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	:	Sunil Dugal
(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	:	5,40,000 T/Annum,10,00,000 T/Annum Million Tonnes

Production Name	**Production Capacity**	**Production Unit**
Pig Iron	5,40,000	Metric Tonnes/Year
Sinter	10,00,000	Metric Tonnes/Year

(iv)	Year of establishment	:	2012
(v)	Date of the last environment statement submitted	:	28/09/2022

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**
Pig Iron	Process water:NA	Process water:NA
Pig Iron	Cooling Water:2.3 m3/THM(Cooling water is inclusive of slag granulation, pig cooling, O2/N2 cooling; BF stove cooling, dust suppression and Sinter plant usage)	Cooling Water:2.1 m3/THM(Cooling water is inclusive of Blast furnace,PCM and Cooling tower)
Sinter	Process water:NA	Process water:0.05 m3/t
Sinter	Cooling Water:Consumption FY 21-22 was shown for total PIDII unit	Cooling Water:0.02 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	467.39 Kg/THM	419.26 Kg/THM
Lumpy High-Grade Ore	Pig Iron	361.84 Kg/THM	369.26 Kg/THM
Limestone	Pig Iron	9.48 Kg/THM	0.81 Kg/THM
Dolomite	Pig Iron	23.38 Kg/THM	11.18 Kg/THM
Manganese Ore	Pig Iron	0 Kg/THM	0 Kg/THM
Siliceous ore/Quartz	Pig Iron	8.21 Kg/THM	67.11 Kg/THM
Sinter	Pig Iron	1377.42 Kg/THM	1319.00 Kg/THM
Pulverized coal	Pig Iron	121.58 Kg/THM	169.26 Kg/THM
Ti-Fe Ore	Pig Iron	0 Kg/THM	0 Kg/THM
High Grade Low Mn Iron Ore Fines	Sinter	674 Kg/THM	558 Kg/THM
Low Grade Iron Ore Fines	Sinter	262 Kg/THM	320 Kg/THM
Coke Breeze	Sinter	58 Kg/THM	52 Kg/THM
Limestone	Sinter	102 Kg/THM	90 Kg/THM
Dolomite	Sinter	49 Kg/THM	50 Kg/THM
Limestone & Dolomite Fines	Sinter	2 Kg/THM	0 Kg/THM
Pig Iron 10/-50 mm Goli & -10mm Goli	Sinter	18 Kg/THM	19 Kg/THM
Quick Lime	Sinter	30 Kg/THM	31 Kg/THM
Sinter Dust & Sinter Fines (-5mm)	Sinter	25 Kg/THM	73 Kg/THM
Flue dust from Blast Furnace	Sinter	10 Kg/THM	17 Kg/THM
Mill Scale	Sinter	2 Kg/THM	1 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 out side 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 : .

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= 13.22 MT Dispatched qty – 14.79 MT 2.Cotton waste – Generated qty 1.353 MT, Dispatched qty is 1.353 MT 3.Paint Tins generated qty- 4.985 MT, Dispatched qty -3.988 MT	From maintenance:1.Used oil- Generated qty= 9.39 MT Dispatched qty – 5.5 MT 2.Cotton waste – Generated qty 1.278 MT, Dispatched qty is 1.278 MT 3.Paint Tins Generated qty- 3.725 MT, Dispatched qty -5.05 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	232835.27 MT	204775 MT
(b) From pollution control facility	Flue Dust BF3- 8,318.01 MT ,Sinter Dust -31155 MT	Flue Dust- BF3-9,079.583 MT, Sinter dust-66,399.295 MT
(c)(1) Quantity recycled or re-utilised within the unit	35,570.90 MT	83,464.154 MT
(2) Sold	Slag sold= 2,60,236 MT	Slag sold= 268525.6 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. Dust from de-dusting system & dry GCP – The dust is collected and used as raw material to produce sinter at Sinter Plant. Also, the slurry obtained from PCM is dried and used in sinter.
Occupier is authorized to handle used oil/Spent oil (Category 5.1) up to 15 MT /Annum; Oil-soaked cotton rags/wastes (Category 5.2) up to 10 MT/year, Used/Discarded Paint Tins (Category 33.3) up to 5 MT /year and Oil Filters (Category 33.3)
Annual Returns in Form 4 submitted to GSPCB on 15.06.2023
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PART G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production •Installed Automated & integrated Fogging System at sinter plant for dust suppression in quick lime handling.
•Asphalting of roads within plant done in phased manner.
•Dry Gas Cleaning plant has helped in reducing water consumption.
•De-dusting unit is installed at cast house and PCM area.
•De-dusting unit is installed at stock house.
•The dust collected from Bag house/Dedusting unit is used as raw material in sinter plant
•Water is harvested in Pits during monsoon for effective utilization of water for process
•Water sprinkling on roads is done to prevent fugitive dust emissions.
•Plantation is carried out during monsoon season.
•Windshield along the boundaries
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PART H

Additional measures/ investment proposal for environmental protection abatement of pollution, prevention of pollution •Rain guns in raw material & Dispatch yard to prevent the fugitive dust.
•Phase wise roads asphaltation to prevent fugitive dust.
•Road sweeping machines are used to prevent fugitive dust emissions
•Windshield along the boundaries
•Sprinklers installed on top of windshields.
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PART I

Any other particulars for improving the quality of the environment •1560nos of plantation carried out in green belt area.
•1850nos of plantation carried out in adjoining villages of Amona and Navelim.
•Check dams constructed as a part of storm water management.
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Remarks : .