

The Member Secretary, Jharkhand State Pollution Control Board, T.A. Bhawan, H.E. C. Campus, Dhurwa, Ranchi, 834004, Jharkhand.

Ref. No. - JMB/ENV/ESSA/05/ 442 /2025

September 30th, 2025

Sub: Annual Environment Statement in Form V for the FY-25.

Dear Sir,

We are enclosing herewith Combined Annual Environment Statement in Form-V for the FY-25 in respect of **Bhelatand A. Colliery and Bhelatand Washery** of M/s Tata Steel Limited, Jharia Division for your kind perusal.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully, For Tata Steel Limited

Head (Planning)

CC: Regional Officer, Jharkhand State Pollution Control Board, H.I.G. -1 Sardar Patel Nagar, Housing Colony Hirapur, Dhanbad (Jharkhand).

Environmental Statement for the financial year ending the 31st March -2025 Bhelatand A. Colliery & Integrated Washery

PART - A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Bhelatand A. Colliery & Integrated Washery
Manager :	Mr. Manoj Kumar Head Bhelatand A Colliery Tata Steel Ltd., P.O Bhelatand Dist Dhanbad, Jharkhand-828103
Nominated Owner :	Mr. T.V. Narendran CEO&MD, Tata Steel Ltd Jamshedpur, Dist- East Singhbhum Jharkhand – 831 001
2.Industry category: Primary (STC Code) Secondary (STC Code)	
3. Production Capacity - Units	Colliery: 0.41 MTPA Raw Coal Washery: 1.5 MTPA Raw coal feed
4.Year of Establishment	Colliery: 1910 Washery: 1995
5.Date of the last environmental statement submitted	Colliery & Washery 27 th September 2024 (Vide Letter No. JMB/ENV/ESSA/05/567/2024)

PART - B

Water and Raw Material Consumption

1. Water Consumption M³ / day.

	Water consumption in 2023-2024	Water consumption in 2024-2025
Process	Not Applicable	Not Applicable
Industrial	7.46 M ³ /day	6.61 M³/day
Domestic	765.838 M³/day	823.22 M ³ /day
Bhelatand Co	oal Preparation Plant	
Process	426.06 M ³ / day	438.24 M ³ / day
Cooling	Not Applicable	Not Applicable
Domestic*	$1 \text{ M}^3 / \text{day}$	$1 \text{ M}^3 / \text{day}$

^{*}The domestic water consumption in colonies has been considered in Bhelatand A. Colliery.

Environmental Statement for the financial year ending the 31st March -2025 Bhelatand A. Colliery & Integrated Washery

Sl. No	Name of the products	Process water consumption	oer unit of product output.
During the previous financia year 2023-2024		During the current financial year 2024-2025	
Bhe	latand A. Colliery		
1.	Raw Coal	Not Applicable	Not Applicable
Bhe	latand Coal Preparation F	Plant	
1.	Clean Coal	0.26 M3/Ton	0.39 M3/Ton

2. Raw Material Consumption

Sl. No	Name of the Raw	Name of the	Raw Materials consumptio	n per unit production output.
Material product		product	During the previous financial year 2023-2024	During the current financial year 2024-2025
Bhe	latand A. Collie	ry	*	
1.	Explosives		0.26 Kg/Ton	0.27 Kg/Ton
2.	Detonators	Raw Coal	0.51 Nos/Ton	0.55 Nos/Ton
Bhe	latand Coal Pre	paration Plant		
1.	Raw Coal	GI G I	1.79 trc/tcc	1.69 trc/tec
2.	Magnetite	Clean Coal	0.80 kg/ton	1.23 kg/ton

^{*}trc stands for Total Raw Coal & tcc stands for total clean coal

$\frac{PART-C}{Pollution\ discharged\ to\ environment\ /\ unit\ of\ output.}$

(Parameter as prescribed in the consent issued)

SI. No	Pollution	Quantity o	Quantity of pollutants discharged (mass/day)				Percentage of variation from prescribed standard with reason.
A.	AIR	PM ₁₀ Level : 24	PM 2.5 Level: 24	SO2	NO ₂ 2	- 1	Ambient air quality is being
		Hourly		Level:	Level:	0.000	Ambient air quality is being measured and all values are within
			Hourly		Hourl		
		Limit-	Limit-	Hourly	Limit		limits as per NAAQS, 2009.
		$100 \mu g/m^3$	$60 \mu g/m^3$	Limit-	80μg/r	m^3	
				$80 \mu g/m^3$			The values indicated here are the
							average value of quarterly reports of
		78.38	46.52	19.17	30.70)	FY25 conducted by 3 rd party NABL
					30.70		accredited laboratory.
В.	WATER	Parameter	Results	Resu	lts I	UOM	I Limit

Environmental Statement for the financial year ending the 31st March -2025 Bhelatand A. Colliery & Integrated Washery

	(Colliery)	(Washery)			The quality of mine
pН	7.7	7.9	рН	5.5-9.0	water is being measured in-house on
Total Suspended Solid	28.3	36.8	mg/ltr.	100	monthly basis and quarterly through NABL accredited 3 rd
Total Dissolved Solid	709.0	894.3	mg/ltr.	2100	party laboratory. Average value from the quarterly report for
Biological Oxygen Demand	1.9	2.4	mg/ltr.	30	FY25 is provided here. Washery is Zero water discharge (Closed
Chemical Oxygen Demand	69.9	72.6	mg/ltr.	250	water circuit system) unit. The analysis of water in the final
Oil & Grease	1.1	BDL	mg/ltr.	10	settling tank is done monthly.

The unit does not have any single point source of air pollution. Hence, quantitative estimation of air pollutants discharged in Kg/day cannot be ascertained.

PART – D
Hazardous Wastes
(as specified under The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016)

SI	Hazardous Waste	Total Quantity (Kg.)			
No		During the previous financial year 2023-2024	During the current financial year 2024-2025		
1.	From process Used Oil Used Batteries	Colliery: 1684.79 Kgs Washery: 819.09 Kgs Nil	Colliery: 2093.3 Kgs Washery: Nil Washery: 62 Nos Colliery: Nil		
2.	From pollution control facility	-			

PART – E Solid Wastes

SI	Solid Wastes	Total Quantity (Kg.)		
No		During the previous financial year 2022-2023	During the current financial year 2024-2025	
1.	Steel Scrap and other materials (conveyor belt, cable pieces waste) collected from U/G mines.	370.84 Ton	307.73 Ton	
2.	From process a. Tailing	84514 Ton		

Environmental Statement for the financial year ending the 31st March -2025 Bhelatand A. Colliery & Integrated Washery

			108414.0 Ton
3.	(i) Quantity recycled or	All tailings sold to	All tailings sold to
	reutilized within the	institutionalized customers	institutionalized customers
	unit/sold/disposed	and scrap sold to dealers	and scrap sold to dealers

PART-F

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

Category of Waste	Characteristics	Quantity	Disposal Practice
Solid Waste			
1. Steel Scrap and other materials	Solid	307.73 Ton	Steel scrap and other solid wastes are sent to central scrap yard for segregation and disposal to vendors.
2. Tailings	Coal of -0.5mm size (Solid)	108414.0 Ton	All tailings sold to institutionalized customers
Hazardous Waste		Colliery: 2093.3 Kgs	
1. Used Oil	Used Oil (Liquid)	Washery: Nil Washery: 62 Nos	Generally, hazardous wastes are disposed off to registered
2. Used Batteries	Used Battery	Colliery: Nil	recyclers according to applicable Hazardous Wastes Management Rules.

PART-G

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

S. No.	Environment Management Activity	Expenditure (Lakh)
1	Stowing activities i.e filling of U/G voids for surface protection and prevention of subsidence	78.78
2	Fire Control measures (Fire/Isolation Stopping and Nitrogen plant)	8.97
3	Goaf Filling activities, drain repairing and maintenance, settling tank maintenance jobs	3.28
4	Water spraying costs in underground and surface	0.35
4	Making potable water in Water Treatment Plant & Supply to colonies	76.83

Environmental Statement for the financial year ending the 31st March -2025 Bhelatand A. Colliery & Integrated Washery

	Total Cost incurred	190.61		
8	Operation and maintenance of ETP/STP	10.08		
7	Environmental Monitoring and scientific studies	6.53		
6	Plantation of saplings and maintenance	3.00		
5	Horticultural activities including lawn and garden maintenance	5.80		

Bhelatand A. Colliery:

Total annual expenditure incurred towards environmental protection is Rs. 190.61 lakhs

Annual raw coal production of the plant during the year is 2.33 lakh tonnes.

So, the impact of the pollution abatement measures, and environment protection shall be **Rs. 81.80 per ton** of raw coal production.

Bhelatand Coal Preparation Plant:

S.No.	Environment Management Activity	Expenditure (Lakh)
1	Tailings Management System including recycling	56.58
2	Dust suppression system (Dry fog system)	11.79
3	Operation and maintenance of Dust extraction system	14.46
4	Housekeeping measures includes removing spillage, improvement of roads, mechanical sweeper etc	22.16
5	Mechanical dewatering system	5.01
6	Fixing of Hosch Scraper and tru track idler for spillage control of conveyor belt	12.00
7	Water sprinkling activities	5.40
8	Any additional measures for Environment Management	20.00
9	Horticultural activities including green belt development and regular lawn and garden maintenance	5.80
10	Operation and maintenance of ETP/STP	10.08
11	Environmental Monitoring and scientific studies	6.58
	Total Cost incurred	169.86

Total annual expenditure incurred towards environmental protection is Rs. 169.86 lakhs.

Annual clean coal production of the plant during the year is 4.06 lakh tonnes.

So, the impact of the pollution abatement measures, and environment protection shall be 41.84~Rs/ ton of clean coal production.

Environmental Statement for the financial year ending the 31st March -2025 Bhelatand A. Colliery & Integrated Washery

PART - H

Additional measures/ investment proposals for environmental protection including abatement of pollution, prevention of pollution

Jharia Division of TATA Steel Ltd. is committed to improve safety and environment by strictly practicing Environmental Management System of company.

Various programs are arranged such as World Environmental day, Sustainability Month, Annual Flower Show, Green school Project, Tata volunteering week etc for public awareness. Also, various initiatives for biodiversity enhancement in the region have been taken such as Bird Niche Nesting, Development of Butterfly garden, Medicinal Garden, Nursery development of native species, etc. Tree plantation will be continued in the leasehold area. Water pumped out of the mine will continue to be used in washery other than use in stowing.

A Sewage Treatment Plant has been installed of 200 KLD & 50 KLD capacity for treatment of domestic sewage. Two STPs of 10 KLD each have been installed in canteen of Bhelatand Colliery and Sijua Colliery. Regular operation and maintenance is being done to ensure optimum performance of plant.

PART - I

Any other particulars for improving the quality of environment

- 1. We are providing safe drinking water from our water treatment plant & MADA to our employees.
- 2. We are regularly sprinkling water in an around the units, to suppress dust.
- 3. We provide dust mask to our employees to prevent exposure to dust in underground mines.
- 4. Our welfare department arranges to clean the domestic garbage from our colonies to provide better environment.
- 5. Regular monitoring of Air Quality & mine water analysis by our separate environment management cell.
- 6. We have already done the tree plantation job and this is a continuous process in company leasehold areas.
- 7. Regular thrust on Environment awareness conducting training classes at P.T.I., Jamadoba.
- 8. We are an IMS certified unit (ISO 9001:2015, 14001:2015 and 45001:2018 certified) along with SA: 8000 (Social Accountability)

Name of Unit - Bhelatand A. Colliery & Integrated Washery

Head Bhelatand A. Colliery
Tata Steel Limited

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HEAD Bhelatand A' Colliery