

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/ 446 /2025

September 30th, 2025

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

Dear Sir,

We are enclosing herewith Annual Environment Statement in Form-V for the FY-25 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

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

FORM – V (See rule – 14)

Environmental Statement for the financial year ending the 31st March -2025 Jamadoba Coal Washery

PART - A

| 1. Name and address of the owner/ occupier of the : industry/ operation or process | Jamadoba Coal Washery |
|--|----------------------------------|
| Head: | Mr. Prasenjit Samanta |
| | Head (Jamadoba Coal Washery) |
| | Tata Steel Ltd., P.O Jamadoba |
| | Dist Dhanbad, Jharkhand-828112 |
| 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 | 2.0 MTPA Clean coal |
| 4. Year of Establishment | 1952 |
| 5.Date of the last environmental statement submitted | 27 th September 2024 |
| | (Vide Letter |
| | No.JMB/ENV/ESSA/05/569/2024) |

PART - B

Water and Raw Material Consumption

1. Water Consumption M³ / day.

| • | Water consumption in 2023-2024 | Water consumption in 2024-2025 |
|-----------|--------------------------------|--------------------------------|
| Process | 515.83 M ³ / day | 510.33 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 Jamadoba Colliery.

| SI. No | Name of the products | Process water consumption per unit of product output. | | |
|-----------|----------------------|---|---|--|
| | | During the previous financial year 2023-2024 | During the current financial year 2024-2025 | |
| 1. | Clean Coal | 0.27 M3/Ton | 0.31 M3/Ton | |

FORM - V (See rule -14)

Environmental Statement for the financial year ending the 31st March -2025 Jamadoba Coal Washery

2. Raw Material Consumption

| SI. No | Name of the Raw | Name of the | Raw Materials consumption per unit production output. | | |
|-----------|--------------------|-------------|---|---|--|
| | Material | product | During the previous financial year 2023-2024 | During the current financial year 2024-2025 | |
| 1. | Raw Coal | C1 | 1.86 trc/tcc | 2.05 trc/tcc | |
| 2. | Magnetite | Clean Coal | 1.93 kg/ton | 2.07 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.

<u>PART - C</u> Pollution discharged to environment / unit of output.

Parameter as prescribed in the consent issued)

| (Para | meter as pr | escribed in the | conse | nt issued |) | | | | | |
|-----------|-------------|---|-----------|---|---------------|--|-----|---|---|--|
| SI. | Pollution | Quantity of | f po | llutants | Cor | Concentration of | | | Percentage of variation | |
| No | | discharged (m | ass/ d | | | from prescribed | | | | |
| | | | | | (Mass/Volume) | | | | standard with reason. | |
| A. | AIR | PM ₁₀ Level : 24 Hourly Limit- 100μg/m ³ | : 24 L | Level Hourly imit- ug/m ³ | 24 I | 2 Level: Hourly Limit-)μg/m ³ | 24 | D2 Level: Hourly Limit- 0μg/m ³ | Ambient air quality is being measured and all values are within limits as per NAAQS, 2009. | |
| | | 76.87 | 4 | 4.18 | | 18.39 | | 26.97 | The values indicated here are the average value of quarterly reports of FY25 conducted by 3rd party NABL accredited laboratory. | |
| В. | WATER | Zero water dis | | | | | | | | |
| | | Paramete | | Resul | | Measur | | Limit | | |
| | | | | | | ment | | | | |
| | | рН | | 7.9 | | рН | | 5.5-9.0 | All values are within | |
| | | Total Suspend Solid | ed | 33.8 | | mg/ltr | | .100 | limits. Average value from the quarterly report | |
| | | Total Dissolve Solid | d | 841.5 | 5 | mg/ltr | | 2100 | for FY25 is provided here. | |
| | | Biological Ox Demand | ygen | 2.5 | | mg/ltr | . 3 | 30 | • | |
| | | Chemical Oxy Demand | gen | 67.8 | | mg/ltr | | 250 | | |
| | | Oil & Grease | | 1.0 | | 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 31st March -2025 Jamadoba Coal Washery

PART - D

Hazardous Wastes

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

| SI | Hazardous Waste | Total Quantity | | | |
|----|--|--|---|--|--|
| No | | During the previous financial year 2023-2024 | During the current financial year 2024-2025 | | |
| 1. | From process Used Oil Lead Acid Battery/12 V | 6411.98 Kgs 64 Nos | 6083.8 Kgs 74 Nos | | |
| 2. | From pollution control facility | - | - | | |

PART – E Solid Wastes

| SI | Solid Wastes | Total Quantity | | | |
|----|---------------------------------|--|-----------------------------|--|--|
| No | | During the previous financial year 2023-2024 | | | |
| 1. | From process | | | | |
| | a. Tailings | 28733.94 Ton | 12806.4 Ton | | |
| | b. Scrap materials | 122.26 Ton | 139.32 Ton | | |
| 2. | Quantity recycled or reutilized | All tailings sold to | All tailings sold to | | |
| | within the unit/sold/disposed | institutionalized customers | institutionalized customers | | |
| | • | 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. Tailings | Tailing | 12806.4 Ton | All tailings sold to institutionalized customers. | | |
| 2. Steel Scrap | Solid · | 139.32 Ton | Steel scrap is sold off to vendors. | | |
| 'and other | | | | | |
| materials | | | | | |
| Hazardous Waste | | | | | |
| 1. Used Oil | Used Oil (Liquid) | 6083.8 Kgs | Disposed off to authorized recycler. | | |
| 2. Used Battery | Used Battery | 74 Nos | | | |
| | (Solid) | | | | |

FORM - V (See rule -14)

Environmental Statement for the financial year ending the 31st March -2025 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 conveyor 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) | 19.63 |
| 3 | Operation and maintenance of Dust extraction system | 3.50 |
| 4 | Housekeeping measures includes removing spillage, improvement of roads, mechanical sweeper etc | 152.71 |
| 5 | Mechanical dewatering system | 430.31 |
| 6 | Water sprinkling activities | 13.59 |
| 7 | Horticultural activities including green belt development and regular lawn and garden maintenance | 18.38 |
| 8 | Plantation of saplings and maintenance | 0.86 |
| 9 | Operation and maintenance of ETP/STP | 10.08 |
| 10 | Environmental Monitoring and scientific studies | 6.80 |
| | Total Cost incurred | 660.87 |

Total annual expenditure incurred towards environmental protection is **Rs. 660.87 lakhs**.

Annual clean coal production of the plant during the year is 5.98 lakh ton.

So, the impact of the pollution abatement measures, and environment protection shall be INR 110.51

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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Environmental Statement for the financial year ending the 31st March -2025 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

30 Head, Jamadoba Coal Washery
TATA STEEL LIMITED

JAMADOBA WASHERY