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

WBD/EMC/4016/085/26
Date: 29.09.2026

Subject: Submission of Environmental Statement of Washery-II unit of West Bokaro Division, Tata Steel Limited for the year 2025-26

Dear Sir,

Please find enclosed herewith the duly filled "Environmental Statement" (Form-V) of **Washery-II** unit of West Bokaro Division, Tata Steel Ltd. for the year 2025-26.

Kindly acknowledge the same & oblige.

Thanking you,
Yours faithfully,

Sr. Area Mgr. (Environment)
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)

TATA STEEL LIMITED
West Bokaro Division Ghatotand Jharkhand 825 314 India
Tel 91 6545 262356 (O) Fax 91 6545 262221 262172
Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001
Tel 91 22 66658282 Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

FORM - V
(See Rule -14)

ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH, 2026

UNIT: WASHERY - II, WEST BOKARO DIVISION, TATA STEEL LIMITED

PART - A

1	Name and address of the owner/ occupier of the industry, operation or process	:	Mr. Ashutosh Kumar Pandey Chief (CB), West Bokaro Division, TATA Steel Limited, P.O.- Ghatotand Dist. Ramgarh, Jharkhand-825314
2	Industry Category	:	Major (Coal Beneficiation)
3	Production Capacity	:	2.5 MTPA Raw Coal Throughput
4	Year of Establishment	:	1982
5	Date of last Environmental Statement submitted.	:	26.09.2025

PART – B

WATER AND RAW MATERIAL CONSUMPTION

i. Water Consumption (m3/d):

Process : 1035.37
Cooling/ Spraying in mine pits : Not Applicable
Colony : This is included in the Environmental Statement of West Bokaro Colliery

Name of the product	Process water consumption per product output (m3/ton)	
	During the current Financial Year (2024-25)	During the current Financial Year (2025-26)
Clean Coal	0.16	0.16

ii. Raw Material Consumption:

Name of Raw materials	Name of the product	Consumption of Raw Material per unit of output	
		During current financial year (2024-25)	During current financial year (2025-26)
Raw Coal	Clean Coal	2.58 t/t of clean coal	2.41 t/t of clean coal
Magnetite	Middling	0.0022 t/t of coarse coal	0.0028 t/t of coarse coal
Synthetic Collector		0.0003 t/t of fine raw coal	0.0004 t/t of fine raw coal
Frother		0.0000 t/t of fine raw coal	0.0001 t/t of fine raw coal
Flocculent		0.0001 t/t of fine raw coal	0.0001 t/t of fine raw coal

Since Magnetite, Synthetic Collector, Frother and Flocculant are being maintained combinedly for Washery-II and Washery-III so consolidate value for both washeries is given.

PART – C

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

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

Air	Air quality is monitored and found within prescribed limit. Details for FY26 are as follows: **Fugitive Dust Monitoring:**

Parameter	Washery Complex	Standard
SPM	230.90	700
RPM	142.70	300
SO2	20.76	120
Nox	23.65	120

All values are in (µg/m3)

AAQ Report:

Parameter	Makundabeda	Housing Complex	Banji	Pundi	Standard
PM10	81.07	83.81	78.92	80.11	100
PM2.5	48.29	46.82	44.77	43.34	60
SO2	17.34	18.32	17.46	20.04	80
Nox	20.69	21.13	20.69	19.65	80

All values are in (µg/m3)

Due to absence of stationary source, it is difficult to measure pollutants load. So, the quantity of air pollutants discharged in Kg/day cannot be ascertained. The above data shows the average ambient air quality during FY-26.

PART–D

HAZARDOUS WASTE

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

Hazardous Waste	Total Quantity	
	During the current financial year (2024-25)	During the current financial year (2025-26)
a) From Process: Oil soaked cotton (jute)	0.04 ton	0.084 ton
b) From Pollution control facilities: Used lubricating Oil	6.67 KL	9.68 KL

PART–E

SOLID WASTE

Solid Wastes		Total Quantity	
		During the previous financial year (2024-25)	During the current financial year (2025-26)
(a)	From Process: • Rejects (by products) • Tailings	 • 507783 ton • 429385 ton	 • 609157 ton • 622645 ton
(b)	From pollution control facilities	Nil	Nil
(c)	I. Quantity recycled or reutilized within the unit • Coal Reject*	• 1.82 lakh ton used in captive power plant (Rejects are being used in FBC power plant, disposed-off to outside agencies & stacked in specified locations).	• 1.89 lakh ton used in captive power plant (Rejects are being used in FBC power plant, disposed-off to outside agencies & stacked in specified locations).
	II. Sold (to reuse as fuel) • Coal Reject* • Tailings*	• 6.81 lakh ton to institutionalized customer operating power plant. • 10.61 lakh ton to Brick Kiln and power plant operator..	• 14.69 lakh ton to institutionalized customer operating power plant. • 12.18 lakh ton to Brick Kiln and power plant operator.
	III. Disposed	Nil	Nil

Note: * Since the Coal reject and tailings of Washery-II & Washery-III are being maintained combined at a single location so the above mentioned quantity in item (c) includes coal reject and tailings of both Washery-II and washery-III.

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. Rejects	Coal of -13mm size (Solid)	609157 ton	Used in FBC power house and disposed-off to outside parties operating power plant / stacked.
2. Tailings	Coal of -0.5mm size (Solid)	622645 ton	Disposed-off to outside agencies (Brick klin manufacturer, institutionalized customer).
Hazardous Waste			
1. Used Oil	Used Oil (Liquid)	9.68 KL	Disposed-off to authorized recycler.
2. Oil soaked cotton/jute	Used Cotton (Solid)	0.084 ton	Safely collected and stored.

PART – G

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

- Adequate fixed type dust suppression arrangement is working inside Washery roads.
- Dry fog system is operational in coal handling plant.
- In addition to above, modifier has been introduced in froth-flotation process for additional recovery of clean coal, which is not only increases the yield of process reduces the raw coal quantity for the same quantity of clean coal thus conserves the natural resources.
- Fixed type water spraying system inside washery complex are being used for dust suppression.
- We have established Environment Laboratory for monitoring purpose. Online Ambient Air Quality monitoring is being practiced.
- One Sewage Treatment Plant (STP) of capacity 5 KLD is installed for canteen liquid waste.
- 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. 76.14 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, creation of SAVE FOREST groups, 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

- Dry fog dust suppression system is also extended to raw coal screen area to minimize fugitive emission.
- Efficient LED lights are introduced in canteen areas.

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 eco-friendly 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. Mechanical Tailing dewatering plant is in operation to recover tailings and ensure recycling of water to wash plant. This has reduced the use of tailing ponds, a commitment towards continual improvement of environmental performance.
- 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.

CHIEF (C B)
West Bokaro

Mr. Ashutosh Kumar Pandey, Chief (Coal Beneficiation)
West Bokaro Colliery, TATA Steel Limited,
P.O. - Ghatotand, Dist.- Ramgarh, Jharkhand - 825314