

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/05/836 /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 COLLIERY.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,

Sr. 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, Jamadoba Colliery

#### 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 66658282 Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com



# $\frac{FORM-V~(See~rule-14~)}{Environmental~Statement~for~the~financial~year~ending~the~31^{st}~March~-2017}\\ Jamadoba~Colliery$

#### PART - A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Jamadoba Colliery
Manager :	Mr. Sanjeev Thakur
	Head(Jamadoba Colliery)
	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)	
3.Production Capacity - Units	0.34 MTPA – Raw coal
4. Year of Establishment	1918
5.Date of the last environmental statement submitted	22 <sup>nd</sup> September' 2016
	(Vide Letter
	No.S&E/ENV/ESSA/05/726/16)

#### PART - B

#### Water and Raw Material Consumption

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

	Water consumption in 2015-2016	Water consumption in 2016-2017			
Process	Not Applicable	Not Applicable			
Industrial	(This is included in the Environn	s included in the Environment Statement of Jamadoba Washery)			
Domestic	4685.7 M <sup>3</sup> /day	5177.57 M³/day			
Other	Not Applicable	Not Applicable			

Sl. No		Process water consumption	Process water consumption per unit of product output.		
		During the previous financial year 2015-2016	During the current financial year 2016-2017		
1.	Raw Coal	Not Applicable	Not Applicable		

#### FORM – V (See rule – 14)

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

#### 2. Raw Material Consumption

SI. No	Name of the Raw	Name of the	Raw Materials consumption	n per unit production output.	
	Material product		During the previous financial year 2015-2016	During the current financial year 2016-2017	
1.	Explosives		0.51 Kg/Tonne	0.47 Kg/Tonne	
2.	Detonators	Raw Coal	0.90 Nos/Tonne	0.88 Nos/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)

SI.	Pollution	Quantity o	f po	llutants	Co	ncentratio	on	of	Percentage of variation	
No		discharged (n	nass/ d	ay)	pol	lutants in	n di	scharges	from prescribed	
					(M	ass/Volun	ne)		standard with reason.	
A.	AIR	PM <sub>10</sub> Level	PM <sub>2</sub>	.5 Level	SO	2 Level:	NC	2 Level:		
		: 24 Hourly	: 24	Hourly	24	Hourly	24	Hourly	Ambient air quality is	
		Limit-		imit-	1	Limit-	1	Limit-	being measured and all	
		$100\mu g/m^3$	60	μg/m³	8	0μg/m³	8	0μg/m³	values are within limits	
		84.29	4	3.19		9.77		10.80	as per NAAQS, 2009.	
B.	WATER	Paramete	r	Results Unit of Limit						
						measur	·e			
		pН		7.4		pН		5.5-9.0	The quality of mine	
		Total Suspend Solid	led	13.4		mg/ltr.	•	100	water is being measured on monthly basis and all	
		Total Dissolve Solid	ed	548.8	3	mg/ltr.		2100	values are within the limits. Average value	
		Biological Ox Demand	ygen	2.4		mg/ltr.	•	30	for FY17 is provided here.	
	Chemical Oxygen Demand		24.0		mg/ltr.	•	250			
		Oil & Grease		1.2		mg/ltr.		10		

The colliery 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 Colliery

#### PART – D Hazardous Wastes

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

SI	Hazardous Waste	Total Quantity (Kg.)			
No		During the previous financial year 2015-2016	During the current financial year 2016-2017		
1.	From process Used Oil Used cap lamp Battery	1330 Litres 0 Nos	4200 Litres 0 Nos		
2.	From pollution control facility	-	-		

#### PART – E Solid Wastes

SI	Solid Wastes	Total Quantity ( Kg.)				
No		During the previous financial year 2015-2016	During the current financial year 2016-2017			
1.	Steel Scrap and other materials (conveyor belt, cable pieces waste) collected from U/G mines.	378 Tonnes	275.28 Tonnes			
2.	Quantity recycled or reutilized within the unit/ sold/ disposed	All scraps sold to vendors	All scraps sold to vendors			

#### 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. Steel Scrap and other materials	Solid	275.28 Tonnes	Steel scrap and other solid wastes, which is mentioned here sent to central scrap yard for segregation and disposal to vendors.	
Hazardous Waste 1. Used Oil 2. Used Cap Lamp Battery	Used Oil (Liquid) Battery(Solid)	4200 Litres 0 Nos	Hazardous wastes are disposed off to registered recyclers according to applicable Hazardous Wastes Management Rules.	

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

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

#### PART - G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

S. No.	Environment Management Activity	Expenditure in Lakhs	
1	Stowing activities i.e filling of U/G voids for surface protection and prevention of subsidence	1145.76282	
2	Fire Control measures (Fire/Isolation Stopping and Nitrogen plant)	78.05	
3	Goaf Filling activities, drain repairing and maintenance, settling tank maintenance jobs	18	
4	Making potable water in Water Treatment Plant & Supply to colonies	25.4	
5	Horticultural activities including green belt development and regular lawn and garden maintenance	16.46	
6	Plantation of saplings and maintenance	2.85	
	Total Cost incurred	1286.52	

Total annual expenditure incurred towards environmental protection is Rs. 1286.52 lakh.

Annual raw coal production of the plant during the year is 2.50 lakh tonnes.

So the impact of the pollution abatement measures and environment protection shall be Rs. 514.19 per ton of raw coal production.

#### PART - H

Additional measures/ investment proposals for environmental protection including abatement of pollution, prevention of pollution

Jharia Division of TATA Steel Ltd. is committed to improve safety and environment by strictly practicing Environmental Management System of company. Various programs are arranged such as World Environmental day, Annual Flower Show for public awareness. Also various initiatives for biodiversity enhancement in the region have been taken in FY17 such as Artificial 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.

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

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

#### 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 in underground mines.
- 4. Our welfare department arranges to clean the domestic garbages from our colonies to provide better environment.
- 5. We also reimburse the cost of LPG cylinder refilling cost to the employees to avoid coal burning.
- 6. Regular monitoring of Air Quality & mine water analysis by our separate environment management cell.
- 7. We have already done the tree plantation job and this is a continuous process in company leasehold areas.
- 8. Regular thrust on Environment awareness conducting training classes at P.T.I., Jamadoba.
- 9. We are an IMS certified unit (ISO 9001 & 14001 and OHSAS 18001 certified).

Name of Unit - Jamadoba Colliery

Head, Jamadoba Colliery
TATA STEEL LIMITED