

Raju Agrawal Head, Environment Clearance & Compliance (TSL) Environment Management

EMD/C-23/250/21 September 22, 2021

The Member Secretary

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

Subject: Environmental Statement 2020-2021 for Tata Growth Shop (Adityapur Complex) of Tata Steel Limited at Gamharia, Jamshedpur

Dear Sir,

This has reference to the captioned subject. Please find enclosed the **"Environmental Statement"** for Tata Growth Shop (Adityapur Complex) of Tata Steel Limited at Gamharia, Jamshedpur for the year 2020-2021 duly filled in the prescribed format is enclosed for your kind consideration.

Thanking you

Yours faithfully,

For Tata Steel Limited

Raju Agrawal

Head, Environment Clearance & Compliance (TSL)

Encl: As Above

Copy to: Regional Officer, Jharkhand State Pollution Control Board, Adityapur, Jamshedpur – 831013

ENVIRONMENTAL STATEMENT FOR THE YEAR 2020-2021

Tata Growth Shop Adityapur Complex Tata Steel Limited

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

FORM-V Environmental Statement for the financial year ending the 31/03/2021

PART-A

i)	Name and address of the owner / occupier of the industry operation or process	:	Mr. T.V. Narendran CEO & MD Tata Steel Limited Tata Growth Shop (Adityapur Complex) Gamharia, Saraikela Kharsawan 832108, Jharkhand
ii)	Industry Category	:	NA
	Primary (SIC Code)	:	Nil
	Secondary (SIC Code)	:	Metallurgical Machinery
iii)	Production Capacity	:	Steel Plant Equipment & Spare Capacity – 40150 MTPA Steel Plant Machinery production at Growth Shop for FY' 21: 6008 MTPA (Tata Growth Shop (TGS) is a multi-disciplinary engineering complex that designs and manufactures heavy engineering and material handling equipment including special purpose Electric Overhead Travelling Cranes.)
iv)	Year of establishment	:	1969
v)	Date of last Environmental Statement submitted	:	September 18th, 2020 vide letter no. EMD/C-23/406/20

PART-B

WATER & RAW MATERIAL CONSUMPTION

i) Water Consumption, KL/day

1. Plant (Cooling) : 275 2. Colony (Domestic) : 660

Name of the product	Process water consumption per unit of product Output (m ³ /t of product)			
	During the Previous Financial year 2019-2020 2020-2021			
Steel Plant Machinery	8.04	16.7		

ii) Raw Material Consumption: 31284 MT

Name of raw material	Name of the products	Consumption of raw material per unit of output (ton/ton of product)	
		During the Previous Financial year 2019-2020	During the Current Financial year 2020-2021
Steel Plates casting & forging	Steel Plant Machinery	1.24	5.2

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

Pollutants	pollu Disch	tity of tants arged s/day)	Concentrations Percentage of pollutants variation from in discharged prescribed (mass/volume) standards with reasons.		Percentage of pollution variation from in discharged prescribed (mass/volume) standards with reasons
	2019-20	2020-21	2019- 20	2020-21	In %age (referring CTO)
a) WATER	Kg/	/day		mg/lit	
TSS	NA	NA	22	21.7	-78.3
Oil & Grease	NA	NA	4.5	2.6	-74
COD	NA	NA	35	100	-60
BOD	NA	NA	19	11.5	-61.3
b) AIR	Kg/	Kg/day		g/Nm³	
PM	6.06	4.17	57.64	39.7	-73.5

Ambient Air Quality (2020-21):

Parameter	UoM	TGS Near Safety Office		
		Max.	Min.	Avg
Particulate Matter, PM ₁₀	μg/m³	353	46.2	204.4
Particulate Matter, PM _{2.5}	μg/m³	104	23.5	71.3
Sulphur Dioxide (SO ₂)	μg/m³	32	8	13.6
Nitrogen Dioxide, (NO _x)	μg/m³	93	18.9	51.3
Carbon Monoxide (CO)	mg/m³	0.45	0.22	0.28
Ammonia (NH ₃)	μg/m³	132	16.2	75.8
Ozone (O ₃)	μg/m³	18	5.8	10.4
Lead (Pb)	ng/m³	0.19	0.11	0.14
Arsenic (As)	ng/m³	<1.0	<1.0	<1.0
Nickel (Ni)	μg/m³	5.4	0.11	3.0

Environmental Statement for 2020-2021

Benzene (C ₆ H ₆)	μg/m³	<1.0	<1.0	<1.0
Benzo alpha Pyrene (BaP)	ng/m³	<1.0	<1.0	<1.0

PART-D

HAZARDOUS WASTES

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

	Hazardous Waste	Total Quantity (Kg)		
		During the Previous Financial year 2019-2020	During the Current Financial year 2020-2021	
a)	From process: - Used oil	55.86 KL	53.13 KL	
b)	From Pollution Facilities.	Nil	Nil	

PART-E Solid Waste

		During the Previous Financial year 2019-2020	During the Current Financial year 2020-2021
а	From process		
	Steel Scrap	4215 MT	5311.08 MT
b	From pollution control facilities	Not Applicable	
c1	Quantities recycled or reused within the unit -		Not Applicable
c2	sold-		
	Steel Scrap	4215 MT	5316.13
сЗ	Disposed -		Not applicable

PART-F

Please specify the characterization (in terms of composition of quantum) of hazardous as well as solid wastes and indicate disposal practices adopted for both these categories of wastes.

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

Hazardous / Solid wastes	Characterist ics	Method of disposal
Steel Scrap (Solid Waste)	Ferrous	Auctioned to outside parties to reuse.
Used Oil	Oily	Sent to registered recyclers.

PART-G

Impact of po	llution co	ntrol
measures	taken	on
conservation	of na	tural
resources a product	nd cost	of

- Settling tank is constructed and in operation to catch oil and TSS from Canteen wastewater.
- Oil Removal plates are installed at Water discharge point from Plant.
- 43 nos. of saplings have been planted in FY'21.

PART-H

Additional	
measures/in	vestment
proposal	Environmental
Protection	including
abatement of	f pollution
prevention of	f pollution

- CAAQMS is installed inside the campus.
- Energy Saving Initiatives taken at TGS
 - a) 16 Nos of 800 W MH Lamps were replaced by 8 Nos of 300 W LED Lamps in 5 no. of Hi - mast Lighting Tower.
 - b) 220 Nos of MH Light fittings were replaced by 150 W and 90 W LED Light fittings.
 - c) 60 Nos of 400 W MH Light fittings were replaced by 90 W LED Light fittings.
 - d) Power Factor of the Plant is maintained between 0.95 to 0.97 to improve utilization factor.
 - e) New ABM Line at SFS were illuminated wit 200 W LED Light fittings.
 - f) 70 Nos of 66 W 2' x 2' light fittings were replaced at different offices with 36 W 2' x 2' LED Light fittings.

PART-I

Particular for improving the	Environment	Management	System	(ISO-
quality of Environment	14001:2015) is	s implemented		·