

**FORM – V (See rule – 14 )**  
**Environmental Statement for the financial year ending the 31<sup>st</sup> March -2014**  
**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>Agent :</b>	<b>Mr. Partha Das</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> Managing Director, Tata Steel Ltd (India and South East Asia) Jamshedpur, Dist- East Singhbhum Jharkhand – 831 001
<b>2.Industry category: Primary (STC Code) Secondary (STC Code)</b>	Factory regn no. 8964/DNB
<b>3.Production Capacity – Units</b>	2.0 MTPA raw coal throughput
<b>4.Year of Establishment</b>	1951
<b>5.Date of the last environmental statement submitted</b>	30 <sup>th</sup> September' 2013 (Vide Letter No.S&E/ENV/ESSA/05/956/13)

**PART – B**

**Water and Raw Material Consumption**

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

	<b>Water consumption in 2013-2014</b>
<b>Process</b>	810 M <sup>3</sup> / day
<b>Cooling</b>	Not Applicable
<b>Domestic</b>	1 M <sup>3</sup> / day

Sl. No	Name of the products	Process water consumption per unit of product output.	
		During the previous financial year 2012-2013	During the current financial year 2013-2014
1.	Clean Coal	0.05 M <sup>3</sup> /Tonnes	0.46 M <sup>3</sup> /Tonnes

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Sl. No	Name of the Raw Material	Name of the product	Raw Materials consumption per unit production output.	
			During the previous financial year 2012-2013	During the current financial year 2013-2014
1.	Raw Coal	Clean Coal	1.82 tonne/tonne	1.83 tonne/tonne
2.	Magnetite		0.49 kg/tonne	0.57 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	SPM Level : 24 Hourly Limit- 700µg/m <sup>3</sup>	RPM Level : 24 Hourly Limit- 300µg/m <sup>3</sup>	SO <sub>2</sub> Level: 24 Hourly Limit- 120µg/m <sup>3</sup>	NO <sub>x</sub> Level: 24 Hourly Limit- 120µg/m <sup>3</sup>	All values are within limits.
		<i>(As per Air Quality Standards for Jharia Coal Mines vide notification G.S.R.742(E), dated 25.9.2000)</i>				
		276.48	140.85	11.74	15.90	
B.	WATER	Zero water discharge (Closed water circuit system). The analysis of water in the settling tank is as follows:				All values are within limits.
		<b>Parameter</b>	<b>Results</b>	<b>Measurement</b>	<b>Limit</b>	
		pH	8.4	pH	5.5-9.0	
		Total Suspended Solid	79	mg/ltr.	100	
		Total Dissolved Solid	736	mg/ltr.	2100	
		Biological Oxygen Demand	4.8	mg/ltr.	30	
		Chemical Oxygen Demand	53	mg/ltr.	250	
		Oil & Grease	3.0	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.

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Jamadoba Coal Washery

**PART – D**

**Hazardous Wastes**

**(as specified under Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008)**

Sl No	Hazardous Waste	Total Quantity	
		During the previous financial year 2012-2013	During the current financial year 2013-2014
1.	From process Used Oil Lead Acid Battery	840 Litres 3 Nos	3150 Litres 69 Nos
2.	From pollution control facility	-	-

**PART – E**

**Solid Wastes**

Sl No	Solid Wastes	Total Quantity	
		During the previous financial year 2012-2013	During the current financial year 2013-2014
1.	From process a. Tailings b. Scrap materials	177536 Tonnes 169.8 Tonnes	194531 Tonnes 243.6 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
<b>Solid Waste</b> 1. Tailings	Coal of -0.5mm size (Solid)	194531 Tonnes	All tailings sold to institutionalized customers
2. Steel Scrap and other materials	Solid	243.6 Tonnes	Steel scrap is sold off to vendors.
<b>Hazardous Waste</b> 1. Used Oil	Used Oil (Liquid)	3150 Litres	Disposed off to authorized recycler.
2. Used Battery	Lead Acid Battery(Solid)	69 Nos	Disposed off to authorized recycler.

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**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.

Cost incurred for Tailings management system is Rs. 95 Lakhs.

Cost incurred for Dust suppression system is Rs. 7 Lakhs

Rs. 10 Lakhs yearly on cost of Housekeeping measures includes removing spillage, improvement of roads.

Cost incurred for spillage control measures is Rs. 1.5 Lakhs.

Cost incurred for Mechanical dewatering system is Rs. 20 Lakhs.

A Continuous Ambient Air Quality Monitoring Station has been installed at Jamadoba for online monitoring with data transfer to JSPCB, Ranchi. Cost incurred for this system is 60 Lakhs.

**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. Dust extraction system is also being strengthened with additional cost of 20 Lakhs.

**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**