

The Member Secretary, Jharkhand State Pollution Control Board, T.A. Division (Ground Floor), H.E.C. Dhurva, Ranchi – 834004 Jharkhand

WBD/EMC/4016/105/25

Date: 26.09.2025

Subject: Submission of Environmental Statement of Power House unit of West Bokaro Division, Tata Steel Limited for the year 2024-25

Dear Sir,

Please find enclosed herewith the duly filled "Environmental Statement" (Form-V) of **Power House unit** of West Bokaro Division, Tata Steel Ltd. for the year 2024-25.

Kindly acknowledge the same & oblige.

Thanking you, Yours faithfully,

Head (Environment Management)

Raw Material Division

Tata Steel Ltd.

Encl: As Above

Copy to: The Regional Officer, Jharkhand State Pollution Control Board, PTC Chowk, Matwari, Hazaribagh – 825301 (Jharkhand)

FORM - V (See Rule -14)

ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH, 2025

UNIT: POWER HOUSE, WEST BOKARO DIVISION, TATA STEEL LIMITED

PART - A

1 Name and address of the owner/ occupier of

the industry, operation or process

Mr. Mazhar Ali

Chief (Engineering & Projects),

West Bokaro Division,

TATA Steel Limited, P.O.- Ghatotand Dist. Ramgarh, Jharkhand-825314

2 Industry Category

Captive Power House

3 Production Capacity

2 X 10 MW Thermal Power Plat

4 Year of Establishment

1994

5 Date of last Environmental Statement

27.09.2024

submitted.

27.05.202

PART - B

WATER AND RAW MATERIAL CONSUMPTION

i. Water Consumption (m3/d):

Process

:1783.26 •

Cooling/ Spraying

: 2226.67 (Boiler Feed + Cooling)

Colony

: This is included in the Environmental Statement of West Bokaro Colliery

Name of the	Process water consumption per product output (m3/KWH)		
product	During the previous Financial Year (2023-24)	During the current Financial Year (2024-25)	
Electricity	0.011	0.015	

ii. Raw Material Consumption:

	Name of the	Consumption of Raw Material per unit of output (kg/kwh)		
Name of Raw materials	product	During previous financial year (2023-24)	During current financial year (2024-25)	
Coal (Washery Rejects)	Electricity	2.18	1.93	

PART - C

POLLUTION DISCHARGES TO ENVIRONMENT/ UNIT OF OUTPUT (PARAMETERS AS SPECIFIED IN THE CONSENT ISSUED)

	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in	Percentage of variation from
Pollutants		discharges	prescribed standards with
		(mass / volume)	reason
Water Zero Effluent Discharge is maintained.			

Air

Air quality is monitored and found within prescribed limit. Details for FY25 are as follows:

Fugitive Dust Monitoring:

Parameter	Power House	Standard		
SPM	242	7.00		
RPM	171	300		
SO2	28.14	120		
Nox	23.74	120		

All values are in (µg/m3)

AAQ Report:

Parameter	Makundabe da	Housing Complex	Banji	Pundi	Standard
PM10	73.16	72.12	68.08	68.82	10 0
PM2.5	43.03	41.26	48.24	42.42	60
SO2	21.19	23.28	21.79	22.49	.80
Nox	20.78	21.17	21.54	20.95	80

All values are in (µg/m3)

The above data shows the average ambient air quality during FY-25.

Stack Monitoring:

Parameters	·PM·	SO₂	NOx
Emission (mg/Nm3)	60.64	221.75	165.57
Emission rate (Kg/day)	217.64	795.87	594,24

PART-D

HAZARDOUS WASTE

[as specified under Hazardous & Other Waste (Management & Transboundary Movement) Rules, 2016]

		Total Quantity		
ŧ	Hazardous Waste	During the previous financial year (2023-24)	During the current financial year (2024-25)	
a)	From Process: Oil soaked cotton (jute)	0.25 ton	0.01 ton	
b)	From Pollution control facilities: Used lubricating Oil Non-Ferrous scrap (Cu -Wires, Zn chips, etc.)	• 1.79 KL • Nil	• 1.56 KL • Nil	

PART-E

SOLID WASTE

	1.00	Total Quantity		
Solid Wastes		During the previous financial year (2023-24)	During the current financial year (2024-25)	
(a)	From Process Coarse ash (from boiler)	Approx. 51268 ton	Approx. 43482 ton	
(b)	From Pollution control facilities • Fly ash (from ESPs)	Approx. 76901 ton	Approx, 65223 ton	
(C)	(1) Quantity recycled or reutilized within the unit (2) Sold & (3) Disposed	(1) The ash being dump for filling of low laying area created between the OB dumps.		

PART - F

THE CHARACTERISTICS (in terms of composition and quantum) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE CATEGORIES OF WASTES

Category of Waste		Characteristics	Quantity	Disposal Practice	
Solid	Waste				
1. 2.	Coarse Ash Fly Ash	Burnt coarse coal particles (Solid) Burnt fine coal particles (Solid)	~43482 ton ~65223 ton	Being used in filling low lying area between OB dumps.	
Hazardous Waste 1. Used Oil		Used Oil (Liquid)	1. 1.56 KI.	Disposed-off to authorize recycler. Safely collected and stored.	
2.	Oil soaked cotton/ jute	Used Cotton(Solid)	2. 0.01 ton		

PART - G

IMPACT OF POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION

- FBC based power plant used high ash content (58-62%) reject coal as fuel and produces power in efficient way. A four field BHEL make Electrostatic Precipitator has been installed with various associated auxiliary system which limits the emission well below the permissible norm.
- Online stack monitoring system is installed for monitoring & recording of stack emission level for both the stacks and data transmission facility has been extended to JSPCB office, Ranchi.
- We have established Environment Laboratory for monitoring purpose. Also Online Ambient Air Quality monitoring is being practiced.
- The combined impact due to implementation of pollution prevention and control measures on cost per tonne of ROM coal, of entire west Bokaro division (Washery, PH, Mines, Eng. services, Logistic, etc.) is Rs. 86.30 Crore.

In addition to the above Tata Steel Foundation, West Bokaro is engaged in peripheral developmental activities in villages around the mine. The projects of the Society include irrigation and agricultural extension projects, plantation programmes, installation of solar street lights and illuminate villages on through low cost, construction of ponds in support to provision of irrigation water and for other domestic use and in recharging groundwater by arresting the flow of rainwater in downstream, civic amenities development, medi-care and health education, rural sports, skill development and promotion of rural cultural activities.

PART-H

ADDITIONAL MEASURES/ INVESTMENT PROPOSAL FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION, PREVENTION OF POLLUTION

- All ESP of power house are adequately maintained and all online stacks monitoring system is smoothly working in power house. Regular maintenance of all equipment is done for enhancement of efficiency of PH.
- Zero discharge is being maintained strictly with close circuit recycling of water.
- We have established Environment Laboratory for monitoring purpose. Also Online Ambient Air Quality monitoring is being practiced.

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

- West Bokaro Division of TATA Steel Ltd. is committed to improve safety and environment by strictly practicing Environment Management System (ISO:14001). Various programs are arranged such as Sustainability Month, Green Month, World Environmental Day, World River Day, Earth Day, Biological Diversity Day, Forestry Day, World Water Day, Van Mohotsav for public awareness. West Bokaro Division of TATA Steel Ltd. is also certified to ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018.
- EMS ISO 14001 & ISO 45001 are being monitored and practiced strictly to protect and preserve the environment by ecofriendly operations and prevent any potential hazard to become risk posing serious threat to environment in a proactive manner. Reduction in water consumption by ensuring its use in judicious manner, further, working on to reduction of power consumption by improving / replacing various energy efficient equipment.
- The Company is having a full-fledged Environmental Management Department with personnel from relevant fields to take care of all environmental aspects relating to the mines of TATA STEEL. This department has in-house capabilities for monitoring various environmental parameters and suggesting to the management for necessary abatement measures.

Mr. Mazhar Ati, Chief Engineering & Proje West Bokarocolliery, Jata Steel Limited,
P.O. - Ghatotand, Dist. - Ramgarn, Jharkhand - 825314