

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 /2015

September 28th, 2015

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,

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 (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



FORM – V (See rule – 14) Environmental Statement for the financial year ending the 31st March -2015 Sijua Colliery

PART - A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Sijua Colliery
Manager :	Mr. Kunal Sharan 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	27 th September' 2014 (Vide Letter No.S&E/ENV/ESSA/05/872/14)

PART - B

Water and Raw Material Consumption

Water Consumption M³ / day. 1.

	Water consumption in 2013-2014	Water consumption in 2014-2015	
Process	Not Applicable	Not Applicable	
Industrial	29.03 M³/day	29.03 M³/day	
Domestic	1525 M³/day	1493.3 M³/day	

SI. No	During the previ	Process water consumption per unit of product output.			
		During the previous financial year 2013-2014	During the current financial year 2014-2015		
1.	Raw Coal	Not Applicable	Not Applicable		

FORM – V (See rule – 14) Environmental Statement for the financial year ending the 31st March -2015 Sijua Colliery

2. Raw Material Consumption

SI. No	Name of the Raw Material	Name of the product	Raw Materials consumption per unit production output.		
			During the previous financial year 2013-2014	During the current financial year 2014-2015	
1.	Explosives	,	0.33 Kg/Tonne	0.32 Kg/Tonne	
2.	Detonators	Raw Coal	0.64 Nos/Tonne	0.63 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 of discharged (n					Percentage of variation from prescribed standard with reason.				
A.	A.	AIR	AIR	PM 10 Level : 24 Hourly Limit- 100µg/m ³	PM 2.5 Level: Hourly Limit 60µg/n	24 Hou y 8	SOx Level: 24 Hourly Limit- 80μg/m ³		Level: Hourly mit- ug/m ³	All values are within limits.	
		76.8	43.0		15.5	1	19.6				
В.	WATER	Paramete	er	Results	Measu men		Limit	All values are within limits.			
			pН		8	pH		5.5-9.0			
			Total Suspend Solid	ded	23	mg/lt	r.	100			
		Total Dissolv Solid	ed	625	mg/lt	r.	2100				
			Biological Or Demand	xygen	4.5	mg/lt	r.	30			
		Chemical Ox Demand	ygen	44.7	mg/lt	r.	250				
		Oil & Grease		0.9	mg/lt	r.	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 -2015 Sijua Colliery

<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 2013-2014	During the current financial year 2014-2015	
1. /	From process Used Oil Used cap lamp Battery	630 Litres 1500 Nos	800 Litres 0 Nos	
2.	From pollution control facility	-	-	

PART – E Solid Wastes

SI No	Solid Wastes	Total Quantity			
		During the previous financial year 2013-2014	During the current financial year 2014-2015		
1.	Steel Scrap and other materials (conveyor belt, cable pieces waste) collected from U/G mines.	255.76 Tonnes	184.82 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	184.82 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	Used Oil (Liquid)	800 Litres	Hazardous wastes are disposed off to registered recyclers according to
2. Used Cap Lamp Battery	Battery(Solid)	0 Nos	applicable Hazardous Wastes Management Rules.

FORM - V (See rule - 14)

Environmental Statement for the financial year ending the 31st March -2015 Sijua Colliery

PART-G

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

Movement of truck for raw coal transportation has been completely stopped from 15-pit & 2-pit, thus helping in reducing the dust pollution load by nearly 60%. This has caused in reduction in CO2 emissions as well.

- Rs. 800.71 lakhs incurred for stowing activities i.e filling of U/G voids for surface protection and prevention of subsidence.
- Rs. 2 lakhs incurred for Goaf filling activities.
- Rs. 15.68 lakhs incurred for fire control measures including ventilation stopping and isolation stopping.
- Rs.2.47 lakhs yearly on cost of Drain repairing and maintenance, settling tank maintenance jobs.
- Rs. 23.05 lakhs incurred for making potable water in Water Treatment Plant and supply to employees' colony.
- Rs. 6.14 lakhs incurred annually for Horticultural activities including green belt development and regular lawn and garden maintenance.
- Extensive plantation in and around the unit for which the annual expenditure of Rs. 2.41 lakhs was incurred.

Total annual expenditure incurred towards environmental protection is Rs. 852.46 lakhs

Annual raw coal production of the plant during the year is 2.78 lakh tonnes.

So the impact of the pollution abatement measures and environment protection shall be Rs. 306.64 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.

A Sewage Treatment Plant has been installed of 200KLD capacity for treatment of domestic sewage of Adarsh Nagri Colony at Bhelatand. Cost incurred for this PSTP is Rs. 65 lakhs.

FORM - V (See rule - 14)

Environmental Statement for the financial year ending the 31st March -2015 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