

TSJ/EMD/C-23/049/25 September 25, 2025

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

Subject: Submission of Environment Statement for Tata Steel Limited, Jamshedpur for the year 2024-25

Dear Sir

With reference to captioned subject, we are submitting herewith the Environment Statement for Tata Steel Limited, Jamshedpur for the year 2024-25 duly filled in the prescribed format for your kind consideration.

You are requested to kindly acknowledge the same and place in your records.

Thanking you

Yours faithfully, For Tata Steel Limited

Utsav Kashyap

**Head Environment Clearance & Compliance (TSL)** 

Enclosures as above

utlay Kashyap

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

# **ENVIRONMENTAL STATEMENT FOR THE YEAR 2024-2025**

# TATA STEEL LIMITED JAMSHEDPUR

Submitted By:
Environmental Management Department
Tata Steel Limited
Jamshedpur-831001
Jharkhand

# [Form V] Environment Statement for the Financial Year ending 31st March 2025

#### **PART-A**

(i)	Name & address of the	Mr. T.V. Narendran, CEO & MD	
	owner/occupier of the	Tata Steel Limited	
	industry operation or	Jamshedpur-831001	
	process:	East Singhbhum, Jharkhand	
	Industry Category	Red Category	
(ii)	Primary STC Code:	3312	
	Secondary SIC Code	331200	
(iii)	<b>Production Capacity</b>	11 MTPA Crude Steel	
(iv)	Year of Establishment	1907	
(v)	Date of last Environment	27 September 2024	
	Statement submitted	27 September 2024	

# PART-B WATER & RAW MATERIAL CONSUMPTION

### i) Water Consumption (m³/day)

Process & Cooling : 39,423

Domestic Consumption : 10,464

Name of the product	Process water consumption/unit of product output (m³/tcs)		
Crude Steel	During the Previous Financial Year (2023-24)	During the Current Financial year (2024-25)	
	1.62	1.37	

### ii) Raw Material Consumption (Works):

Name of raw	Name of	Consumption of raw material per unit of output (kg/ton of crude steel)		
material	products	During the Previous Financial Year (2023-24)	During the Current Financial year (2024-25)	
Iron Ore		1555	1536	
Coal		212.92	233.47	
Coke		435.48	407.18	
Limestone	Crude	321.96	319.42	
Dolomite	Steel	54.61	48.38	
Zinc		0.56	0.62	
Pellet Purchased		0.88	0.95	
Others		255.42	238.41	

PART-C Pollution discharged to environment/unit of output

Pollution	discharged	f pollutants (mass/day)	Concentrations of pollutants in discharges (mass / volume)		% of variation from prescribed standards with
	(Tons	s/day)	m (m	ng/L)	reason
(a) Water	2023-24	2024-25	2023-24	2024-25	Teason
TSS	0.94	0.84	65	64	-36
COD	1.42	0.82	86	74	-70
BOD	0.17	0.16	10	14	-53
Oil & grease	0.04	0.03	3.0	2.64	-73
(b) Air	2023-24	2024-25	2023-24	2024-25	
	(Tons/day)		(mg	/Nm³)	
PM	5.69	5.30	8.63	7.96	-92
SO <sub>2</sub>	15.48	18.57	73.85	86.33	-
NOx	14.14	16.85	67.47	78.30	-

PART-D
Hazardous Waste
[As Specified under Hazardous and Other Wastes (Management and Transboundary
Movement) Rules, 2016]

		Total Quantity (Tons)		
	Hazardous Waste	During the Previous Financial Year (2023-24)	During the Current Financial year (2024-25)	
(a) F	rom Process			
1.	Used or spent oil	2308	1454	
2.	Wastes or residues containing oil	493	4752	
3.	Zinc fines or dust or ash or skimming in dispersible form	901	974	
4.	Spent bath and sludge containing sulfide, cyanide and toxic metals	109	119	
5.	Decanter tank tar sludge	9632	9576	
6.	Process wastes, residues and sludges	-	4	
7.	Empty barrels/ containers/ liners contaminated with hazardous chemicals/ wastes	302	332	
8.	Contaminated cotton rags or other cleaning materials	245	132	
9.	Exhaust Air or Gas cleaning residue	572500	552716	
10.	Spent ion exchange resin containing toxic metals	17	19	
11.	Chemical sludge from wastewater treatment (ZED salt from Tertiary Treatment Plant)	-	49	
12.	Muck Waste	12703	14325	
13.	Used Glass wool	165	152	
14.	Inorganic Acid/Mixed Chemical	21	43	

### **Environmental Statement 2024-25**

15. Jelly filled Copper cables	-	206
(b) From Pollution Control Facilities		
1. APCE Dust	67,836	76,534
2. BOD Sludge	294	98

### PART-E Solid Wastes

		Total Quantity (Tonnes)		
		During the Previous Financial Year (2023-24)	During the Current Financial year (2024-25)	
(a) Fr	om Process			
1.	Granulated BF Slag	41,61,472	40,46,649	
2.	Air Cooled BF Slag	2,15,500	2,70,519	
3.	BOF LD Slag	20,05,309	19,51,246	
4.	Mill Scale	1,12,543	1,03,640	
5.	Iron Oxide	7544	7971	
6.	Mill Sludge	3255	2881	
(b) Fr	om Pollution Control	Facilities - Nil		
(c) (1)	) Quantity recycled or	re-utilized within the unit		
		During the Previous Financial Year	During the Current Financial year	
		(2023-24)	(2024-25)	
1.	Air Cooled BF Slag	24,000	-	
2.	BOF LD Slag	1,53,466	1,62,805	
3.	Mill Scale	1,13,441	94,326	
4.	Iron Oxide	272	443	
5.	Mill Sludge	3143	3068	
(2) So	old	During the Previous Financial Year	<b>During the Current Financial year</b>	
		(2023-24)	(2024-25)	
1.	Granulated BF Slag	41,44,572	40,45,446	
2.	Air Cooled BF Slag	1,92,000	2,71,019	
3.	BOF LD Slag	18,80,147	17,44,303	
4.	Mill Scale	-	-	
5.	Iron Oxide	7414	7482	
6.	Mill Sludge	-	-	
(3) Disposed		No solid waste is being disposed of.		

### 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.

Name of Wastes	Chemical Composition and Quantum (%)	Disposal Method	
	FeO – 0.5-15.21; Fe <sub>2</sub> O <sub>3</sub> – 4.4-4.4, Total Fe –	Uses LD slag to make branded	
	0.37-0.37; MgO - 4.5-10; CaO - 40.08-57;	product i.e. Tata Aggreto, which is a	
LD Slag	MnO - 0.2-1.95; $SiO_2$ - 2-10; $Al_2O_3$ - 8-35;	coarse aggregate for road	
	$P_2O_5 - 0.11-0.68$ ; S - 0.085-1.83; $Cr_2O_3 -$	construction	
	0.14-0.43		

Name of Wastes	Chemical Composition and Quantum (%)	Disposal Method
	w.r.t. Guidelines on Management of Pyrometallurgical Slags - Iron & Steel Slags by CPCB.	<ul> <li>Uses LD slag to make branded product i.e. Tata Nirman, a fine aggregate used to manufacture fly ash bricks and clinker.</li> <li>Supplies processed slag to cement companies for cement and clinker production, brick makers, and for infrastructure projects like national highway work etc.</li> </ul>
BOF Slag	$\label{eq:feom} \begin{split} &\text{FeO}-13.54\text{-}23.5;  \text{Fe}_2\text{O}_3-23\text{-}23.57,  \text{Total Fe} \\ &-16\text{-}20.63;  \text{MgO}-4.16\text{-}15.15;  \text{CaO}-40.95\text{-} \\ &52.35;  \text{MnO}-0.58\text{-}3.12;  \text{SiO}_2-10.13\text{-}19.06; \\ &\text{Al}_2\text{O}_3-0.27\text{-}5.36;  \text{P}_2\text{O}_5-0.6\text{-}2.68;  \text{S}-0.049\text{-} \\ &3.5;  \text{Free CaO}-2.53\text{-}3.96;  \text{Hg}-0.086  \text{mg/kg} \\ &\text{w.r.t. }  \text{Guidelines on Management of Pyrometallurgical Slags - Iron \& Steel Slags by CPCB.} \end{split}$	<ul> <li>Uses BOF slag branded as Tata         Aggreto, for road construction and         maintenance, particularly for national         highways, as a substitute for natural         aggregates.</li> <li>Uses BOF slag to produce Tata         Nirman, a slag-based product for the         brick manufacturing industry.</li> <li>Uses BOF slag to produce branded         product i.e. Dhurvi Gold, a soil         enhancer for agriculture.</li> </ul>
BF Slag	$SiO_2-26.4-37.2; CaO-28.72-37.22; Al_2O_3\\-14-35.3; MgO-0.52-10.21; MnO-0.07-0.47; FeO-0.04-0.66; Fe-0.08-0.9; S-0.3-0.85; TiO_2-0.51-0.9; Hg-0.018 mg/kg$ w.r.t. Guidelines on Management of Pyrometallurgical Slags - Iron & Steel Slags by CPCB.	<ul> <li>Uses BF slag for making Tata Dureco for concrete and as aggregate in road construction.</li> <li>Uses BF slag as railway ballast and sold to cement industries.</li> </ul>

#### **PART-G**

## Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production

- Reduction in freshwater consumption by increase in quantity of treated effluent from upgraded CTEP.
- Reduction in raw material consumption by recycling, re-use & co-processing of muck waste, flue dust, wastewater treatment sludges in agglomeration.
- Initiative to convert kitchen and other food waste into methane-rich biogas and uses it to replace LPG in commercial kitchens, such as those at the GT Hostel and the United Club.
- Replacement of diesel and petrol driven vehicles by 67 e-vehicles for local commute thus resulted in reduction of consumption of natural resource like petrol & diesel.

#### PART-H

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

- Deployment of facilities such as industrial vacuum cleaning, mechanical road sweeping machine, dust suppression through water sprinklers and mobile water sprinklers and through dust extraction systems.
- Facilities like telescopic chutes, closed conveyors and covered sheds have been installed for material handling & storage.
- Trucks and dumpers are covered for material transportation which can be air borne inside the premises.
- Installation of new water jet dust suppression system at pellet plant, high pressure mist beam canon at I-Blast Furnace, increased the frequency of road sweeping through mechanized sweeping machines, deployed new water tanker cum mist canon, mist cannons in the MRP area and other vulnerable areas.
- Increment in the mist fog curtain from 180 m to 380m at MRP area, installation of more than 20 feet high new wind curtain along the material dispatch road & in MRP area.
- To reduce the stack dust emissions, we have upgraded the bag filters at Raw Material Handling section and Ladle Furnace (LF) as well as have replaced the existing ESPs with bag filters to effectively control the secondary emissions in LD1 of the Steel Melt Shop and installed new DE systems at Pellet Plant.
- Upgradation of CETP capacity from 4 MGD to 9 MGD

#### PART-I

#### Any other particulars for improving the quality of environment

- Replacement of 10 years above old & outlived Split/window AC to increase the efficiency and reduction in power consumption is in progress.
- We have planted 1,46,681 nos. saplings during FY'25 inside the works, Jugsalai Muck Dump area and in Township.
- Waste Plastic being generated from plant premises are being for road construction as a part of Endof-Life Management.
- The company engages in scrap recycling, procuring various types of scrap (from end-of-life vehicles to household scrap) and processing it to improve its quality for use in steelmaking.