



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/ 842 /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 COAL WASHERY**.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,


Sr. Manager (Environment)


Received
28/9/17
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, Bhelatand Coal Washery

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

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FORM – V (See rule – 14)

**Environmental Statement for the financial year ending the 31st March -2017
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	22 nd September' 2016 (Vide Letter No.S&E/ENV/ESSA/05/731/16)

PART – B

Water and Raw Material Consumption

1. Water Consumption M³ / day.

	Water consumption in 2015-2016	Water consumption in 2016-2017
Process	1007.86 M ³ / day	778.4 M ³ / day
Cooling	Not Applicable	Not Applicable
Domestic	1 M ³ / day	1 M ³ / day

**The domestic water consumption in colonies has been considered in Bhelatand A. Colliery.*

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.	Clean Coal	0.74 M ³ /Tonnes	0.69 M ³ /Tonnes

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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 2015-2016	During the current financial year 2016-2017
1.	Raw Coal	Clean Coal	2.05 tonne/tonne	1.97 tonne/tonne
2.	Magnetite		1.05 kg/tonne	0.84 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.	
		70.80	35.95	14.09	13.55		
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	Measure ment	Limit		
		pH	8.3	pH	5.5-9.0		
		Total Suspended Solid	50.6	mg/ltr.	100		
		Total Dissolved Solid	679.9	mg/ltr.	2100		
		Biological Oxygen Demand	4.3	mg/ltr.	30		
		Chemical Oxygen Demand	36.3	mg/ltr.	250		
Oil & Grease	4.3	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)**Environmental Statement for the financial year ending the 31st March -2017****Bhelatand Coal Washery****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 2015-2016	During the current financial year 2016-2017
1.	From process Used Oil Lead Acid Battery	4556 Litres 35 Nos	1890 Litres 1 No
2.	From pollution control facility	-	-

PART – E**Solid Wastes**

Sl No	Solid Wastes	Total Quantity (Kg.)	
		During the previous financial year 2015-2016	During the current financial year 2016-2017
1.	From process a. Tailings b. Scrap materials	155845 Tonnes 302.59 Tonnes	120028 Tonnes 113 Tonnes
2.	(i) Quantity recycled or reutilized within the unit/sold/dispersed	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)	120028 Tonnes	All tailings sold to institutionalized customers
2. Scrap materials	Solid	113 Tonnes	Steel scrap is sold off to vendors.
Hazardous Waste			
1. Used Oil	Used Oil (Liquid)	1890 Litres	Disposed off to authorized recycler.
2. Used Battery	Lead Acid Battery(Solid)	1 No	Disposed off to authorized recycler.

FORM – V (See rule – 14)
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Bhelatand Coal Washery

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	37.72
2	Dust suppression system (Dry fog system)	6.24
3	Dust extraction system	0.3
4	Housekeeping measures includes removing spillage, improvement of roads	36.25
5	Mechanical dewatering system	0.5
6	Fixing of Hosch Scraper and tru track idler for spillage control of conveyor belt	7.5
7	Water spraying on roads for dust control	5.35
8	Horticultural activities including green belt development and regular lawn and garden maintenance	5.52
9	Plantation of saplings and maintenance	2.14
10	Replacement of reciprocating type air compressor by screw compressor for noise reduction	3.2
11	Any additional expenditure incurred such as constructing the rainwater harvesting structure	3.5
	Total Cost incurred	108.22

Total annual expenditure incurred towards environmental protection is **Rs. 108.22 lakhs**.

Annual clean coal production of the plant during the year is **3.476 lakh tonnes**.

So the impact of the pollution abatement measures and environment protection shall be **31.13 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. 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.

FORM – V (See rule – 14)

Environmental Statement for the financial year ending the 31st March -2017
Bhelatand Coal Washery

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

M. P. Singh
Head, Bhelatand Coal Washery
TATA STEEL LIMITED

Anil
TATA STEEL LIMITED
BHELATAND, DHANBAD