



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

Ref. No.- S&E/ENV/ESSA/05/ 730 /2016

September 22, 2016

Dear Sir,

With reference to the above, we are enclosing here with form (V) (See rule-14) the Environmental Statement for **JAMADOBA COAL WASHERY**.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,

Manager (Environment)

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

TATA STEEL LIMITED

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Tel 91 326 2320263/2320265/2320267 Fax 91 326 2320268
Regd. Office Bombay House 24 Homi Mody Street Mumbai 400 001
Tel 91 22 66658282 Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

FORM – V (See rule – 14)

**Environmental Statement for the financial year ending the 31st March -2016
Jamadoba Coal Washery**

PART – A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Jamadoba Coal Washery
Head :	Mr. Amit Ranjan Head(Jamadoba Coal Washery) Tata Steel Ltd., P.O.- Jamadoba Dist.- Dhanbad, Jharkhand-828112
Nominated Owner :	Mr. T.V.Narendran Managing Director, Tata Steel Ltd (India and South East Asia) Jamshedpur, Dist- East Singhbhum Jharkhand – 831 001
2.Industry category: Primary (STC Code) Secondary (STC Code)	Factory regn no. 8964/DNB
3.Production Capacity – Units	2.0 MTPA raw coal throughput
4.Year of Establishment	1952
5.Date of the last environmental statement submitted	28 th September' 2015 (Vide Letter No.S&E/ENV/ESSA/05/837/15)

PART – B

Water and Raw Material Consumption

1. Water Consumption M³ / day.

	Water consumption in 2014-2015	Water consumption in 2015-2016
Process	871 M ³ / day	795 M ³ / day
Cooling	Not Applicable	Not Applicable
Domestic	1 M ³ / day	1 M ³ / day

Sl. No	Name of the products	Process water consumption per unit of product output.	
		During the previous financial year 2014-2015	During the current financial year 2015-2016
1.	Clean Coal	0.51 M ³ /Tonnes	0.42 M ³ /Tonnes

FORM – V (See rule – 14)**Environmental Statement for the financial year ending the 31st March -2016****Jamadoba Coal Washery****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 2014-2015	During the current financial year 2015-2016
1.	Raw Coal	Clean Coal	1.91 tonne/tonne	1.93 tonne/tonne
2.	Magnetite		0.59 kg/tonne	0.58 kg/tonne

*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 ₁₀ Level : 24 Hourly Limit- 100µg/m ³	PM _{2.5} Level : 24 Hourly Limit- 60µg/m ³	SO ₂ Level: 24 Hourly Limit- 80µg/m ³	NO ₂ Level: 24 Hourly Limit- 80µg/m ³	Ambient air quality is being measured and all values are within limits as per NAAQS, 2009.	
		90.45	42.80	24.58	19.43		
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.
		Parameter	Results	Measurement	Limit		
		pH	8.4	pH	5.5-9.0		
		Total Suspended Solid	32.8	mg/ltr.	100		
		Total Dissolved Solid	692.8	mg/ltr.	2100		
		Biological Oxygen Demand	4.5	mg/ltr.	30		
		Chemical Oxygen Demand	52.3	mg/ltr.	250		
		Oil & Grease	3.5	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 31st March -2016****Jamadoba Coal Washery****PART – D****Hazardous Wastes****(as specified under Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008)**

SI No	Hazardous Waste	Total Quantity	
		During the previous financial year 2014-2015	During the current financial year 2015-2016
1.	From process Used Oil Lead Acid Battery	5200 Litres 32 Nos	2742 Litres 12 Nos
2.	From pollution control facility	-	-

PART – E**Solid Wastes**

SI No	Solid Wastes	Total Quantity	
		During the previous financial year 2014-2015	During the current financial year 2015-2016
1.	From process a. Tailings b. Scrap materials	233293 Tonnes 362.9 Tonnes	231748 Tonnes 224.7 Tonnes
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
Solid Waste 1. Tailings	Coal of -0.5mm size (Solid)	231748 Tonnes	All tailings sold to institutionalized customers
2. Steel Scrap and other materials	Solid	224.7 Tonnes	Steel scrap is sold off to vendors.
Hazardous Waste 1. Used Oil	Used Oil (Liquid)	2742 Litres	Disposed off to authorized recycler.
2. Used Battery	Lead Acid Battery(Solid)	12 Nos	Disposed off to authorized recycler.

FORM – V (See rule – 14)
Environmental Statement for the financial year ending the 31st March -2016
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, 14001 and OHSAS 18001 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 operated at all times 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	102
2	Dust suppression system	4.8
3	Housekeeping measures includes removing spillage, improvement of roads	16
4	Spillage control measures	2
5	Mechanical dewatering system	3
6	Water spraying on roads for dust control	5
7	Chemical Dewatering	5
8	Augmentation of recycling pump house	5
9	Horticultural activities including green belt development and regular lawn and garden maintenance	14.55
10	Plantation of saplings and maintenance	0.99
	Total Cost incurred	158.34

Total annual expenditure incurred towards environmental protection is **Rs. 158.34 lakhs.**

Annual clean coal production of the plant during the year is **5.81 lakh tonnes.**

So the impact of the pollution abatement measures and environment protection shall be **27.27 Rs/ ton of clean coal production.**

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. Vacuum dust collector procured for Rs.10.00 Lakh.

FORM – V (See rule – 14)

**Environmental Statement for the financial year ending the 31st March -2016
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 and around the units to suppress dust.
3. Our welfare department arranges to clean the domestic garbages from our colonies to provide better environment.
4. We also reimburse the cost of LPG cylinder refilling cost to the employees to avoid coal burning.
5. Regular monitoring of Air quality & mine water analysis by our separate environment management cell.
6. We are continuously increasing the green cover of our leasehold area by planting trees.
7. Regular thrust on Environment awareness by conducting training classes at PTI, Jamadoba.
8. We are an IMS certified unit (ISO 9001 & 14001 and OHSAS 18001 certified).

Name of Unit – Jamadoba Coal Washery



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