



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/ 841 /2015

September 28<sup>th</sup>, 2015

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)

  
29/09/15  
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 (BCPP)

**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 Horni Mody Street Mumbai 400 001  
Tel 91 22 66658282 Fax 91 22 66657724  
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

O/C  
File

**FORM – V (See rule – 14 )**  
**Environmental Statement for the financial year ending the 31<sup>st</sup> March -2015**  
**Bhelatand Coal Washery**

**PART – A**

<b>1.Name and address of the owner/ occupier of the : industry/ operation or process</b>	<b>Bhelatand Coal Washery</b>
<b>Head :</b>	<b>Mr. M. P. Sinha</b> Head(Bhelatand Coal Washery) Tata Steel Ltd., P.O.- Bhelatand Dist.- Dhanbad, Jharkhand-828 103
<b>Nominated Owner :</b>	<b>Mr. T.V.Narendran</b> Managing Director, Tata Steel Ltd (India and South East Asia) Jamshedpur, Dist- East Singhbhum Jharkhand – 831 001
<b>2.Industry category: Primary (STC Code) Secondary (STC Code)</b>	--
<b>3.Production Capacity – Units</b>	0.54 MTPA Clean coal
<b>4.Year of Establishment</b>	1995
<b>5.Date of the last environmental statement submitted</b>	27 <sup>th</sup> September' 2014 (Vide Letter No.S&E/ENV/ESSA/05/866/14)

**PART – B**

**Water and Raw Material Consumption**

**1. Water Consumption M<sup>3</sup> / day.**

	<b>Water consumption in 2013-2014</b>	<b>Water consumption in 2014-2015</b>
<b>Process</b>	858 M <sup>3</sup> / day	924.74 M <sup>3</sup> / day
<b>Cooling</b>	Not Applicable	Not Applicable
<b>Domestic</b>	1 M <sup>3</sup> / day	1 M <sup>3</sup> / day

<b>Sl. No</b>	<b>Name of the products</b>	<b>Process water consumption per unit of product output.</b>	
		<b>During the previous financial year 2013-2014</b>	<b>During the current financial year 2014-2015</b>
1.	Clean Coal	0.50 M <sup>3</sup> /Tonnes	0.60 M <sup>3</sup> /Tonnes

**FORM – V (See rule – 14 )****Environmental Statement for the financial year ending the 31<sup>st</sup> March -2015  
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 2013-2014	During the current financial year 2014-2015
1.	Raw Coal	Clean Coal	1.76 tonne/tonne	1.96 tonne/tonne
2.	Magnetite		0.96 kg/tonne	1.02 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 <sub>10</sub> Level : 24 Hourly Limit- 100µg/m <sup>3</sup>	PM <sub>2.5</sub> Level : 24 Hourly Limit- 60µg/m <sup>3</sup>	SO <sub>x</sub> Level: 24 Hourly Limit- 80µg/m <sup>3</sup>	NO <sub>x</sub> Level: 24 Hourly Limit- 80µg/m <sup>3</sup>	All values are within limits.
		76.8	43.0	15.5	19.6	
B.	WATER	Zero water discharge (Closed water circuit system). The analysis of water in the settling tank is as follows:				All values are within limits.
		<b>Parameter</b>	<b>Results</b>	<b>Measurement</b>	<b>Limit</b>	
		pH	8.47	pH	5.5-9.0	
		Total Suspended Solid	70.92	mg/ltr.	100	
		Total Dissolved Solid	718.33	mg/ltr.	2100	
		Biological Oxygen Demand	5.05	mg/ltr.	30	
		Chemical Oxygen Demand	58.17	mg/ltr.	250	
		Oil & Grease	3.42	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 31<sup>st</sup> March -2015**  
 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 2013-2014	During the current financial year 2014-2015
1.	From process Used Oil Lead Acid Battery	1890 Litres Nil	2400 Litres 1 No
2.	From pollution control facility	-	-

**PART – E**

**Solid Wastes**

Sl No	Solid Wastes	Total Quantity ( Kg.)	
		During the previous financial year 2013-2014	During the current financial year 2014-2015
1.	From process a. Tailings b. Scrap materials	134591 Tonnes 209.71 Tonnes	207963 Tonnes 158.27 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
<b>Solid Waste</b>			
1. Tailings	Coal of -0.5mm size (Solid)	207963 Tonnes	All tailings sold to institutionalized customers
2. Scrap materials	Solid	158.27 Tonnes	Steel scrap is sold off to vendors.
<b>Hazardous Waste</b>			
1. Used Oil	Used Oil (Liquid)	2400 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 )**

**Environmental Statement for the financial year ending the 31<sup>st</sup> March -2015  
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.

Tailing management cost per annum is Rs. 20.82 Lakhs.

Rs. 2.35 Lakhs yearly on cost of Mechanical dewatering system.

Rs. 14.16 Lakhs yearly on cost of Housekeeping measures includes removing spillage, improvement of roads.

Rs. 5.54 Lakhs yearly on cost of Dust suppression system (Dry fog system + water sprinklers)

Rs. 0.10 Lakhs yearly on cost of Dust Extraction System.

Rs. 2.83 Lakhs yearly on cost of Water Spraying on Roads.

**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.

**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**

