



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

MD/ ENV/ 310 /125/2022
Date: 27th September 2022

Sub: Environmental Statement of Tata Steel Hospital, Noamundi for 2021-22.

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 Officer (Mines)
Chief Medical Officer
Tata Steel Hospital, Noamundi
Tata 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**

TATA STEEL LIMITED

Mines Division Noamundi 833 217 India
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Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001 India
Tel 91 22 66658282 Fax 91 22 66657724

Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

ENVIRONMENT STATEMENT 2021-22



PSA Oxygen Plant installed at TSH-Noamundi



10KLD Effluent Treatment Plant (ETP) at Hospital

Tata Steel Hospital, Noamundi

TATA STEEL LIMITED

September 2022

FORM - V
(See Rule -14)

ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st OF MARCH 2022

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, Dist.-West Singhbhum, Jharkhand-833217
	Nominated Owner	:	Mr. Atul Bhatnagar, General Manager, OMQ division, Administrative Building, Noamundi Iron Mine, Tata Steel Limited PO.: Noamundi, Dist.-West 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.	:	22.09.2021 vide letter no. MD/ENV/226/125/2021

PART-B

Water and Raw Material Consumption

(i) Water Consumption:

Consumption Head:	2020-21 (in KL)	2021-22 (in KL)
Process	Nil	Nil
Spraying in mine pit, services	Nil	Nil
Domestic	Nil	Nil
Name of the product	Process water consumption per product output (m3/MT)	
	During the Previous financial Year (2020-21)	During the current financial Year (2021-22)
Hospital (Used in Housekeeping activity)	25882 KL	27882 KL

ii) Raw Material Consumption

The following items have been consumed/ utilized:

Name of Raw materials	Consumption of Raw Material	
	During Previous financial year (2020-21)	During current financial year (2021-22)
Oxygen gas	D- type – 59 nos.	D- type – 78nos
	B- type – 72 nos.	B- type – 69
	A- type - 08 nos.	A- type - 08 nos.
Nitrous oxide	8 cylinders	8 cylinders
CO2	10 cylinders	10 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	At Tata Steel Hospital Noamundi, all the liquid waste after pre-treatment is sent to Effluent Treatment Plant (ETP) of 10 KLD capacity. The treated water is consumed for horticultural activities. The 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.		

PART-D
HAZARDOUS WASTES

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

Hazardous Wastes	Total Quantity	
	During the Previous Financial Year (2020-21)	During the Current Financial Year (2021-22)
I) From Process:	Nil	Nil
II) From Pollution Control Facility:		
▪ Bio-medical incinerator ash	88.63 Kg	72.91 Kg

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.

Sources	TOTAL QUALITY	
	During the Previous Year (2020-21)	During the Current Year (2021-22)
a) From Process: b) From Pollution Control Facility c) i. Quantity recycled or reused within the unit ii. Quantity sold iii. Quantity disposed ▪ General Office Waste (garbage)	-	-
	5.44 tonne /yr.	5.407 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 is disposed off as per Biomedical waste Management Rules, 2016.

Details of Bio-medical waste generated in FY 2021-22:

Yellow Category	: 5480.3 Kg	Red Category	: 2656.4 kg
White Category	: 5634 kg	Blue Category	: 1926.4 kg
General Solid Waste	: 5407 Kg		

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 Bio-medical 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 & reused in horticulture 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 for incinerated ash disposal, autoclave is available in hospital.
- 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 before incineration of waste.

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 proposed to be handled by common bio-medical waste management facility.

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

- The hospital 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, Breast 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 (Mines)
Tata Steel Hospital, Noamundi
Chief Medical Officer,
Tata Steel Hospital, Noamundi

WATER QUALITY DATA 2021-22
TATA Steel Hospital, Noamundi
(Annual Average)

Parameters	EFFLUENT TREATMENT PLANT (ETP) HOSPITAL NOAMUNDI		Standard
	10 KLD Inlet	10 KLD Outlet	
pH*	6.31	7.25	5.5-9.0
TSS (mg/l)	133.75	18.75	100
BOD 5 days (mg/l)	28.95	11.02	30
COD (mg/l)	87.9	28.43	250
Oil & Grease (mg/l)	BDL(DL-4)	BDL(DL-4)	10
Iron (mg/l)	0.64	0.94	3.0
Faecal Coliform	132.75	61.50	-

Note: BDL – Below detection limit

AIR QUALITY DATA 2021-22
Annual Average Air quality of Tata Steel Hospital, Noamundi of FY'22

Pollutants	Concentration of pollutants ($\mu\text{g}/\text{m}^3$)	Standards ($\mu\text{g}/\text{m}^3$)
Near Hospital		
1. PM_{10}	51.75	100
2. $\text{PM}_{2.5}$	18.08	60
3. SO_2	7.54	80
4. NO_x	17.08	80
5. CO	0.21	4*

*Unit of CO is mg/m^3



ANACON LABORATORIES PVT. LTD.

- ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 Certified
- Recognized By Ministry of Environment & Forests (MoEF), New Delhi
- 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-NIM/2022/3-11		Date: 31/03/2022	
Issued to	M/s Noamundi Iron Mine (M/s TATA Steel Limited)		Order Reference
			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 X 1 No. SO ₂ : 30 mL X 1 No. PVC Bottle NO _x : 25 mL X 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	m ³ /h	1490.72	IS:11255 (Part 3)
Total gas quantity at NTP	Nm ³ /h	1358.52	IS:11255 (Part 3)
Total Particulate Matter (PM)	mg/Nm ³	23.42	IS:11255 (Part 1)
Sulphur Dioxide (SO ₂)	mg/Nm ³	36.19	IS 11255 (Part 2)
Oxide of Nitrogen (NO _x)	mg/Nm ³	78.31	IS 11255 (Part 7)
Carbon Monoxide (CO)	mg/Nm ³	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 approval of Anacon Labs.

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

Verified by


Shubhangi Armarkar
(Technical Manager)

Authorized Signatory


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

-----End of Report-----

ANAC_IN 001

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Please Visit us at : www.anaconlaboratories.com

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