

The Member Secretary Jharkhand State Pollution Control Board T A Division Building, HEC Campus, Dhurwa Ranchi - 834004

MD/ ENV/ 822 /125/2023 Date: 25th September 2023

Sub: Environmental Statement of Tata Steel Hospital, Noamundi for 2022-23.

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, Noamundi for your kind perusal.

Thanking you,

Yours faithfully f: Tata Steel Limited

Chief Medical Official Medical Officer Tata Steel Hospital, Natan Steel Hospital Noamundi

Encl: As above

Copy to: The Regional Officer, Jharkhand State Pollution Control Board,

MB/12 New Housing Colony, Adityapur, Jamshedpur - 831013,

Jharkhand

ENVIRONMENT STATEMENT 2022-23



PSA Oxygen Plant installed at TSH-Noamundi

10KLD Effluent Treatment Plant (ETP) at Hospital

Tata Steel Hospital, Noamundi **TATA STEEL LIMITED**

September 2023

<u>FORM - V</u> (See Rule -14)

ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st OF MARCH 2023

TATA STEEL HOSPITAL, NOAMUNDI

PART-A

1	Name and address of the owner/ occupier of the industry, operation or process	*	Dr Dhirendra Kumar, Chief Medical Officer, Tata Steel Hospital Noamundi, DistWest Singhbhum, Jharkhand–833217
	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, CEO & Managing Director, Tata Steel Ltd, Bombay House, 24 Homi Mody Street, Fort, Mumbai 400 001
2.	Industry Category	;	Hospital (Health Care Facility)
3	Production Capacity		75 Bedded Hospital with all facilities such as ICU, Blood Bank, Pathological Lab, X-Ray room, Ultra Sonography facility, etc
4	Year of Establishment	;	1925
5	Date of last Environmental Statement submitted.	* *	27.09.2022 vide letter no. MD/ENV/310/125/2022

PART-B

Water and Raw Material Consumption

(i) Water Consumption:

Consumption Head:	2021-22 (in KL)	2022-23 (in KL)		
Process	Níl	Nil		
Spraying in mine pit, services	Nil	Nil		
Domestic	Nil	Nil		
AND THE PARTY AND ROOM TO THE PARTY AND THE	Process water consumption per product output (m3/MT)			
Name of the product	During the Previous financial Year (2021-22)	During the current financial Year (2022-23)		
Hospital (Used in Housekeeping activity)	27882 KL	27750 KL		

ii) Raw Material Consumption

The following items have been consumed/utilized:

	Consumption of Raw Material			
Name of Raw materials	During Previous financial year (2021-22)	During current financial year (2022-23)		
	D- type – 78nos	D- type – 261nos		
Oxygen gas	B- type - 69	B-type - 72nos		
	A-type - 08 nos.	A-type - 06 nos.		
Nitrous oxide	8 cylinders	6 cylinders		
CO2	10 cylinders	6 cylinders		
Electric Power:				
Consumed				
Generated				

Tata Steel hospital Noamundi is one of the health care facilities of Noamundi iron Mine and shares all the resources of mine. It's a health care facility (Hospital) & thus various medicine are used for medical treatments.

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	to Effluent Treatment Plan consumed for horticultural	Tata Steel Hospital Noamundi, all the liquid waste after pre-treatment is sent Effluent Treatment Plant (ETP) of 10 KLD capacity. The treated water is assumed for horticultural activities. e water quality results of ETP are attached herewith in annexure 1.		
b) Air	At Tata Steel Hospital Noamundi, for disposal of bio-medical waste, an incinerator is installed with adequate pollution control equipment. The stack emission is regularly monitored. The results of air quality and stack emission quality monitoring is attached as Annexure-2.			

<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 Previous Financial Year (2021-22))	During the Current Financial Year (2022-23)		
l) From Process:	Nil	Nil		
II) From Pollution Control Facility:				
 Bio-medical incinerator ash 	72,91 Kg	Waste collected by Third party. (Adityapur Waste		

	management pvt. Ltd]

PART-E SOLID WASTES

Tata Steel Hospital, Noamundi is a Health Care Facility with ICU, Blood Bank, Pathological Lab, X-ray unit, Ultrasound 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.

A 100 - 100	TOTAL QUALITY		
Sources	During the Previous Year (2021-22)	During the Current Year (2022-23)	
a) From Process: b) From Pollution Control Facility c) i. Quantity recycled or reused within the unit ii. Quantity sold	· c		
iii. Quantity disposed - General Office Waste (garbage)	5.407 tonne /yr.	12.874 tonne /yr.	

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, Noamundi is a Health Care Facility with ICU, Blood Bank, Pathological Lab, X-ray unit, Ultrasound facility etc. Only bio-medical waste along with garbage (solid waste) is being generated. All the biomedical waste generated, segregated and collected at the point of use is handed over to Adityapur waste management Pvt.ltd. and disposed as per protocol.

Details of Bio-medical waste generated in FY 2022-23:

Yellow Category : 4140.84 Kg Red Category : 4465.8 kg White Category : 7376.47 kg Blue Category : 2740.1 kg

General Solid Waste : 12874.2 Kg

DISPOSAL PRACTICE: -

The segregation of Bio-medical waste is made from generation point and shall be handed over to third party (Adityapur waste management Pyt.ltd.) as per norms.

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 & reused in horticulture activities.

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

10 KLD Effluent Treatment Plant cum STP has been established on 2nd August 2017.

 Pre-treatment such as neutralization of contamination of waste by using Hypo-chlorite dosing and autoclaving is practiced regularly.

PART-H

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

- The hospital is proposed to be shifted and established in a new area due to the advancement of mining operations.
- The new hospital will also be built with modern facilities and all pollution control arrangements will be in place.
- The bio-medical waste is handled by common bio-medical waste management facility.

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

- The hospitals is an integral part of mine and has adopted & is certified for the Integrated Management System (ISO 9001: 2015, ISO 14001: 2015 & ISO 45001:2018) and have been certified from year 2008.
- The hospital has its own facilities such as ICU, X-ray, Ultrasound, 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.
- Blood donation camp is being organized every month.
- Executive health check-up for officers in progress.
- Central pipeline oxygen supply in all wards.
- Two no of A L S Ambulances purchased.
- Covid-19 Vaccination drive for community people, all employees and their family members.
- Half Yearly conference of clinical society of T M H conducted at Noamundi.

Chief Medical Officer. Tata Steel Hospital, Noamundi Chief Medical Officer

Tata Steel Hospital

Noamundi

WATER QUALITY DATA 2022-23 TATA Steel Hospital, Noamundi (Annual Average)

	EFFLUENT TRE		
Parameters	10 KLD inlet	10 KLD Outlet	Standard
рН*	6.55	7.18	5.5–9.0
TSS (mg/l)	103.67	26.75	1.00
BOD 5 days (mg/l)	26.53	11.10	30
COD (mg/l)	78,24	30.29	250
Oil & Grease (mg/l)	BDL	BDL	10
Iron (mġ/l)	0/96	0.54	3.0
Faecal Coliform	122.50	52.00	-

Note: BDL - Below detection limit

AIR QUALITY DATA 2022-23 Annual Average Air quality of Tata Steel Hospital, Noamundi of FY'23

Pollutants	Concentration of pollutants (μg/m³)	Standards (μg/m³)	
Near Hospital			
1. PM ₁₀	52.23	100	
2. PM _{2,5}	18.81	60	
3. SO ₂	8.47	80	
4. NO _x	17.39	80	
5. CO	0.165	4*	

^{*}Unit of CO is mg/m³



ISO 9001:2015, ISO 14001:2015, ISO 45001:2016 Cartified
 Recognized By Ministry of Environment & Forests (MoEF), New Deihi
 Approved by : Food Safety & Standards Authority of India under FSS Act,
 Bureau of Indian Standards (BIS), Agricultural & Processed Food Products Export Development Authority (APECA):
 Export inspection council (EIC); AGMARK.

TEST REPORT

Stack Emission Report for the month of March-2022

Report No.: AN/SE/TS-NIN	Date: 31/03/2022		
M/s Noamundi Iron Mine			Order Reference
Issued to	(M/s TATA Steel Limited)		3000132460/962, date: 15.05.20
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Anacon Representative
Sampling Location	Incinerator	Sample Quantity/ Packing	Thimble: 1 × 1 No. SO:: 30 mL × 1 No. PVC Bottle NOx 25 mL × 1 No. PVC Bottle
Date of Sampling	10/03/2022	Sample Inward Date	14/03/2022
Sample Reference No.	2022/ENV-69-S/9	Sampling Procedure	ANtd/7.2/Mon-01
Analysis Start date	15/03/2022	Analysis End date	16/03/2022

Stack details:				
Stack Identity		Hospital - Incinerator	**	
Stack attached to		Incinerator		
Material of construction		MS		
Shape of Stack		Circular	**	
Stack diameter		0.30	Meter	
Height of sampling point from GL		30	Meter	
Type of Fuel		Electric		
Parameter	Units	Results	Method Reference	
Flue gas temperature	°C	54	IS:11255 (Part 3)	
Flue gas velocity	m/s	5.86	IS:11255 (Part 3)	
Total gas quantity	m³/h	1490.72	15:11255 (Part 3)	
Total gas quantity at NTP	Nm³/h	1358.52	IS:11255 (Part 3)	
Total Particulate Matter (PM)	mg/Nm³	23.42	IS:11255 (Part 1)	
Sulphur Dioxide (SO ₂)	mg/Nm³	36.19	IS 11255 (Part 2)	
Oxide of Nitrogen (NOs)	mg/Nm³	78.31	15 11255 (Part 7)	
Carbon Monoxide (CO)	mg/Nm³	116	Gas Analyser	

Carbon Monoxide (CO) mg/Nm³ 116 Gas Analyser

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approva. of Anacon Labs.

Remark: - All Results are within Limit as per CPCB Standards.

Verified by

Shubbangi Armarkar (Technical Manager)

Authorized Signatory

Scawol Dr. (Mrs.) S.D. Garway (Quality Manager)

----End of Report----

Laboratory address: FP-34, 35, Food Park, 5 Star Industrial Estate, MIDC Butibori, Nagpur - 441 122.

Email: support@anacon.in; Please Visit us at: www.anacontaboratories.com

Thanks for your faith and trust in our services. We at Anacon Laboratories cherish our relationship.

We put in a lot of hard work to ensure that you have a seamless experience at every step of our relationship.

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