



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/ 731 /2016

September 22 , 2016

Dear Sir,

With reference to the above, we are enclosing here with form (V) (See rule-14) the Environmental Statement for **BHELATAND COAL WASHERY**.

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.

TATA STEEL LIMITED

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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 -2016
Bhelatand Coal Washery

PART – A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Bhelatand Coal Washery
Head :	Mr. M. P. Sinha Head(Bhelatand Coal Washery) Tata Steel Ltd., P.O.- Bhelatand Dist.- Dhanbad, Jharkhand-828 103
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	0.54 MTPA Clean coal
4.Year of Establishment	1995
5.Date of the last environmental statement submitted	28 th September' 2015 (Vide Letter No.S&E/ENV/ESSA/05/841/15)

PART – B

Water and Raw Material Consumption

1. Water Consumption M³ / day.

	Water consumption in 2014-2015	Water consumption in 2015-2016
Process	924.74 M ³ / day	1007.86 M ³ / day
Cooling	Not Applicable	Not Applicable
Domestic	1 M ³ / day	1 M ³ / day

Sl. No	Name of the products	Process water consumption per unit of product output.	
		During the previous financial year 2014-2015	During the current financial year 2015-2016
1.	Clean Coal	0.60 M ³ /Tonnes	0.74 M ³ /Tonnes

FORM – V (See rule – 14)**Environmental Statement for the financial year ending the 31st March -2016
Bhelatand Coal Washery****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 2014-2015	During the current financial year 2015-2016
1.	Raw Coal	Clean Coal	1.96 tonne/tonne	2.05 tonne/tonne
2.	Magnetite		1.02 kg/tonne	1.05 kg/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.	
		88.11	44.02	23.10	18.82		
B.	WATER	Zero water discharge (Closed water circuit system). The analysis of water in the final settling tank is as follows:					All values are within limits.
		Parameter	Results	Measurement	Limit		
		pH	8.4	pH	5.5-9.0		
		Total Suspended Solid	29.1	mg/ltr.	100		
		Total Dissolved Solid	679.9	mg/ltr.	2100		
		Biological Oxygen Demand	4.2	mg/ltr.	30		
		Chemical Oxygen Demand	51.0	mg/ltr.	250		
Oil & Grease	3.5	mg/ltr.	10				

The washery 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)

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PART – D

Hazardous Wastes

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

Sl No	Hazardous Waste	Total Quantity (Kg.)	
		During the previous financial year 2014-2015	During the current financial year 2015-2016
1.	From process Used Oil Lead Acid Battery	2400 Litres 1 No	4556 Litres 35 Nos
2.	From pollution control facility	-	-

PART – E

Solid Wastes

Sl No	Solid Wastes	Total Quantity (Kg.)	
		During the previous financial year 2014-2015	During the current financial year 2015-2016
1.	From process a. Tailings b. Scrap materials	207963 Tonnes 158.27 Tonnes	155845 Tonnes 302.59 Tonnes
2.	(i) Quantity recycled or reutilized within the unit/sold/disposed	All tailings sold to institutionalized customers and scrap sold to dealers	All tailings sold to institutionalized customers and scrap sold to dealers

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. Tailings	Coal of -0.5mm size (Solid)	155845 Tonnes	All tailings sold to institutionalized customers
2. Scrap materials	Solid	302.59 Tonnes	Steel scrap is sold off to vendors.
Hazardous Waste 1. Used Oil	Used Oil (Liquid)	4556 Litres	Disposed off to authorized recycler.
2. Used Battery	Lead Acid Battery(Solid)	35 Nos	Disposed off to authorized recycler.

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PART – G

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

Bhelatand coal washery of TATA Steel Ltd. is an ISO 9001, 14001 and OHSAS 18001 unit, entire coal washing is done by eco-friendly way by using standard practice. Dry-fog system has been already installed to suppress the dust generated at CHP and transfer points of belt conveyor systems and is operated at all times to check fugitive emissions. Adequate fixed-type water sprinklers are also installed at the internal roads of the washery.

S.No.	Environment Management Activity	Expenditure in Lakhs
1	Tailings Management System including recycling	37.45
2	Dust suppression system (Dry fog system)	6.12
3	Dust extraction system	0.05
4	Housekeeping measures includes removing spillage, improvement of roads	32.65
5	Mechanical dewatering system	0.45
6	Water spraying on roads for dust control	5.5
7	Horticultural activities including green belt development and regular lawn and garden maintenance	5.88
8	Plantation of saplings and maintenance	0.59
	Total Cost incurred	88.69

Total annual expenditure incurred towards environmental protection is **Rs. 88.69 lakhs.**

Annual clean coal production of the plant during the year is **4.23 lakh tonnes.**

So the impact of the pollution abatement measures and environment protection shall be **20.94 Rs/ ton** of clean coal production.

PART – H

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

- Efforts are being made to increase the utilization of the mine out water from Bhelatand colliery for washery operation.
- Replacement of reciprocating type air compressor by screw compressor for noise reduction has been done at a cost of 7.5 lakhs.
- Fixing of Hosch Scraper and tru track idler for spillage control of conveyor belt has been done at a cost of 4.74 lakhs.

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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 and around the units to suppress dust.
3. Our welfare department arranges to clean the domestic garbage from our colonies to provide better environment.
4. We also reimburse the cost of LPG cylinder refilling cost to the employees to avoid coal burning.
5. Regular monitoring of Air quality & mine water analysis by our separate environment management cell.
6. We are continuously increasing the green cover of our leasehold area by planting trees.
7. Regular thrust on Environment awareness by conducting training classes at PTI, Jamadoba.
8. We are an IMS certified unit (ISO 9001 & 14001 and OHSAS 18001 certified).

Name of Unit – Bhelatand Coal Washery



Head, Bhelatand Coal Washery
TATA STEEL LIMITED