Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2023

Unique Application Number	***Submitted Date***
MPCB-ENVIRONMENT_STATEMENT-0000058270	18-09-2023

PART A

Company Information

Company Name	***Application UAN number***	
Tata Steel Limited	0000039991	
Address		
VILLAGE NIFAN & SAVROLI, TAL KHALAPUR, DIST RAIGAD		
Plot no	***Taluka***	***Village***
19/2A	KHALAPUR	NIFAN & SAVROLI
Capital Investment (In lakhs)	***Scale***	***City***
187254.97	LARGE	SAVROLI
Pincode	***Person Name***	***Designation***
410203	Mr. Kapil Modi	Executive Plant Head
Telephone Number	***Fax Number***	***Email***
02192302000	02192302000	environment.khopoli@tatasteel.com
Region	***Industry Category***	***Industry Type***
SRO-Raigad I	Red	R44 Industry or process involving metal surface treatment or process such as pickling/ electroplating/paint stripping/ heat treatment using cyanide bath/ phosphating or finishing and anodizing / enamellings/ galvanizing
Last Environmental statement submitted online	***Consent Number***	***Consent Issue Date***
yes	Format 1.0/BO/UAN No. -0000039991-18/CACCell-1909000459	16/09/2019
Consent Valid Upto	***Establishment Year***	***Date of last environment statement submitted***
28/02/2023	2003	Sep 20 2022 12:00:00:000AM
Industry Category Primary (STC Code) & Secondary (STC Code)		

Product Information

Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
C. R. COILS	180000	172083	MT/A
G. I. COILS	360000	174122	MT/A
COLOUR COILS	120000	54303	MT/A
PIPES & TUBES	120000	105995	MT/A
API PIPES, CASTING PIPES,PIPE FOR LOW PRESSURE SERVICE, ROUND PIPES&TUBE FOR MECHANICAL & STRUCTURAL PIPES & SQUARE STRUCTURAL PIPE	285000	146779	MT/A

CAPTIVE POWER	24	2.2	Mwh

By-product Information

By Product Name	Consent Quantity	Actual Quantity	UOM
NA	0	0	MT/A

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for	Consent Quantity in m3/day	Actual Quantity in m3/day
Process	835.00	575.00
Cooling	340.00	303.00
Domestic	255.00	240.00
All others	200.00	195.00
Total	1630.00	1313.00

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
TRADE EFFLUENT	270	182.32	CMD
DOMESTIC EFFLUENT	185	160	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
C.R.COILS & SHEETS, GALVANIZED / GALUM COIL & SHEET, COLOR COATED COIL & SHEET, PIPES & TUBES, CAPTIVE POWER, APPI PIPES, CASTING PIPES, PIPE FOR LOW PRESSURE SERVICE, ROUND PIPES AND TUBE FOR MECHANI	0.33	0.34	Ton/Ton

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
HR COIL	1.03	1.00	Ton/Ton
ZINC	0.01	0.008	Ton/Ton
PAINT FOR CCL	0.01	0.002	Ton/Ton
PAINT FOR PIPE	0.04	0.005	Ton/Ton
ALUMINIUM	0.01	0.0048	Ton/Ton
HYDROCHLORIC ACID	0.0015	0.0024	Ton/Ton

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
LNG	18387.24	14556.94	MT/A
FURNACE OIL	0	0	MT/A
LSHS	54767.52	4930.586	MT/A

Part-C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
SUSPENDED SOLIDS (STP)	0.05	27.33	-45.33	50	Full Fled STP
BOD 3DAY 27C(STP)	0.03	16.78	-44.07	30	Full Fledged STP
COD(STP)	0.08	42.51	-57.49	100	Full Fledged STP

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
NON OX FURNACE (GAL.- I) PM	2.70	37.6	-62.380	150	LNG Gas
NON OX FURNACE (GAL.-I I) PM	10.52	33.54	-66.456	150	LNG Gas
POT FURNACE GAL-I(PM)	5.68	39.27	-60.730	150	LNG Gas
RTF SECTION GAL-II(PM)	10.01	37.52	-62.480	150	LNG Gas
COATER SECTION (CCL)-PM	28.56	23.52	-76.480	150	LNG Gas
D.G& BOILER(PM)	135.71	32.20	-67.800	150	LSHS as Fuel Gas
D.G& BOILER(SO2)	295.23	70.05	-29.950	400	LSHS AS FUEL
SHEET ANNEALING(PM)	0.24	26.54	-73.458	150	LNG Gas
HARDENING FURNACE-I(PM)	2.05	21.65	-78.353	150	LNG Gas
HARDENING FURNACE-II(PM)	0.41	28.68	-71.325	150	LNG Gas
HARDENING FURNACE-III(PM)	2.37	37.66	-62.340	150	LNG Gas
HARDENING FURNACE-IV(PM)	1.87	29.57	-70.432	150	LNG Gas
TUBE ANNELING I(PM)	2.17	20.52	-79.477	150	LNG Gas
TUBE ANNELING II(PM)	2.24	31.37	-68.629	150	LNG Gas
WIDER PICKLING(PM)	7.48	48.89	-51.110	150	WET SCRUBBER
WIDER PICKLING(ACID MIST)	0.42	2.75	-97.250	35	WET SRUBBER
NARROW PICKLING(PM)	3.41	31.09	-68.910	150	WET SRUBBER
NARROW PICKLING(ACID MIST)	0.69	6.27	-93.730	35	WET SRUBBER
6HI MILL I, WIDER(PM)	18.48	28.39	-71.609	150	BLOWER WITH VENT
6HI MILL II, WIDER(PM)	17.21	29.08	-70.915	150	BLOWER WITH VENT
4HI MILL I, NARROW(PM)	7.84	28.23	-71.766	150	BLOWER WITH VENT
4HI MILL II, NARROW(PM)	7.91	29.50	-70.503	150	BLOWER WITH VENT
4HI MILL III, NARROW(PM)	5.39	19.92	-84.085	150	BLOWER WITH VENT
ALKALI SCRUBBER WIDER(PM)	4.25	26.66	-73.340	150	Scrubber

HOT AIR DRYER I , WIDER(PM)	4.23	19.61	-81.393	150	BLOWER WITH VENT
HOT AIR DRYER II , WIDER(PM)	4.34	19.68	-84.319	150	BLOWER WITH VENT
ACID FUME SCRUBBER,ARP(PM)	4.47	29.99	-70.009	35	WET SCRUBBER
ACID SCRUBBER,TUBE(PM)	2.71	14.79	-85.208	150	WET SCRUBBER
ACID SCRUBBER,TUBE(ACID MIST)	2.19	19.00	-81.000	35	WET SCRUBBER
PHOSPHATE SCRUBBER,TUBE(PM)	8.54	17.66	-82.338	150	WET SCRUBBER
LEAD BATH STRAPPING LINE I(PM)	8.24	32.50	-67.503	150	BLOWER WITH VENT
LEAD BATH STRAPPING LINE II(PM)	8.09	33.84	-66.163	150	BLOWER WITH VENT
COATING PLANT I, PIPE PLANT(PM)	2.08	29.81	-70.187	150	BLOWER WITH VENT
COATING PLANT II, PIPE PLANT(PM)	2.20	30.18	-69.818	150	BLOWER WITH VENT
COATING PLANT III, PIPE PLANT(PM)	2.19	30.14	-69.860	150	BLOWER WITH VENT
COATING PLANT IV, PIPE PLANT(PM)	2.03	28.56	-71.441	150	BLOWER WITH VENT
ACID SCRUBBER,ARP(ACID MIST)	0.47	3.18	-96.820	150	LNG Gas

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	***Total During Previous Financial year***	***Total During Current Financial year***	***UOM***
3.3 Sludge and filters contaminated with oil	43.97	7	MT/A
5.1 Used or spent oil	42.25	23.863	MT/A
5.2 Wastes or residues containing oil	433.09	626.575	MT/A
6.2 Zinc fines or dust or ash or skimmings in dispersible form	560.54	650	MT/A
12.1 Acidic and alkaline residues	15724	16321	KL/A
12.4 Sludge from bath containing organic solvents	37.79	27.2	MT/A
12.5 Phosphate sludge	29.67	40	MT/A
20.2 Spent solvents	22.12	16.71	MT/A
21.1 Process wastes, residues and sludges	18.08	18.13	MT/A
33.2 Contaminated cotton rags or other cleaning materials	32.29	29.62	MT/A
33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	10382	0	Nos./Y
9.1 Lead bearing residues	34.91	24	MT/A

2) From Pollution Control Facilities

Hazardous Waste Type	***Total During Previous Financial year***	***Total During Current Financial year***	***UOM***
35.3 Chemical sludge from waste water treatment	1615	1775.24	MT/A

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
METAL SCRAP/TUBE/PIPES END/ EDGE MILLING/STRIP CUT PIECES/CUTTING SCRAP	67290	58516.19	MT/A
EMPTY DRUMS	4069	5755	Nos./Y

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
IRON OXIDE	2142.05	2934.79	MT/A

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
12.1 Acidic and alkaline residues	15724	16321	MT/A

Part-F

Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
3.3 Sludge and filters contaminated with oil	6.95	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
5.1 Used or spent oil	23.33	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
5.2 Wastes or residues containing oil	614.45	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
6.2 Zinc fines or dust or ash or skimming in dispersible form	645.94	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
12.1 Acidic and alkaline residues	16321	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
12.4 Sludge from bath containing organic solvents	24.32	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
12.5 Phosphate sludge	31.72	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
20.2 Spent Solvent	16.71	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
21.1 Process wastes , residues and sludges	18.13	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
35.3 Chemical sludge from waste water treatment	1775.24	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
33.2 contaminated cotton rags or other cleaning materials	29.62	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
33.1 Empty barrels/containers /liners contaminated with hazardous chemicals / wastes	0	Nos./Y	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER
9.1 Lead bearing residues	21.73	MT/A	MPCB RECOGNIZED AUTHORIZED PROCESSOR/RECYCLER

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
METAL SCRAPTUBE/PIPES END/STIP CUT PIECES/EDGE MILLING SCRAP/INSIDE/OUTSIDE BEAD CUTTING SCRAP	58516.19	MT/A	AUTHORIZED PROCESSOR/RECYCLER

Empty Drums	5755	Nos./Y	AUTHORIZED PROCESSOR/RECYCLER
IRON OXIDE	2934	MT/A	AUTHORIZED PROCESSOR/RECYCLER

Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	*Reduction in Water Consumption (M3/day)*	*Reduction in Fuel & Solvent Consumption (KL/day)*	*Reduction in Raw Material (Kg)*	*Reduction in Power Consumption (KWH)*	*Capital Investment(in Lacs)*	*Reduction in Maintenance(in Lacs)*
Replacement of Sugarcane	0	0	120000	0	22	0.0
Tube plant with STP Operation and Maintenance	0	0	0	0	196.7	0.0
LDP Coating env. O&M	0	0	0	0	8	0.0
Env. Monitoring	0	0	0	0	67	0.0
IARP,ETP&STP O&M	0	0	0	0	1932.25	0.0
NCRM env O&M	0	0	0	0	115.628	0.0
10500 nos saplings plantation	0	0	0	0	20.65	0.0
WCRM env. O&M	0	0	0	0	84	0.0

Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	*Environmental Protection Measures*	*Capital Investment (Lacks)*
Scientific Disposal of HW	Scientific disposal of different types of hazardous waste	223.91
Operation and Maintenance of ETP,STP and ARP	Treatment of Sewage and effluents	1932.25
Cost of Environmental Monitoring	Monitoring of parameters	67
10500 nos saplings Plantation Cost	Green Bel Development	20.65
Hazardous waste disposal	(ETP Sludge)	102

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	*Environmental Protection Measures*	*Capital Investment (Lacks)*
6000 sapling plantation	Green belt	80
Two HCL Online Monitoring at Stack	Online HCL Stack Monitoring	80
One Online AAQMS	Online AAQMS	94
Replacement of ARP Acid storage tanks	Water Pollution Prevention	220
New STP storage tank	Treated Sewage water storage	50
Replace Sugarcane to nitrogen automiser	Reduction of waste	20
Thinner recycling unnit	Reduction of waste	30

Part-I

Any other particulars for improving the quality of the environment.

Particulars

Improving the reduction of Co2, Waste reduction and Energy saving

Name & Designation

Mr.Kapil Modi, Executive Plant Head

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000058270

Submitted On:

18-09-2023