

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/ 837 /2015

September 28th, 2015

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.

Copy to: Head (JCPP)

TATA STEEL LIMITED

Jharia Collieries Jamadoba 828 112 Dhanbad India
Tel 91 326 2320263/2320265/2320267 Fax 91 326 2320268
Regd. Office Bombay House 24 Homi Mody Street Mumbai 400 001
Tel 91 22 66655282 Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com



$\frac{FORM-V\ (See\ rule-14\)}{Environmental\ Statement\ for\ the\ financial\ year\ ending\ the\ 31^{st}\ March\ -2015}$ Jamadoba Coal Washery

PART - A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Jamadoba Coal Washery
Head :	Mr. Partha Das 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	1951
5.Date of the last environmental statement submitted	27 th September' 2014 (Vide Letter No.S&E/ENV/ESSA/05/867/14)

PART - B

Water and Raw Material Consumption

Water Consumption M³ / day. 1.

	Water consumption in 2013-2014	Water consumption in 2014-2015
Process	810 M ³ / day	871 M ³ / day
Cooling	Not Applicable	Not Applicable
Domestic	1 M ³ / day	$1 \text{ M}^3 / \text{day}$

SI. No	Name of the products	Process water consumption per unit of product output.			
	*	During the previous financial year 2013-2014	During the current financial year 2014-2015		
1.	Clean Coal	0.46 M ³ /Tonnes	0.51 M ³ /Tonnes		

$\frac{FORM-V\ (See\ rule-14\)}{Environmental\ Statement\ for\ the\ financial\ year\ ending\ the\ 31^{st}\ March\ -2015}$ Jamadoba Coal Washery

Raw Material Consumption 2.

SI. No	Name of the Raw	Name of the product	Raw Materials consumption per unit production output.			
	Material		During the previous financial year 2013-2014	During the current financial year 2014-2015		
1.	Raw Coal		1.83 tonne/tonne	1.91 tonne/tonne		
2.	Magnetite	Clean Coal	0.57 kg/tonne	0.59 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.

		escribed in the							D 4 6 14
Sl. No	Pollution	Quantity o discharged (n		y) pollutants in discharges			Percentage of variation from prescribed standard with reason.		
Α.	AIR	PM ₁₀ Level : 24 Hourly Limit- 100μg/m ³	: 24 I Lii	1 _{2.5} Level 4 Hourly Limit- 60μg/m ³		SOx Level: 24 Hourly Limit- 80µg/m ³		k Level: Hourly imit- μg/m ³	All values are within limits.
		87.6	4.	5.8		17.2		22.1	
В.	WATER	Zero water discharge (Closed analysis of water in the settling							
		Paramete	er	Resul	ts	Measur ment		Limit	
		рН		8.43		pН		5.5-9.0	
		Total Suspen Solid	ded	72.08	3	mg/ltr			All values are within
		Total Dissolved 717.83		3	mg/ltr		2100	limits.	
		Biological Ox Demand		5.21	mg/ltr			30	
		Chemical Ox Demand		58.58	3	mg/ltr		250	
		Oil & Grea	ise	3.38		mg/ltr		10	1001

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 -2015 Jamadoba Coal Washery

PART – D Hazardous Wastes

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

SI	Hazardous Waste	Total Quantity			
No		During the previous financial year 2013-2014	During the current financial year 2014-2015		
1.	From process Used Oil Lead Acid Battery	3150 Litres 69 Nos	5200 Litres 32 Nos		
2.	From pollution control facility	~	-		

PART – E Solid Wastes

SI No	Solid Wastes	Total Quantity			
		During the previous financial year 2013-2014	During the current financial year 2014-2015		
1.	From process a. Tailings b. Scrap materials	194531 Tonnes 243.6 Tonnes	233293 Tonnes 362.9 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)	233293 Tonnes	All tailings sold to institutionalized customers
2. Steel Scrap and other materials	Solid	362.9 Tonnes	Steel scrap is sold off to vendors.
Hazardous Waste			
1. Used Oil	Used Oil (Liquid)	5200 Litres	Disposed off to authorized recycler.
2. Used Battery	Lead Acid Battery(Solid)	32 Nos	Disposed off to authorized recycler.

FORM - V (See rule - 14)

Environmental Statement for the financial year ending the 31st March -2015 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.

- Cost incurred for Tailings management system is Rs. 102 Lakhs.
- · Cost incurred for Dust suppression system is Rs. 8 Lakhs
- Rs. 12 Lakhs yearly on cost of Housekeeping measures includes removing spillage, improvement of roads.
- Cost incurred for spillage control measures is Rs. 2 Lakhs.
- Cost incurred for Mechanical dewatering system is Rs. 3 Lakhs.
- Rs. 30.69 lakhs incurred for making potable water in Water Treatment Plant and supply to employees' colony.
- Rs. 8.5 lakhs incurred annually for Horticultural activities including green belt development and regular lawn and garden maintenance.
- Extensive plantation in and around the unit for which the annual expenditure of Rs. 4.82 lakhs was incurred.

Total annual expenditure incurred towards environmental protection is Rs. 171.01 lakhs.

Annual clean coal production of the plant during the year is 5.29 lakh tonnes.

So the impact of the pollution abatement measures and environment protection shall be 32.33 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. Vacuum dust collector procured for 10.00 Lakh. PCC road near weighbridge made to control dust in the area at a cost of Rs. 30 Lakh. For Zero effluent discharge recirculation pond is being augmented at cost of 7 Lakh.

FORM - V (See rule - 14)

Environmental Statement for the financial year ending the 31st March -2015 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