

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/ **8 40** /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 **BHELATAND A. 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.

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Copy to: Head, Bhelatand A. 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 66655282 Fax 91 22 66657724 Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

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FORM – V (See rule – 14) Environmental Statement for the financial year ending the 31st March -2017 Bhelatand A. Colliery

PART - A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Bhelatand A. Colliery
Manager :	Mr. Barun Banerjee
	Head(Bhelatand A. Colliery) Tata Steel Ltd., P.O Bhelatand
	Dist Dhanbad, Jharkhand-828103
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	1910
5.Date of the last environmental statement submitted	22 nd September' 2016
	(Vide Letter
	No.S&E/ENV/ESSA/05/729/16)

PART - B

Water and Raw Material Consumption

Water Consumption M³ / day. 1.

	Water consumption in 2015-2016	Water consumption in 2016-2017
Process	Not Applicable	Not Applicable
Industrial	69.68 M³/day	70.57 M³/day
Domestic	2213.45 M ³ /day	2060.20 M³/day

SI. No	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.	Raw Coal	Not Applicable	Not Applicable	

FORM - V (See rule - 14)

Environmental Statement for the financial year ending the 31st March -2017 Bhelatand A. Colliery

2. Raw Material Consumption

SI. No	Name of the Raw	Name of the	Raw Materials consumption per unit production output.		
	Material	product	During the previous financial year 2015-2016	During the current financial year 2016-2017	
1.	Explosives		0.28 Kg/Tonne	0.26 Kg/Tonne	
2.	Detonators	Raw Coal	0.53 Nos/Tonne	0.51 Nos/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.

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

(Parameter as prescribed in the consent issued)

Sl. No	Pollution	Quantity o discharged (n	_	ollutants		ncentratio		of ischarges	Percentage of variation from prescribed	
110		ansonar gear (in	1100007	.u.y)	1 -	ass/Volum		isenai ges	standard with reason.	
A.	AIR	PM ₁₀ Level : 24 Hourly Limit- 100μg/m ³ 70.80	: 24 L 60	4 Hourly 24 Limit- 2 0µg/m ³ 8		NO2 Level: NO2 Level: 4 Hourly 24 Hourly Limit- 0μg/m³ Limit- 80μg/m³ 14.09 13.55		Limit- 30μg/m ³	Ambient air quality is being measured and all values are within limits as per NAAQS, 2009.	
В.	WATER	Paramete	r	Resul	ts	Unit of measur	_	Limit		
		рН		7.7		рН		5.5-9.0	The quality of mine	
		Total Suspend Solid	ed	15.6		mg/ltr.		100	The quality of mine water is being measured on monthly basis and all	
		Total Dissolve Solid	661.0)	mg/ltr.		2100	values are within the limits. Average value	
		Biological Ox Demand	ygen	2.2		mg/ltr.		30	for FY17 is provided here.	
		Chemical Oxy Demand	gen	22.4		mg/ltr.		250		
		Oil & Grease		1.8		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 31st March -2017 Bhelatand A. Colliery

<u>PART – D</u> 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	1996 Litres Nil	Nil Nil		
2.	From pollution control facility		-		

PART – E Solid Wastes

Sl Solid Wastes Total Quan			ntity (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.	304 Tonnes	135.64 Tonnes	
2.	Quantity recycled or reutilized within the unit/ sold/ disposed	All wastes sold to recyclers	All wastes sold to recyclers	

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	Solid	135.64 Tonnes	Steel scrap and other solid wastes,
and other		management school acrosses	which is mentioned here sent to
materials		elfos-lytsees alordo i con	central scrap yard for segregation
	SEE ANDRE VERNI		and disposal to vendors.
Hazardous Waste			alvenios pasalis usanopis silo
1. Used Oil	Used Oil (Liquid)	Nil	Generally, hazardous wastes are
		Libration belows	disposed off to registered recyclers
2. Used Cap	Battery(Solid)	Nil	according to applicable Hazardous
Lamp Battery			Wastes Management Rules.

FORM - V (See rule -14)

Environmental Statement for the financial year ending the 31st March -2017 Bhelatand A. 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	137.1426
2	Fire Control measures (Fire/Isolation Stopping and Nitrogen plant)	10.5
3	Goaf Filling activities, drain repairing and maintenance, settling tank maintenance jobs	15
4	Making potable water in Water Treatment Plant & Supply to colonies	31.345
5	Horticultural activities including green belt development and regular lawn and garden maintenance	5.52
6	Plantation of saplings and maintenance	2.14
	Total Cost incurred	201.65

Total annual expenditure incurred towards environmental protection is Rs. 201.65 lakhs

Annual raw coal production of the plant during the year is 2.71 lakh tonnes.

So the impact of the pollution abatement measures and environment protection shall be Rs. 74.47 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. Efforts are being made to increase the utilization of the mine water from Bhelatand colliery for washery operation.

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.

A Sewage Treatment Plant has been installed of 200KLD capacity for treatment of domestic sewage of Adarsh Nagri Colony at Bhelatand at a cost of Rs. 65 lakhs. Regular operation and maintenance is being done to ensure optimum performance of plant.

FORM - V (See rule -14)

Environmental Statement for the financial year ending the 31st March -2017 Bhelatand A. Colliery

PART-I

Any other particulars for improving the quality of environment

- 1. We are providing safe drinking water from our water treatment plant to our employees.
- 2. We are regularly sprinkling water in and 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 are continuously increasing the green cover of our leasehold area by planting trees.
- 8. Regular thrust on Environment awareness by conducting training classes at PTI, Jamadoba.

9. We are an IMS certified unit (ISO 9001 & 14001 and OHSAS 18001 certified).

Name of Unit - Bhelatand A. Colliery

Head, Bhelatand A. Colliery
TATA STEEL LIMITED