

The Member Secretary State Pollution Control Board A/118, Nilakantha Nagar, Unit-VIII Bhubaneswar - 751012

MD/ ENV/ 352 /129/2019 Date - 25.09.2019

Sub: Environmental Statement of Tata Steel Hospital, Joda for 2018-19.

Dear Sir

Kindly find attach herewith the Environment Statement in the prescribed format (FORM V) as per "Environmental (Protection) Amendment Rules, 1992 of our Tata Steel Hospital, Joda for your kind perusal..

Thanking you,

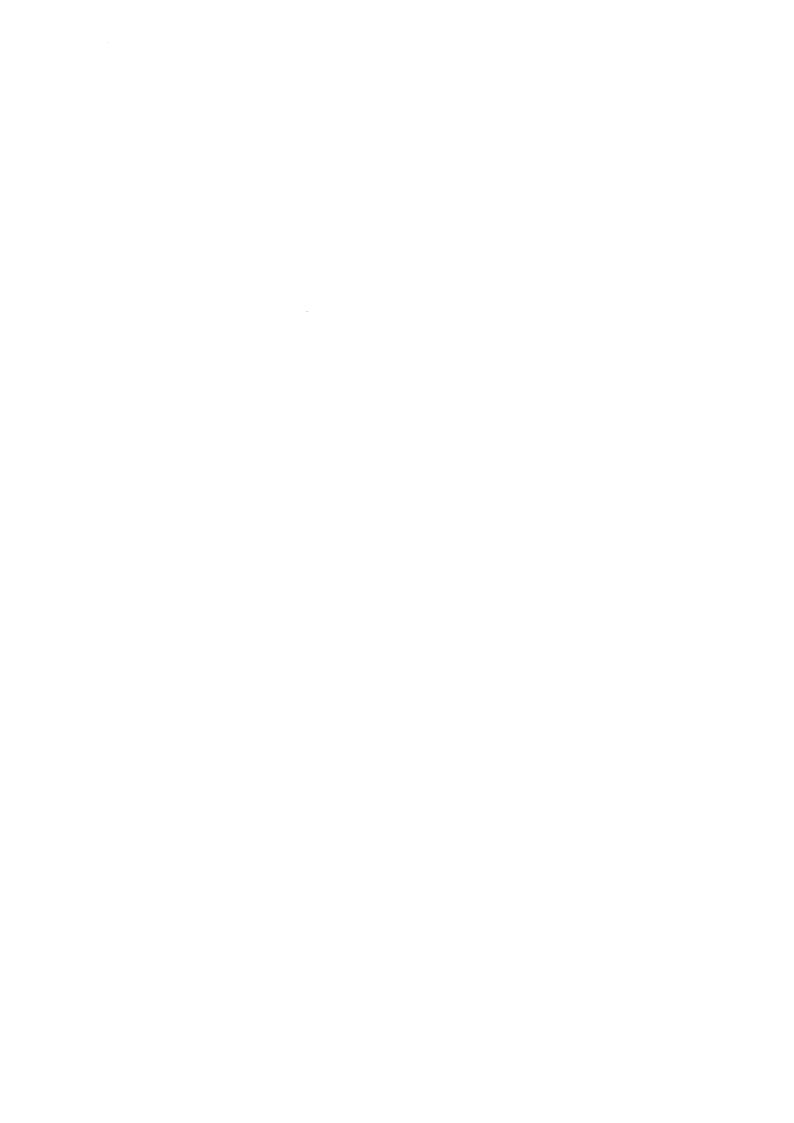
Yours faithfully f: Tata Steel Limited

Chief Medical Officer Tata Steel Hospital, Joda

Encl: As above

Copy to: The Regional Officer

State Pollution Control Board Baniapata, College Road Keonjhar - 758001, Odisha



ENVIRONMENT STATEMENT 2018-19



TATA Steel Hospital, Joda TATA STEEL LIMITED

September 2019

FORM - V (See Rule -14)

ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH, 2019

TATA STEEL HOSPITAL, JODA

PART-A

1	Name and address of the owner/ occupier of the industry, operation or process	:	TATA Steel Hospital Joda, Joda West, Po.: Joda, DistKeonjhar, Odisha –758034
	Agent	:	Dr Ashok Kumar Roy
	Nominated Owner		Mr. Atul Bhatnagar, General Manager, OMQ division, Administrative Building, Noamundi Iron Mine, TATA Steel Limited PO.: Noamundi, DistWest Singhbhum Jharkhand – 833217 Mr T V Narendran, Managing Director, Tata Steel India & SEA, Jamshedpur-831001
2	Industry Category	:	Hospital
3	Production Capacity	:.	75 Bedded Hospital
4	Year of Establishment	:	1946
5	Date of last Environmental Statement submitted.	:	September 2018

<u>PART-B</u> <u>Water and Raw Material Consumption</u>

(i) Water Consumption: (Joda east Iron Mine)

Consumption Head:	2017-18 (in KL)	2018-19 (in KL)		
Process	Nil	Nil		
Spraying in mine pit, services	Nil	Nil		
Domestic	Nil	Nil		
	Process water consumption per product output (m3/MT)			
Name of the product	During the Previous financial Year (2017-18)	During the current financial Year (2018-19)		
Hospital (Used in Housekeeping activity)	30600 litre	31300 litre		

ii) Raw Material Consumption

The following items have been consumed/utilized:

	Consumption of Raw Material			
Name of Raw materials	During previous financial year (2017-18)	During current financial year (2018-19)		
Oxygen gas	1800 CFT or 50976 Kg	3620 CFT or 102,518.40 Kg		
Carbon dioxide	40 CFT or 1132.80 KG	nil		
Nitrous oxide	80 CFT or 2265.60 Kg	120 CFT or 3398.40 Kg		
It's a health care facility (Hospital) & thus various medicine are used for medical treatments				
Electric Power:				
Consumed	- Nil			
Generated				

PART-C POLLUTION DISCHARGED TO ENVIROMENT/ UNIT OF OUTPUT (Parameters as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass / day)	Concentration of Pollutants discharges (mass / day)	Percentage of variation from prescribed standards with reasons	
a) Water	connected to Effluent Treat	Steel Hospital Noamundi all the liquid waste after pre-treatment and to Effluent Treatment Plant (ETP) of 10 KLD. The treated water is a for plantation activities. All the water quality results of ETP are herewith in annexure-1. Steel Hospital, Joda, for disposal of bio-medical waste, an incinerator is . The air emission from same is regularly been monitored.		
b) Air				

<u>PART-D</u> <u>HAZARDOUS WASTES</u>

As specified under the Hazardous & Other Waste (Management & Trans boundary Movement) Rules, 2016 and amendment thereof

	Total Quantity			
Hazardous Wastes	During the Current Financial Year (2017-18)	During the Current Financial Year (2018-19)		
I) From Process:				
	Nil	Nil		
II) From Pollution Control Facility:				
 Bio-medical incinerator ash 	35.58 Kg	38.54 Kg		

PART-E **SOLID WASTES**

TATA Steel Hospital, Joda is a Health Care Facility with ICU, Blood Bank, Pathological Lab, X-ray unit, Ultra sound facility etc. The solid waste generated in hospital such as refused food, peel of fruits etc. been generated and disposed of along with municipal solid waste.

	TOTAL QUALITY		
Sources	During the Current Year (2017-18)	During the Current Year (2018-19)	
a) From Process:			
b) From Pollution Control Facility			
c) i. Quantity recycled or reused within the unit ii. Quantity sold	Treated water from ETP	Treated water from ETP	
General Office Waste (garbage)	~17.34 tonnes	18.64 tonnes	

PART-F

THE CHARACTERISTICS (in terms of composition and quantum) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE **CATEGORIES OF WASTES**

TATA Steel Hospital, Joda is a Health Care Facility with ICU, Blood Bank, Pathological Lab, X-ray unit, Ultra sound facility etc. Only bio-medical waste along with garbage (solid waste) is been generated. All the bio-medical waste generated are disposed off as per Biomedical waste management Rule -2016.

Yellow Category White Category : 697.21 kg/yr

Red Category Blue Category $: 301.42 \, \text{kg/yr}$: 39.56 kg /yr

General Solid Waste : 17.34 tonne/yr

 $: 17.63 \, \text{kg/yr}$

DISPOSAL PRACTICE:-

The segregation of Bio-medical waste is made from generation point and shall be disposed as per norms. Due to absence of common facility; a double chamber Incinerator has been installed at Hospital along with autoclave, shredder and other various facilities for disposal of Biomedical waste.

The liquid chemical waste generated from pathology, blood bank etc. is pre-treated in neutralisation pit followed by treatment in 10 KLD Effluent Treatment Plant (ETP). The treated water is recycled and reused in horticultural activities.

PART-G IMPACT OF POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION

- For the adequate disposal of biomedical waste an Incinerator has been installed in unit.
- Plastic shredder, deep burial ash disposal, autoclave is available in hospital.
- 10 KLD Effluent Treatment Plant is been established on December 2017.
- 10 KLD Sewage treatment Plant (STP) is connected to hospital for treatment of waste.

- Pre-treatment such as neutralization of contamination of waste by using 1-2% Hypochlorite dosing and autoclaving is practiced regularly before incineration of waste.
- The hospital has enhanced the facility such as new casualty, eye operation machines, various microscopes for surgery, auto analyser etc.
- The hospital is also proposed in Ayushman Bharat the National Health Protection Scheme of Govt. of India for treatment of economically weaker section of people.



10 KLD Effluent Treatment Plant (ETP) at TATA Steel Hospital Joda (Dec 2017)

PART-H

ADDITIONAL MEASURES/ INVESTMENT PROPOSAL FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION, PREVENTION OF POLLUTION

 The hospital spends additional environmental cost for operation and maintenance of biomedical treatment facility apart from mines.

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

- The hospitals is an integral part of mine and has adopted & certified for the Integrated Management System (ISO 9001: 2015, ISO 14001: 2015 & ISO 45001:2018 & SA 8001) and have been certified from year 2008.
- The hospital has its own facilities such as ICU, X-ray, Ultra Sound, Pathology, Dispensary, OT, Wards, Blood bank, Medicine store with pharmacist.
- The hospital celebrated & organizes various public events for awareness such as World TB Day, World Health Day, Nutrition & dietetics day, World Heart Day, No Tobacco day, AIDS Awareness Day, Brest Feeding Day etc. and organizes various Blood donation camps.

Chief Medical Officer Tata Steel Hospital, Joda

WATER QUALITY DATA 2018-19 TATA Steel Hospital, Joda (Annual Average)

	EFFLUENT TREA			
Parameters	10 KLD Inlet	10 KLD Outlet	Standard	
*Hq	6.53	7.36	5.5–9.0	
TSS (mg/l)	121.13	19.88	100	
BOD 5 days (mg/l)	37.00	5.69	30	
COD (mg/l)	226.38	22.75	250	
Oil & Grease (mg/l)	ND	ND	3.0	
Iron (mg/l)	3.90	0.55	3.0	

ND – Not detectable