



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/ 838 /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 **JAMADOBA POWER HOUSE NO. 3**.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,


Manager (Environment)


29/9/15
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: Sr. Mgr. (Power System)

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

D/C
File

FORM – V (See rule – 14)
Environmental Statement for the financial year ending the 31st March -2015
 Jamadoba Power House No. 3

PART – A

1.Name and address of the owner/ occupier of the : industry/ operation or process	Power House
Head :	Mr. Sumit Roy Senior Manager (Power Systems) Jamadoba Power House No. 3 Tata Steel Ltd., P.O.- Jamadoba Dist.- Dhanbad, Jharkhand-828112
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	10 MW
4.Year of Establishment	1988
5.Date of the last environmental statement submitted	27 th September' 2014 (Vide Letter No.S&E/ENV/ESSA/05/865/14)

PART – B

Water and Raw Material Consumption

1. Water Consumption M³ / day.

	Water consumption in 2013-2014	Water consumption in 2014-2015
Process	2898 M ³ / day	2803 M ³ / day
Cooling		
Domestic	2 M ³ / day	2 M ³ /day
Other	Not Applicable	Not Applicable

Sl. No	Name of the products	Process water consumption per unit of product output.	
		During the previous financial year 2013-2014	During the current financial year 2014-2015
1.	Electricity Power	19.90 Ltrs./KWH	17.58 Ltrs./KWH

FORM – V (See rule – 14)

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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.	Coal Rejects	Electricity	2.76 kgs/KWH	2.30 kgs/KWH

*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 _x Level: 24 Hourly Limit- 80µg/m ³	NO _x Level: 24 Hourly Limit- 80µg/m ³	All values are within limits.
		87.6	45.8	17.2	22.1	
B.	WATER	Zero water discharge (Closed water circuit system). The analysis of water in the final settling ash pond is as follows:				All values are within limits.
		Parameter	Results	Measurement	Limit	
		pH	8.45	pH	5.5-9.0	
		Total Suspended Solid	65.50	mg/ltr.	100	
		Oil & Grease	3.26	mg/ltr.	10	
C.	STACK	SPM (mg/NM ³)	SO ₂ (mg/NM ³)	NO _x (mg/NM ³)		All values are within limits.
		137.71	31.89	38.91		

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 2013-2014	During the current financial year 2014-2015
1.	From process Used Oil Used cap lamp Battery	2520 Litres Nil	5200 Litres Nil
2.	From pollution control facility	-	-

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

Jamadoba Power House No. 3

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.	From process Bed Ash Scrap material	34565 Tonnes 33.66 Tonnes	38203 Tonnes 104.40 Tonnes
2.	From pollution control mechanism Fly Ash	98787 Tonnes	82207 Tonnes
3.	Quantity recycled or reutilized within the unit/ sold/ disposed	Bed ash reutilized in stowing process. Flyash bricks used for making bricks	Bed ash reutilized in stowing process. Flyash used for making bricks, reclamation purpose.

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. Bed Ash	Solid	38203 Tonnes	Bottom ash is quenched and conveyed to a silo by belt conveyor. This ash is transported to collieries for stowing in underground mines after mixing with sand. Fly ash is taken out of ESP as wet slurry and is guided to settling ponds through drain. After settling ash is taken out and transported to low lying areas for filling. Once the area is filled up, tree plantation is undertaken after putting good earth on the top. Fly ash bricks are also utilized for manufacturing bricks. Steel scrap is sent to central scrap yard for segregation and disposal to vendors.
2. Fly Ash	Solid	82207 Tonnes	
3. Scrap material	Solid	104.40 Tonnes	
Hazardous Waste 1. Used Oil	Used Oil (Liquid)	5200 Litres	Hazardous wastes are disposed off to registered recyclers according to applicable Hazardous Wastes Management Rules.

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Environmental Statement for the financial year ending the 31st March -2015
Jamadoba Power House No. 3

PART – G

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

Performance of ESP is quite satisfactory due to which stack emission is not polluting environment where by it is not disturbing the ecology.

Total effluent discharged from the plant is recycled back to the plant after settling. Settling ponds are always maintained properly.

- (a) Cost incurred for Ash Handling & Pond management system is Rs. 158.62 Lakhs
- (b) Cost incurred for hygienic conditioning is Rs. 2.92 Lakhs
- (c) Expenditure for Dust Suppression system (Dry fog system + water sprinklers): Rs.4.41 lakhs.
- (d) Expenditure for ESP maintenance: Rs. 2.99 Lakh.
- (e) Cost incurred for Housekeeping measures: Rs. 4.79 lakhs.
- (f) Cost incurred for operation and maintenance of online stack monitoring system is Rs.5.27 lakhs.
- (g) Rs. 8.5 lakhs incurred annually for Horticultural activities including green belt development and regular lawn and garden maintenance.
- (h) Extensive plantation in and around the unit for which the annual expenditure of Rs. 4.81 lakhs was incurred.
- (i) Rs. 30.69 lakhs incurred for making potable water in Water Treatment Plant and supply to employees' colony.

Total annual expenditure incurred towards environmental protection is Rs. 223 Lakhs

Annual electricity generation of the plant during the year is 582.21 LKWH.

So the impact of the pollution abatement measures and environment protection shall be Rs. 0.38/KWH.

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 like creation of herbal garden, butterfly-park have been taken to improve the aesthetic value and beautification of the area.

FORM – V (See rule – 14)

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

Jamadoba Power House No. 3

PART – I

Any other particulars for improving the quality of environment

1. Spraying of water by Company's tanker on roads surrounding Power Plant is being done on regular basis to control ambient air quality.
2. Afforestation and horticulture has been done on new areas filled up with fly ash.
3. Rain harvesting system is modified.
4. Stack emission is continuously monitored and maintained.
5. We are an IMS certified unit (ISO 9001 & 14001 and OHSAS 18001 certified).

Name of Unit – Jamadoba Power House No. 3

Handwritten signature
26/9/15
Sr. Mgr (Power Systems)
Jamadoba Power House No. 3
TATA STEEL LIMITED

Approved