Dr. Amit Ranjan Chakraborty
Chief Environment Management

EMD/C-23/409/20
September 18th, 2020

The Member Secretary
Jharkhand State Pollution Control Board
T.A. Division Building, HEC Campus, Dhurwa
RANCHI – 834004

Subject: Environmental Statement 2019-2020 for Tubes Division of Tata Steel Limited, Jamshedpur

Dear Sir,

This has reference to the captioned subject. Please find enclosed the **"Environmental Statement"** for Tubes Division of Tata Steel Limited, Jamshedpur for the year 2019-2020 duly filled in the prescribed format is enclosed for your kind consideration.

Thanking you

Yours faithfully,
For Tata Steel Limited

Dr. Amit Ranjan Chakraborty
Chief, Environment Management

Encl: As Above

Copy to: Regional Officer, Jharkhand State Pollution Control Board, Adityapur, Jamshedpur – 831 013

TATA STEEL LIMITED
Environment Management Jamshedpur 831 001 India
Tel 91 657 6647572 P&T 9297953299 (O) 9262290348 (M) e-mail amit.chakraborty@tatasteel.com
Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001 India
Tel 91 22 66658282 Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

ENVIRONMENTAL STATEMENT
FOR THE YEAR 2019- 2020

TUBES DIVISION
TATA STEEL LIMITED

Submitted by:
ENVIRONMENTAL MANAGEMENT DEPARTMENT
TATA STEEL LIMITED
JAMSHEDPUR-831001

FORM – V

Environment Statement Report for the Year ending 31/03/2020

PART-A

I)	Name and address of the occupier	:	Mr. T. V. Narendran Managing Director Tata Steel Limited, Jamshedpur-831001 Jharkhand
II)	Industry Category Primary (SIC Code) Secondary (SIC Code)	: : :	3547 Not available Not available
III)	Production capacity	:	235000 MTPA (Standard Tubes) 85000 MTPA (Precision Tubes)
IV)	Year of establishment	:	1954
V)	Date of last environmental statement submitted.	:	September 20, 2019 vide letter no. EMD/C-23/207/19

PART-B
WATER & RAW MATERIAL CONSUMED

i) Water Consumption (m^3/day)

Water Consumption	During the previous Financial Year (2018-19)	During the current Financial year (2019-20)
Industrial Consumption (Process & Cooling as Makeup water)	2,74,336 KL (752 m^3/day)	2,30,515 KL (632 m^3/day)
Domestic Consumption (as drinking water)	24,067 KL (66 m^3/day)	16,848 KL (46.16 m^3/day)

Name of the product	**Process water consumption per unit of product Output**	
	During the previous Financial Year (2018-19)	During the current Financial year (2019-20)
Standard Tubes & Precision Tubes	0.98 KL/Tonnes	0.90 KL/Tonnes

ii) Raw Material Consumption:

Name of Raw Material	**Name of the Products**	**Consumption of raw material**	
		2018-2019	**2019-2020**
		MT/Yr.	**MT/Yr.**
Hot & Cold Rolled Strips	Standard tubes & Precision tubes	2,88,703	269980
Zinc spelter		1931.332	2162.66
Preflux		62.810	80.4
Topflux		32.380	28.7
Sulphuric Acid		340.680	364.56
Hydrochloric Acid		180	200.78

PART-C

POLLUTION DISCHARGED TO ENVIRONMENT / UNIT OF OUTPUT (PARAMETER AS SPECIFIED IN THE CONSENT ISSUED)

Pollutants	Quantity of pollutants Discharged (mass/day)		Concentrations of pollutants discharged (mass / volume)		Percentage of variation from prescribed (standards with reasons.)
a) WATER	**kg/day**		**mg/L**		
	2018-2019	**2019-2020**	**2018-2019**	**2019-2020**	
TSS	2.24	NA*	20.28	28.0	-
Oil & Grease	0.31	NA	2.80	4.40	-
COD	9.41	NA	85.08	70.0	-
b) AIR	**kg/day**		**mg/Nm³**		
	2018-2019	**2019-2020**	**2018-2019**	**2019-2020**	
PM	11.16	12.21	17.5	18.27	-
SO_2	21.97	-	112.6	-	-
NO_x	3	-	111	-	-

*No process effluent is being discharged outside the premises

Ambient Air Quality (2019-20)

Parameter	Norm	UoM	Tube Division Near Canteen		
			Max	Min	Avg
Particulate Matter, PM_{10}	**100**	µg/m³	245.90	60.60	118.47
Particulate Matter, $PM_{2.5}$	**60**	µg/m³	129.20	38.30	60.66
Sulphur Dioxide (SO_2)	**80**	µg/m³	19.60	4.70	12.68
Nitrogen Dioxide, (NO_x)	**80**	µg/m³	47.60	16.70	25.46
Carbon Monoxide(CO)	**2**	mg/m³	1.11	0.40	0.57
Ammonia (NH_3)	**400**	µg/m³	42.80	16.90	31.05
Ozone (O_3)	**100**	µg/m³	36.20	13.80	21.24
Lead (Pb)	**1**	µg/m³	16.20	0.20	7.16
Arsenic (As)	**6**	ng/m³	NT	NT	NT
Nickel (Ni)	**20**	ng/m³	0.30	0.04	0.16
Benzene (C_6H_6)	**5**	µg/m³	< 4.2	< 4.2	< 4.2
Benzo alpha Pyrene (BaP)	**1**	ng/m³	< 0.5	< 0.5	< 0.5

PART-D

HAZARDOUS WASTES

(As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Amendment Rules, 2016)

Hazardous Wastes	Total Quantity (Tonne/year)	
	2018-19	2019-20
Zinc by product (Ash, Dross, Dust, Blowing)	656.69	843.03
Acid Residue (Hydrochloric Acid & Sulphuric Acid)	1133.47	1276.66
Phosphating sludge	92.84	60.18
Chemical sludge from common industrial ETP	95	72.60
Used oil & residue containing oil	245.11	44.63

PART-E

SOLID WASTES

Sl. No.	Solid Waste	Total Quantity Generated	
		2018-19	2019-20
a.	From process ▪ Metal finishing wastes	13704.12 MT	11001.68 MT
	▪ Zinc Metal Wastes	661.152 MT	827.563 MT
b.	From Pollution Control facility	Nil	Nil
c.	Quantity recycled within the unit	Nil	Nil

PART - F

Characteristics of hazardous as well as solid wastes and their method of disposal:

Hazardous / Solid wastes	Characteristics	Method of disposal
Metal Finishing Wastes	Ferrous	Auctioned to outside parties to reuse.
Zinc Metal Wastes	Zinc compound	Sent to registered recyclers.
Pickling Sludge	Acidic	Sent to registered recyclers.
Phosphating Sludge	Acidic	Auctioned to outside parties to reuse.
ETP Sludge	Acidic	Sent to TSDF facility outside the premise.

PART - G

Impact of pollution control measures on conservation of natural resources and consequently on the cost of production.	• Necessary measures have been taken to increase yield and reduce electricity, water and oil consumption, which reduces the overall cost of production. • 3200 m3 Rain Water Harvesting structure/Pond has been installed in old scooter shed area inside plant premises. • For FY 20, 590 nos. of saplings were planted. Almost all vacant space inside plant premises is covered with plantation and being maintained.

PART - H

Additional investment proposal for environmental protection including abatement of pollution	Effluent monitoring system is in place at ETP. However, online stack emission monitoring system in one stack is going to commissioned.

PART – I

Any other particulars for improving in respect of environmental protection and abatement of pollution.	The Tubes Division has implemented ISO: 14001:2015 (Environmental Management System).