



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/ 839 /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 **SIJUA COLLIERY**.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,

Sr. Manager (Environment)

Received
26/9/17
Jharkhand State Pollution Control Board
Regional Office
Dhanbad

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

Copy to: Head, Sijua 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

O/C
F/T

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

PART – A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Sijua Colliery
Manager :	Mr. Rajeev Raman Head(Sijua 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	0.32 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/05/728/16)

PART – B

Water and Raw Material Consumption

1. Water Consumption M³ / day.

	Water consumption in 2015-2016	Water consumption in 2016-2017
Process	Not Applicable	Not Applicable
Industrial	29.03 M ³ /day	28.66 M ³ /day
Domestic	1478.58 M ³ /day	1506.27 M ³ /day

Sl. 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

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Sijua Colliery

2. Raw Material Consumption

Sl. No	Name of the Raw Material	Name of the product	Raw Materials consumption per unit production output.	
			During the previous financial year 2015-2016	During the current financial year 2016-2017
1.	Explosives	Raw Coal	0.29 Kg/Tonne	0.315 Kg/Tonne
2.	Detonators		0.54 Nos/Tonne	0.596 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.

PART – C

Pollution discharged to environment / unit of output.

(Parameter as prescribed in the consent issued)

Sl. No	Pollution	Quantity of pollutants discharged (mass/ day)		Concentration of pollutants in discharges (Mass/Volume)		Percentage of variation from prescribed standard with reason.
A.	AIR	PM ₁₀ Level : 24 Hourly Limit- 100µg/m ³	PM _{2.5} Level : 24 Hourly Limit- 60µg/m ³	SO ₂ Level: 24 Hourly Limit- 80µg/m ³	NO ₂ Level: 24 Hourly Limit- 80µg/m ³	Ambient air quality is being measured and all values are within limits as per NAAQS, 2009.
		70.80	35.95	14.09	13.55	
B.	WATER	Parameter	Results	Unit of measure	Limit	The quality of mine water is being measured on monthly basis and all values are within the limits. Average value for FY17 is provided here.
		pH	7.6	pH	5.5-9.0	
		Total Suspended Solid	17.7	mg/ltr.	100	
		Total Dissolved Solid	627.8	mg/ltr.	2100	
		Biological Oxygen Demand	2.8	mg/ltr.	30	
		Chemical Oxygen Demand	26.5	mg/ltr.	250	
	Oil & Grease	1.6	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
Sijua Colliery

PART – D
Hazardous Wastes

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

Sl No	Hazardous Waste	Total Quantity	
		During the previous financial year 2015-2016	During the current financial year 2016-2017
1.	From process Used Oil Used cap lamp Battery	1532 Litres 0 Nos	210 Litres 0 Nos
2.	From pollution control facility	-	-

PART – E
Solid Wastes

Sl No	Solid Wastes	Total Quantity	
		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.	256.19 Tonnes	325.5 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	325.5 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)	210 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 31st March -2017
Sijua Colliery

PART – G

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

The mode of transportation of raw coal from colliery to washery is shifted from truck to underground belt network system. Presently, 95% coal transportation is through belt network, thus helps in reduction of CO2 emissions as well fugitive emissions.

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	2331.58
2	Fire Control measures (Fire/Isolation Stopping and Nitrogen plant)	28.53
3	Goaf Filling activities, drain repairing and maintenance, settling tank maintenance jobs	12.36
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	2411.48

Total annual expenditure incurred towards environmental protection is **Rs. 2411.48 lakhs**

Annual raw coal production of the plant during the year is **2.89 lakh tonnes**.

So the impact of the pollution abatement measures and environment protection shall be **Rs. 835.68 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.

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
Sijua 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 – Sijua Colliery



Head, Sijua Colliery
TATA STEEL LIMITED