

FORM V
(See Rule 14)

Environmental Statement for the financial year ending on 31st March 2023.

PART-A

- (i) Name and address of the owner/ occupier of the industry operation or process.

M/s Tata Steel Ltd, Bearings Division, Nimpura Industrial Estate, P.O.: Rakhajungle,
P.S- Kharagpur, Paschim Medinipur, West Bengal, Pin-721301

- (ii) Industry category-Red
(iii) Production capacity- 33.806 Million units of Bearings produced between 01.04.2022 & 31.03.2023
(iv) Year of establishment- Sept 1979
(v) Date of the last environmental statement submitted- 11.10.2022

PART-B

I] Water and Raw Material Consumption

1. Water consumption cum/day
Process & Cooling – 78.68 KL
Domestic- 460.95 KL

Name of Products	Process water consumed per unit of production output	
	During the previous financial year (FY 22)	During the Current financial year (FY 23)
	[1]	[2]
Ball Bearings & Taper Roller bearings of different size	0.00096 cum/no	0.00075 cum/ no

II] Raw Materials consumption

Name of raw materials	Name of products	Consumption of raw materials per unit of output [Average]	
		During the previous financial year (FY 22)	During the Current financial year (FY 23)
(Races, Balls, Rollers, Metal cages etc.)	Bearings	99.26 gms / no	100.06 gms / no

PART – C

Pollution Discharge to environmental / unit of output
 [Parameters as specified in the consent issued]

1] Pollutants	Quality of pollutants discharged (mass / day)	Concentration of pollutants in discharged (mass / volume)	Percentage of variation from prescribed standards with reason
a) Water	Water discharge = 1) Zero Discharge 2) TSS- 0 kgs 3) Oil & grease- 0 kgs	pH – 7.21	Within permissible limit
		BOD –29.0 mg/Lit	Within permissible limit
		COD-177.5 mg/Lit	Within permissible limit
		TSS – 53.0 mg/Lit	Within permissible limit
		Oil & grease 3.1 mg/Lit	Within permissible limit
		Chloride as Cl-35.9 mg/Lit	
b) Air	PM – 5.06 kgs(Av)	PM – 51 mg/Nm(PM2.5)	Within permissible limit
		CO - < 0.2% v/v	Within permissible limit
	Sox - 0.57kgs (Av)	Sox- 181.61 mg/Nm3	
	Nox - 0.51kgs (Av)	Nox –208.68 mg/Nm3	

PART – D

HAZARDOUS WASTE

(As specified under Hazardous Water management and Handling Rules 1989)

Hazardous Waste	Total Quantity (Kg)	
	During the previous financial year (FY 22)	During the Current financial year (FY 23)
a) from Process		
Used oil	0 KL	0 KL
Nitrate/ Nitrate salt [Heat Treatment salt]	Process stopped	Process stopped
Oil Soaked Jute / cotton waste	6.42 Ton	21.78 T
b)From Pollution Control Activity (oily muck from ETP)	3.12 Ton	0 Ton
c)Electronic waste	0 kg	0 Kgs

PART – E

SOLID WASTE

Description	Total Quantity(Generated)	
	During the previous financial year (FY22)	During the Current financial year (FY 23)
a) From Process		
Grinding Swarf / Muck	196.35 MT	204.02 MT
Empty barrels	82 Nos	182 Nos
Iron Chips	0.34 MT	0.67MT
b) From Pollution Activity		
STP sludge (From dry bed of STP)	15 MT	17 MT
C) (1) Quantity recycled or reutilized within the	15 MT(STP SLUDGE)	17 MT(STP Sludge.)

units		
(2) Sold	Empty barrels – 394 Nos (Metallic)	Empty barrels – 344 Nos.(Metallic)
	Iron Chips -0.34MT	Iron Chips -0.67 MT
	M.S Scrap -19.82 MT	M.S Scrap -7.17MT
	Hard Bearings component- 30.430 MT	Hard Bearings components- 41.125 MT
	Rusted , pitted & damaged bearings- 21.760 MT	Rusted, pitted& Damaged Bearings-9.520 MT
	Electrical Scrap-0.42 MT	Electrical scrap-0.29MT
	Scrap Wood – 50.040 MT	Scrap Wood -53.260 MT
	Used Cardboard Box -31.300 MT	Used Cardboard Box- 32.120MT
	Empty Plastic containers-- (100+205)Lts capacity -141 nos	Empty Plastic containers- (100+205)Lts capacity -145 nos
	Empty Plastic containers-(20 Lts) capacity -65 nos	Empty Plastic containers- (20Lts) capacity -99 nos
	Rejected filters - 0.98 MT	Rejected filters - 0.37 MT
	Scrap(Plastic/Rubber)- 8.22 MT	Scrap(Plastic/Rubber)-14.06 MT
	Scrap m/cs & spare - 2 Nos	Scrap m/cs & spare - 3 Nos
	Scrap electrodes-0 MT	Scrap electrodes-0 MT
	Rejected spring - 00.00 MT	Rejected spring - 0.00MT
	Rejected Heat resistance hooks - 0 MT	Rejected heat resistance hooks - 0MT
	Used grinding wheels - 5.7 MT	Used grinding wheels - 4.76 MT
(3) Disposed	STP sludge – 15 MT	STP sludge – 17 MT
	Grinding Swarf - 196.35 MT	Grinding Swarf - 203.81 MT
	Iron dust -0 cub mtr	Iron dust -0 cub mtr
	Canteen Waste -4.0 MT	Canteen Waste - 3.8 MT

PART – F

1. The solid waste generated from process is approx. 558.38 kgs /day (av) of unutilized fines.
2. The solid waste generated from pollution control activities is 0 kg /day by stopping the old process.

Disposal practice of solid waste

1. The solid Non-Hazardous waste generated from process & pollution activities is used for low filling & as garden manure & all solid Hazardous waste sent to M/S W.B.W.M.L, Haldia for treatment & final disposal

PART – G

Various improvement project taken under TPM, ISO-9001:2015, ISO 14001:2015, ISO 45001:2018 , ASPIRE for yield improvement , reduction of electricity consumption, water consumption ,oil consumption & safe working zone etc. The treated water from E.T.P. is however profitably used in cultivation of adjacent land, Green initiatives taken to reduce energy consumption / water consumption & waste generation. Utility and reuse of water for industrial purpose and saved 500 KL water/month.

PART-H

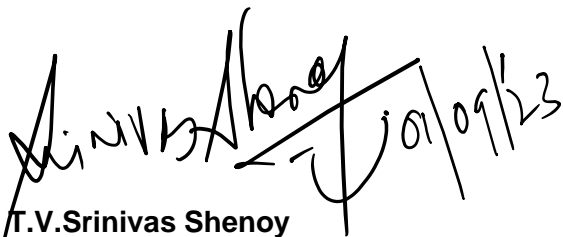
All the drains are being cleaned regularly. This division of TATA STEEL has been registered with m/s W.B.W.M.L, Haldia for disposal & treatment of hazardous waste generated during manufacturing process. All bio medicals wastes generated in our dispensary disposed within 48hrs for treatment at m/s W.B.W.M.L, Haldia.

We are testing all the stack , ambient air, oil mist level, ventilation , illumination , Bio assay & Chloride test of E.T.P treated Water , Noise level of different location to avoid abnormalities in process.

To maintain E.T.P process we are testing final discharged water regularly on monthly basis. We conduct medical tests of all employees and provide necessary medical treatment as per requirement.

PART -I

About 100 saplings were planted near to the housing complex and development of park is under plan in this year.



T.V.Srinivas Shenoy
Executive In- charge (Bearings)
TATA STEEL Limited
Bearings division
Kharagpur