

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

MD/ENV/288/129/2019 Date-25.07.2019

Sub: Environmental Statement of Tata Steel Hospital, Joda for 2017-18.

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 Hospital
Tata Steel Hospital, Joda

Encl: As above Chief Medical Officer TATA STEEL HOSPITAL, JODA

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

ENVIRONMENT STATEMENT 2017-18



TATA Steel Hospital, Joda TATA STEEL LIMITED

FORM - V (See Rule -14)

ENVIRONMENT STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH, 2018

NOAMUNDI IRON MINE, TATA STEEL LIMITED

PART-A

| 1 | Name and address of the owner/occupier of the industry, operation or process Agent Nominated Owner | : | TATA Steel Hospital Joda, Joda West, Po.: Joda, DistKeonjhar, Odisha –758034 Dr Ashok Kumar Roy 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 | : | |
| 5 | Date of last Environmental Statement submitted. | : | Nil |

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

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

| Consumption Head: | 2016-17 (in KL) | 2017-18 (in KL) | |
|--------------------------------|--|------------------------------|--|
| Process | 1001555 | 1542033 | |
| Spraying in mine pit, services | 76756 | 78732 | |
| Domestic | 104739 | 142257 | |
| | Process water consumption per product output (m3/MT) | | |
| Name of the product | During the Previous | During the current | |
| Name of the product | financial Year | financial Year | |
| | (2016-17) | (2017-18) | |
| | | 10 KLD ETP established and | |
| Hospital | NIL | water is reused in gardening | |
| F | | purpose. | |

ii) Raw Material Consumption

The following items have been consumed/utilized:

| | Consumption of Raw Material | | |
|-----------------------|--|--|--|
| Name of Raw materials | During previous financial year (2016-17) | During current financial year (2017-18) | |
| High Speed Diesel | NIL | | |
| Lubricants | | | |
| Grease | | | |

| | Consumption of Raw Material | | |
|-------------------------------|--|---|--|
| Name of Raw materials | During previous financial year (2016-17) | During current financial year (2017-18) | |
| Explosives of all types | | | |
| (Explosive, codex, detonator) | | | |
| Electric Power: | | | |
| Consumed | | | |
| Generated | | | |
| Gas | Nil | | |
| Tyres | | | |
| Drill rods | | | |

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

Air Pollution:

Average Air Quality of Joda East Iron Mine of FY' 18:

| Pollutants | Concentration of pollutants (µg/m³) | Standards (µg/m³) |
|-----------------------------------|-------------------------------------|----------------------|
| Manmora Slime Dam | | |
| 1. PM ₁₀ | 59.65 | 100 |
| 2. PM _{2.5} | 26.64 | 60 |
| 3. SO ₂ | 7.72 | 80 |
| 4. NO _x | 26.20 | 80 |
| Near Rain Water Harvesting | | |
| 1. PM ₁₀ | 53.65 | 100 |
| 2. PM _{2.5} | 26.13 | 60 |
| 3. SO ₂ | 4.42 | 80 |
| 4. NO _x | 12.03 | 80 |
| Near Magazine | | |
| 1. PM ₁₀ | 57.20 | 100 |
| 2. PM _{2.5} | 27.28 | 60 |
| 3. SO ₂ | 6.30 | 80 |
| 4. NO _x | 12.19 | 80 |
| Near Equipment Maintenance | | |
| 1. PM ₁₀ | 68.49 | 100 |
| 2. PM _{2.5} | 35.63 | 60 |
| 3. SO ₂ | 5.63 | 80 |
| 4. NO _x | 15.11 | 80 |

<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 (2016-17) | During the Current Financial Year (2017-18) | | |
| I) From Process: | | | | |
| | Nil | Nil | | |
| II) From Pollution Control Facility: | | | | |
| Bio-medical incinerator ash | ~9 kg | 35.58 Kg | | |

^{*}Note: The biomedical waste generated from hospital is attached as annexure -1 (Form-IV)

PART-E SOLID WASTES

TATA Steel Hospital, Noamundi 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 Previous Year (2016-17) | During the Current Year (2017-18) | |
| a) From Process: | | | |
| b) From Pollution Control Facility | | | |
| c) i. Quantity recycled or reused | | | |
| within the unit | | | |
| ii. Quantity sold | | | |
| General Office Waste (garbage) | ~15.5 tonnes | \sim 17.34 tonnes | |
| iii. Quantity disposed | | | |
| | | | |

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. The hospital includes all dispensers all across town & other area. Only bio-medical waste along with garbage (solid waste) is been generated all the waste are been disposed off as per Biomedical waste management Rule -2016.

Yellow Category : \sim 573.94 kg Red Category : \sim 247.9 kg White Category : \sim 72.97 kg Blue Category : \sim 17.85 kg

General Solid Waste : ~18.640 tonne/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.

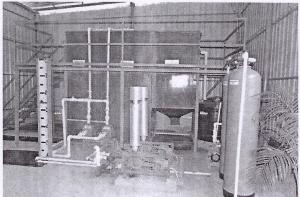
The liquid chemical waste generated from pathology, blood bank etc. is pre-treated in neutralisation pit followed by treatment in 10 KLD Effluent

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.





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

- Approx Rs.8.50 lakhs will be spent on monitoring of various environmental parameters during next financial year.
- During monsoon 2017-18, 13,290 saplings will be planted in available sites inside the lease area with a budgetary provision of approximately Rs.30.00 lakhs.
- Approx. 75.00 lakhs will be spent towards peripheral development during the next year.
- Approx Rs. 1 Crore shall be spent towards buying scientific equipment and strengthening the environmental laboratory.

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

- The mine is having a full-fledged Environmental Management Department with personnel from science background to take care of all environmental aspects relating to mines of TATA STEEL.
- This department has in-house capabilities for monitoring various environmental parameters and suggesting to the management necessary abatement measures.
- An independent Environmental Laboratory is in operation since 1994 to carry out the monitoring and analytical jobs, with a total expenditure of Rs. 30 lakhs.
- The hospitals is an integral part of mine and has adopted the Integrated Management System (ISO 9001: 2015, ISO 14001: 2015 & OHSAS 18001: 2007) and have been certified in 1st August 2008.

Chief Medical Officer,
Tata Steel Hospital, Joda
Chief Medical Officer

TATA STEEL HOSPITAL, JODA