold	**Slag:253422920Kg**	**Slag:302016000Kg**
(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 barrels at a designated place on secondary containment and same is sent for disposal to authorized vendor as per consent.

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 sent to authorized vendor as per the consent.
Dust from dedusting units and GDC GCP is reused in sinter plant for sintering process
Slurry from PCM slurry is dried and mixed in dust for sinter production
Occupier is authorized to handle: Used oil/Spent oil (Category 5.1) up to 25MT/Annum and Discarded Containers / Barrels /Liners contaminated with Hazardous Wastes/Chemicals (Cat.33.1)10 MT/Annum, Waste Residue Containing Oil (Cat 5.2) 11 MT/Annum and Oil filters(3.3) 2.5 MT/Annum as per CTO,Slag(3,45,000 MT/year-Sold to cement industry),Flue dust(18,000 MT/Year and sinter dust 35000MT/year (which is Recycled through sinter plant)..

PART G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production 1.The gas coming out from the blast furnace is cleaned by passing it through Dust catcher and then through Dry Gas Cleaning System which has 12 silos of bag filters. The clean gas is then used as fuel in hot blast stoves, Pulverized coal injection, Sinter machine & for Power generation
2.Pulverized coal injection plant is installed in which the coal is ground from < 25 mm for use in Blast furnace as an additive to replace some quantity of coke
3.The oxygen required for injection and nitrogen required for all purging purposes are supplied by the O2/N2 plant
4.Dedusting units are installed and dust generated is reused in sintering process as raw material
5.Rainwater is harvested in rainwater harvesting pits and is used back in process
6.Advantage of use of sinter in the blast furnace:
•Low grade Goan iron ore fines utilized effectively for a value-added product.
•Productivity of blast furnace increases
•Better operation of blast furnace
7.Power generated from Waste Heat Recovery Power Plant is used for operations of all plants at VAB
8.Slag generated as by product of BF process is sold to cement industries
9.Reduction in total carbon bearing material in blast furnaces through process optimization and oxygen enrichment
.

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 is deployed for prevention of fugitive dust emissions
3.CEMS CAAQMS are installed for continuous air monitoring and data is communicated on control room systems through PLC for taking quick actions in case of any exceedances observed.
4.Desilting of all settling ponds is done before monsoons as a part of storm water management plan to ensure proper settling of rainwater and for clean flow of storm water discharge. Filter beds are also present across drains.
5.Rain guns, fog cannons for dust suppression in stock yards
6.Fog mist, humidifiers present in dedusting dust discharge hoppers for dust suppressions during evacuation of dust
7.Windshields and thick plantation is present along the boundaries
8.Closed conveyor system for transfer of material
9.Covering of the transportation trucks with tarpaulin and Speed limit is maintained at 20km/hr within plant premises
10.Wheel wash system present at the exit of raw material gate

11.Closed shed for storage of iron ore fines stack
12.Green belt developed and maintained
13.Dumps covered with geotextile and plantation done over dumps
14.Energy audit at plant
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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 transportation for official work
5.EV wheel loader for operational work handling
6.Free EV charging station at Navelim for employees & community
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Remarks : Environment statement of M/s. Vedanta Iron and Steel Ltd, Value Added Business,Pig Iron Division Unit 2 for FY 25-26 .