

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 /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 **DIGWADIH 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.

Jharkhand State

Copy to: Head, Digwadih 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 6665582 Fax 91 22 66657724 Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com



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

PART - A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Digwadih Colliery
Manager :	Mr. Vikash Kumar
Supplied (Sept. 1997)	Head(Digwadih Colliery)
	Tata Steel Ltd., P.O Jealgora
	Dist Dhanbad, Jharkhand-828110
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	0.60 MTPA – Raw Coal
4. Year of Establishment	1918
5.Date of the last environmental statement submitted	22 nd September' 2016
	(Vide Letter
	No.S&E/ENV/ESSA/05/726/16)

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	19.35 M³/day	18.61 M³/day
Domestic	1166.2 M ³ /day	1185.15M³/day

SI. No	Name of the products	Process water consumption per unit of product of		
	(legene selle) legio, sono	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 Digwadih 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		0.29 Kg/Tonne	0.33 Kg/Tonne	
2.	Detonators	Raw Coal	0.53 Nos/Tonne	0.60 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)

SI. No	Pollution	Quantity o discharged (n		ollutants lay)	pol	ncentration lutants in ass/Volum	n d	of ischarges	Percentage of variation from prescribed standard with reason.	
Α.	AIR	PM ₁₀ Level : 24 Hourly Limit- 100µg/m ³ 84.29	: 24 L 60	Level Hourly imit- µg/m ³ 3.19	24	2 Level: Hourly Limit- 0μg/m ³ 9.77	2	O2 Level: 4 Hourly Limit- 80μg/m ³ 10.80	Ambient air quality is being measured and all values are within limits as per NAAQS, 2009.	
В.	WATER	Paramete	er	Resul	ts	Unit o		Limit	ELLI DE PROSE FF	
		рН		7.7		рН		5.5-9.0	TTI 1:4 C :	
		Total Suspend Solid	led	22.8		mg/ltr		100	The quality of mine water is being measured on monthly basis and all	
		Total Dissolve Solid	ed	507.8	3	mg/ltr		2100	values are within the limits. Average value	
		Biological Ox Demand	ygen	2.9		mg/ltr		30	for FY17 is provided here.	
		Chemical Oxy Demand	/gen	20.0		mg/ltr		250	noiv.	
		Oil & Grease		1.4		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 Digwadih 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	2217 Litres 35 Nos	1130 Litres Nil		
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.	226 Tonnes	113 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 and other materials	Solid	113 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)	1130 Litres Nil	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 31st March -2017 Digwadih 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	606.09
2	Fire Control measures (Fire/Isolation Stopping and Nitrogen plant)	131.52
3	Goaf Filling activities, Drain repairing and maintenance, settling tank maintenance jobs	6.9
4	Water spraying costs in underground and surface	10
5	Making potable water in Water Treatment Plant & Supply to colonies	25.4
6	Horticultural activities including green belt development and regular lawn and garden maintenance	16.46
7	Plantation of saplings and maintenance	2.85
	Total Cost incurred	799.22

Total annual expenditure incurred towards environmental protection is Rs. 799.22 lakhs.

Annual raw coal production of the plant during the year is 2.62 lakh tonnes.

So the impact of the pollution abatement measures and environment protection shall be Rs. 305.00 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.

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 garbage's 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.

FORM - V (See rule - 14)

Environmental Statement for the financial year ending the 31st March -2017 Digwadih Colliery

- 6. Regular monitoring of Air Quality & mine water analysis by our separate Environment Cell.
- 7. We have already done the tree plantation job and this is a continuous process in company lease hold 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 - Digwadih Colliery

Head, Digwadih Colliery
TATA STEEL LIMITED

And DIGWADIH COLLIER