



**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/ 569 /2024

September 27<sup>th</sup>, 2024

**Sub: Annual Environment Statement in Form-V for the FY-24.**

Dear Sir,

We are enclosing herewith Annual Environment Statement in Form-V for the FY-24 in respect of **Jamadoba Coal 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**

*f-Tit*

**Head (Planning)**

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

**TATA STEEL LIMITED**

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Tel 91 22 66658282 Fax 91 22 66657724  
Corporate Identity Number L27100MH1907PLC000260 Website [www.tatasteel.com](http://www.tatasteel.com)

**FORM – V (See rule – 14 )**

**Environmental Statement for the financial year ending the 31<sup>st</sup> March -2024  
Jamadoba Coal Washery**

**PART – A**

<b>1.Name and address of the owner/ occupier of the : industry/ operation or process</b>	<b>Jamadoba Coal Washery</b>
<b>Head :</b>	<b>Mr. Rajeev Kumar Ranjan</b> Head (Jamadoba Coal Washery) Tata Steel Ltd., P.O.- Jamadoba Dist.- Dhanbad, Jharkhand-828112
<b>Nominated Owner :</b>	<b>Mr. T.V. Narendran</b> CEO&MD, Tata Steel Ltd Jamshedpur, Dist- East Singhbhum Jharkhand – 831 001
<b>2.Industry category: Primary (STC Code) Secondary (STC Code)</b>	
<b>3.Production Capacity – Units</b>	2.0 MTPA Clean coal
<b>4.Year of Establishment</b>	1952
<b>5.Date of the last environmental statement submitted</b>	29 <sup>th</sup> September 2023 (Vide Letter No.JMB/ENV/ESSA/05/734/2023)

**PART – B**

**Water and Raw Material Consumption**

**1. Water Consumption M<sup>3</sup> / day.**

	<b>Water consumption in 2022-2023</b>	<b>Water consumption in 2023-2024</b>
<b>Process</b>	561.26 M <sup>3</sup> / day	515.83 M <sup>3</sup> / day
<b>Cooling</b>	Not Applicable	Not Applicable
<b>Domestic*</b>	1 M <sup>3</sup> / day	1 M <sup>3</sup> / day

*\*The domestic water consumption in colonies has been considered in Jamadoba Colliery.*

<b>Sl. No</b>	<b>Name of the products</b>	<b>Process water consumption per unit of product output.</b>	
		<b>During the previous financial year 2022-2023</b>	<b>During the current financial year 2023-2024</b>
1.	Clean Coal	0.28 M3/Ton	0.27 M3/Ton

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**2. Raw Material Consumption**

Sl. No	Name of the Raw Material	Name of the product	Raw Materials consumption per unit production output.	
			During the previous financial year 2022-2023	During the current financial year 2023-2024
1.	Raw Coal	Clean Coal	1.86 trc/tcc	1.86 trc/tcc
2.	Magnetite		1.38 kg/ton	1.93 kg/ton

**\*Industries may use codes if disclosing details of raw materials would violate contractual obligation, otherwise all industries have to name the raw materials used.**

**PART – C**

**Pollution discharged to environment / unit of output.**

**(Parameter as prescribed in the consent issued)**

Sl. No	Pollution	Quantity of pollutants discharged (mass/ day)		Concentration of pollutants in discharges (Mass/Volume)		Percentage of variation from prescribed standard with reason.	
A.	AIR	PM <sub>10</sub> Level : 24 Hourly Limit- 100µg/m <sup>3</sup>	PM <sub>2.5</sub> Level : 24 Hourly Limit- 60µg/m <sup>3</sup>	SO <sub>2</sub> Level: 24 Hourly Limit- 80µg/m <sup>3</sup>	NO <sub>2</sub> Level: 24 Hourly Limit- 80µg/m <sup>3</sup>	Ambient air quality is being measured and all values are within limits as per NAAQS, 2009. The values indicated here are the average value of quarterly reports of FY24 conducted by 3rd party NABL accredited laboratory.	
		82.40	49.30	19.50	28.6		
B.	WATER	Zero water discharge (Closed water circuit system). The analysis of water in the final settling tank is as follows:					All values are within limits. Average value from the quarterly report for FY24 is provided here.
		<b>Parameter</b>	<b>Results</b>	<b>Measurement</b>	<b>Limit</b>		
		pH	7.75	pH	5.5-9.0		
		Total Suspended Solid	33.25	mg/ltr.	100		
		Total Dissolved Solid	813.75	mg/ltr.	2100		
		Biological Oxygen Demand	2.67	mg/ltr.	30		
		Chemical Oxygen Demand	59.75	mg/ltr.	250		
Oil & Grease	0.5	mg/ltr.	10				

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

**FORM – V (See rule – 14 )**

**Environmental Statement for the financial year ending the 31<sup>st</sup> March -2024  
Jamadoba Coal Washery**

**PART – D**

**Hazardous Wastes**

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

Sl No	Hazardous Waste	Total Quantity	
		During the previous financial year 2022-2023	During the current financial year 2023-2024
1.	From process Used Oil Lead Acid Battery	8489.52 Kgs 2868 Nos	6411.98 Kgs 64 Nos
2.	From pollution control facility	-	-

**PART – E**

**Solid Wastes**

Sl No	Solid Wastes	Total Quantity	
		During the previous financial year 2022-2023	During the current financial year 2023-2024
1.	From process a. Tailings b. Scrap materials	39956.3 Ton 87.72 Ton	28733.94 Ton 122.26 Ton
2.	Quantity recycled or reutilized within the unit/sold/disposed	All tailings sold to institutionalized customers and scrap sold to dealers	All tailings sold to institutionalized customers 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
<b>Solid Waste</b> 1. Tailings	Tailing	28733.94 Ton	All tailings sold to institutionalized customers. Steel scrap is sold off to vendors.
2. Steel Scrap and other materials	Solid	122.26 Ton	
<b>Hazardous Waste</b> 1. Used Oil	Used Oil (Liquid)	6411.98 Kgs	Disposed off to authorized recycler.
2. Used Battery	Used Battery (Solid)	64 Nos	

**FORM – V (See rule – 14 )**  
**Environmental Statement for the financial year ending the 31<sup>st</sup> March -2024**  
**Jamadoba Coal Washery**

**PART – G**

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

Jamadoba coal washery of TATA Steel Ltd. is an ISO 9001:2015, 14001:2015 and ISO 45001 unit, entire coal washing is done by eco-friendly way by using standard practice. Dry-fog system has been already installed to suppress the dust generated at CHP and transfer points of belt conveyer systems and is always operated to check fugitive emissions. Adequate fixed-type water sprinklers are also installed at the internal roads of the washery.

S.No.	Environment Management Activity	Expenditure in Lakhs
1	Tailings Management System including recycling	5.00
2	Dust suppression system (Dry fog system)	28.50
3	Operation and maintenance of Dust extraction system	9.36
4	Housekeeping measures includes removing spillage, improvement of roads, mechanical sweeper etc	144.99
5	Mechanical dewatering system	889.69
6	Water sprinkling activities	27.00
7	Horticultural activities including green belt development and regular lawn and garden maintenance	16.80
8	Plantation of saplings and maintenance	0.77
9	Operation and maintenance of ETP/STP	7.25
10	Environmental Monitoring and scientific studies	5.01
	<b>Total Cost incurred</b>	<b>1134.36</b>

Total annual expenditure incurred towards environmental protection is **Rs.1134.36 lakhs**.

Annual clean coal production of the plant during the year is **6.86 lakh ton**.

So, the impact of the pollution abatement measures, and environment protection shall be **INR 165.32**.

**PART – H**

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

Fixed type water spraying system inside washery complex is being operated. Further extend to branch road has been done. Dust extraction system is being commissioned in washery expansion project to control the air pollution. Various programs are arranged such as World Environmental day, 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. One ETP of 10 KLD has been installed for canteen wastewater treatment. Dust extraction system has been installed to suppress dust at source of generation. Mechanical sweeper, mist canon, mechanical tailing dewatering plants are major pollution control methods.

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**Jamadoba Coal Washery**

**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.
4. Our welfare department arranges to clean the domestic garbage's 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 – Jamadoba Coal Washery**

**Head, Jamadoba Coal Washery**  
**TATA STEEL LIMITED**

HEAD  
JAMADOBA WASHERY