

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/ 841 /2017

September 25, 2017

Sub: Environment Statement in Form V for the year 2016-17.

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,

Sr. Manager (Environment)

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

Copy to: Head, Jamadoba Coal Washery

#### 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 666558282 Fax 91 22 66657724 Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

OIC File

# FORM – V (See rule – 14 ) Environmental Statement for the financial year ending the 31st March -2017 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	Factory regn no. 8964/DNB
(STC Code)	I was a selection of expense as an impersor
3.Production Capacity – Units	2.0 MTPA raw coal throughput
4. Year of Establishment	1952
5.Date of the last environmental statement submitted	22 <sup>nd</sup> September' 2016
	(Vide Letter
	No.S&E/ENV/ESSA/05/730/16)

#### PART - B

#### Water and Raw Material Consumption

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

	Water consumption in 2015-2016	Water consumption in 2016-2017
Process	795 M <sup>3</sup> / day	688.5 M <sup>3</sup> / day
Cooling	Not Applicable	Not Applicable
Domestic	1 M <sup>3</sup> / day	1 M <sup>3</sup> / day

Sl. Name of the products		Process water consumption per unit of product output.			
		During the previous financial year 2015-2016	During the current financial year 2016-2017		
1.	Clean Coal	0.42 M <sup>3</sup> /Tonnes	0.49 M <sup>3</sup> /Tonnes		

#### FORM - V (See rule - 14)

## Environmental Statement for the financial year ending the 31<sup>st</sup> March -2017 Jamadoba Coal Washery

#### 2. Raw Material Consumption

Sl. No	Name of the Raw	Name of the	Raw Materials consumption per unit production output.		Raw Materials consumption per unit production	
Material product			During the previous financial year 2015-2016	During the current financial year 2016-2017		
1.	Raw Coal	G1 G 1	1.93 tonne/tonne	2.11 tonne/tonne		
2.	Magnetite	Clean Coal	0.58 kg/tonne	0.48 kg/tonne		

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

 $\frac{PART-C}{Pollution\ discharged\ to\ environment\ /\ unit\ of\ output.}$ 

Parameter as prescribed in the consent issued)

		escribed in the			1			
SI.	Pollution	Quantity o		llutants	Concentration of			
No		discharged (n	nass/ d	lay)	pollutants in discharges			
						ass/Volun		standard with reason.
A.	AIR	PM <sub>10</sub> Level	Level PM 2.5 Level		SO	SO2 Level: NO2 Level:		1:
		: 24 Hourly	: 24	Hourly	24	Hourly	24 Hourly	Ambient air quality is
		Limit-	L	imit-	]	Limit-	Limit-	being measured and all
		$100 \mu g/m^3$	60	$\mu g/m^3$	8	$0\mu g/m^3$	$80 \mu g/m^3$	values are within limits
		84.29	4	3.19		9.77	10.80	as per NAAQS, 2009.
В.	WATER	Zero water discharge (Closed water circuit system). The						
		analysis of water in the final se						
		Paramete	r	Resul	ts	Measur	e Limit	
						ment		
		pН		8.3		pН	5.5-9.0	)
		Total Suspend Solid	ed	47.4		mg/ltr	. 100	All values are within
			Total Dissolve Solid	ed	693.0	)	mg/ltr	. 2100
		Biological Ox Demand	ygen	5.2		mg/ltr	. 30	
		Chemical Oxy Demand	gen	40.0		mg/ltr	. 250	
		Oil & Grease		4.1		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 -2017 Jamadoba Coal Washery

#### <u>PART – D</u> Hazardous Wastes

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

SI	Hazardous Waste	Total Quantity			
No		During the previous financial year 2015-2016	During the current financial year 2016-2017		
1.	From process Used Oil Lead Acid Battery	2742 Litres 12 Nos	4620 Litres Nil		
2.	From pollution control facility	-	- 17		

#### PART – E Solid Wastes

SI	Solid Wastes	Total Quantity			
No		During the previous financial year 2015-2016	During the current financial year 2016-2017		
1.	From process				
	a. Tailings	231748 Tonnes	199951 Tonnes		
	b. Scrap materials	224.7 Tonnes	120 Tonnes		
2.	Quantity recycled or	All tailings sold to	All tailings sold to		
	reutilized within the	institutionalized customers	institutionalized customers		
	unit/sold/disposed	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	Coal of -0.5mm size (Solid)	199951 Tonnes	All tailings sold to institutionalized customers
2. Steel Scrap and other materials	Solid	120 Tonnes	Steel scrap is sold off to vendors.
Hazardous Waste	Hand Oil (Linuid)	4620 Litres	Diamaged off to outhorized
1. Used Oil	Used Oil (Liquid)		Disposed off to authorized recycler.
2. Used Battery	Lead Acid Battery(Solid)	Nil	Disposed off to authorized recycler.

#### FORM - V (See rule - 14)

#### Environmental Statement for the financial year ending the 31<sup>st</sup> March -2017 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	6
2	Dust suppression system	3
3	Housekeeping measures includes removing spillage, improvement of roads	12
4	Spillage control measures	2
5	Mechanical dewatering system	29
6	Water spraying on roads for dust control	20
7	Chemical Dewatering	5
8	Horticultural activities including green belt development and regular lawn and garden maintenance	16.46
9	Plantation of saplings and maintenance	2.85
	Total Cost incurred	96.31

Total annual expenditure incurred towards environmental protection is Rs. 96.31 lakhs.

Annual clean coal production of the plant during the year is 4.39 lakh tonnes.

So the impact of the pollution abatement measures and environment protection shall be 21.94 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. Dust extraction system is proposed in washery expansion project to control the air pollution.

### FORM – V (See rule – 14)

#### Environmental Statement for the financial year ending the 31<sup>st</sup> March -2017 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 Chal Washery TATA STEEL LIMITED