



**The Member Secretary
State Pollution Control Board, Odisha
A/118, Nilakantha Nagar,
Unit - VIII
Bhubaneswar – 751 012**

MD/ ENV/ 309 /129/2022
Date – 27.09.2022

Sub: Environmental Statement of Tata Steel Hospital, Joda 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, Joda for your kind perusal.

Thanking you,

Yours faithfully
f: Tata Steel Limited


**Chief Medical Officer
Tata Steel Hospital, Joda**
Chief Medical Officer
TATA STEEL HOSPITAL, JODA

Encl: As above

**Copy to: The Regional Officer, State Pollution Control Board Odisha, At: Baniapata,
College Road, Keonjhar - 758001, Odisha**

TATA STEEL LIMITED

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ENVIRONMENT STATEMENT 2021-22



Tata Steel Hospital, Joda

TATA STEEL LIMITED

September 2022

FORM - V
(See Rule -14)

ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st OF MARCH 2021

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, Dist.-Keonjhar, Odisha -758034 |
| | Agent | : | Dr Suchismita Das |
| | 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, Managing Director & CEO 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. | : | 21.09.2021 |

PART-B

Water and Raw Material Consumption

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

| <u>Consumption Head:</u> | 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) | 574600 litres | 735000 litres |

ii) Raw Material Consumption

The following items have been consumed/ utilized:

| Name of Raw materials | Consumption of Raw Material | |
|--|---|---|
| | During previous financial year (2020-201) | During current financial year (2021-22) |
| Oxygen gas | 4621 CFT or 163189.07 Kg | 3121 CFT or 134203.07 Kg |
| Carbon dioxide | nil | nil |
| Nitrous oxide | 100 CFT or 3531.46 Kg | 75 CFT or 3225.46 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 | At Tata Steel Covid-19 Hospital Joda, after pre-treatment, all the liquid waste of both Covid-19 & non-Covid area, is connected to Effluent Treatment Plant (ETP) of 10 KLD. The treated water is consumed for plantation activities. All the water quality results of ETP are attached herewith in annexure 1. | | |
| b) Air | At Tata Steel Covid-19 Hospital, Joda, for disposal of bio-medical waste, an incinerator is installed. The air emission from same has regularly been monitored. | | |

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 previous financial year (2020-21) | During current financial year (2021-22) |
| I) From Process: | Nil | Nil |
| II) From Pollution Control Facility: | | |
| ▪ Bio-medical incinerator ash | 47.8 Kg | 44.796 Kg |

PART-E
SOLID WASTES

TATA Steel Hospital, Joda 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 previous financial year (2020-21) | During current financial year (2021-22) |
| a) From Process: b) From Pollution Control Facility c) i. Quantity recycled or reused within the unit ii. Quantity sold <ul style="list-style-type: none">▪ General Office Waste (garbage) | Treated water from ETP 23.02 tones | Treated water from ETP 26.93 tones |

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, Ultrasound facility etc. Only bio-medical waste along with garbage (solid waste) has been generated. All the bio-medical waste generated are disposed off as per Biomedical waste management Rule -2016.

Yellow Category : 1312.25 kg/yr.

Red Category: 783.857 kg/yr.

White Category : 49.55 kg/yr.

Blue Category: 142.858 kg /yr.

General Solid Waste: 26.93 tones/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 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 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, deep burial pit, safe pit for sharp waste, autoclave is available in hospital.
- 10 KLD Effluent Treatment Plant has been established in December 2017.

- 10 KLD Sewage treatment Plant (STP) is connected to hospital for treatment of waste.
- Pre-treatment of Covid-19 waste & other bio-medical waste & waste bins -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 Covid-19 ward, Covid-19 ICU & Isolation ward, 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)



50 Nm³/ Hr. Medical Oxygen Plant at Tata Steel Hospital, Joda (Sept 2021)

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 bio-medical treatment facility apart from mines.

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

- The hospital 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 Covid-19 ward, ICU, Isolation ward, 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.



**Chief Medical Officer
Tata Steel Hospital, Joda**
Chief Medical Officer
TATA STEEL HOSPITAL, JODA

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

| Parameters | EFFLUENT TREATMENT PLANT (ETP) | | Standard |
|---------------------|--------------------------------|---------------|----------|
| | 10 KLD Inlet | 10 KLD Outlet | |
| pH* | 7.36 | 7.57 | 5.5-9.0 |
| TSS (mg/l) | 79.18 | 24.36 | 100 |
| BOD 5 days (mg/l) | 36.03 | 11.48 | 30 |
| COD (mg/l) | 149.2 | 27.64 | 250 |
| Oil & Grease (mg/l) | BDL (DL-4) | BDL (DL-4) | 10.0 |
| Faecal Coliform | 0.44 | 0.31 | - |

BDL - Below detection limit.