



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

MD/ENV/ 604 /125/2020  
Date: 09.04.2020

**Subject: Submission of annual report of Bio - medical wastes in the prescribed format (Form-IV), of TATA Steel Hospital, Noamundi for a period 1<sup>st</sup> January 2019 to 31<sup>st</sup> December 2019, as per Bio-medical Waste Management Rule 2016.**

Ref.: 1. Bio-medical Waste Authorization no. JSPCB/HO/RNC/BMW-1355118/2017/28 dated: 30<sup>th</sup> August 2017 valid till 24.10.2021.  
2. Consent to Operate (CTO) no. JSPCB/HO/RNC/CTO-1619551/2017/1284 dated 25<sup>th</sup> September 2017 valid till 24.10.2021

Dear Sir,

Kindly find attached the Bio-medical waste in the prescribed format (Form-IV) as per Bio-medical Waste Management Rule 2016 for a period of January 2019 to December 2019 of Tata Steel Hospital, Noamundi, Babuline Campus, West Singhbhum District, Jharkhand , along with the required documents.

Also kindly find attached the compliance of Consent to Operate (CTO) and Bio-medical Waste Authorization of Tata Steel Hospital, Noamundi as on date for your kind information.

Thanking you,

Yours sincerely,

Tata Steel Limited

*07/05/2020*  
Chief Medical Officer (Mines)  
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.**



## LIST OF ANNEXURE

### TATA STEEL HOSPITAL, NOAMUNDI DIST: WEST SINGHBHUM, JHARKHAND

Annexure-I	Yearly report of Bio-medical Waste
Annexure-II	Incineration Report
Annexure-III	Accident Report
Annexure-IV	Training Details
Annexure-V	Biomedical Waste Authorization & its Compliance
Annexure-VI	CTO & its Compliance
Annexure-VII	Immunization details of Hospital Staffs
Annexure-VIII	10 KLD ETP OF Noamundi Hospital Report
Annexure-IX	Hospital Stack Monitoring Report



**Form - IV**  
**(See rule 13)**  
**ANNUAL REPORT**

[To be submitted to the prescribed authority on or before 30th June every year for the period from January to December of the preceding year, by the occupier of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF)]

Sl. No.	Particulars	
1.	Particulars of the Occupier	TATA Steel Hospital, Noamundi Health Care Facility
	(i) Name of the authorized person (occupier or operator of facility)	Dr. Dharendra Kumar, (Chief Medical Officer)
	(ii) Name of HCF or CBMWTF	Tata steel Hospital, Noamundi
	(iii) Address for Correspondence	Babu Line Campus, Noamundi
	(iv) Address of Facility	District: West Singhbhum,
	(v) Tel. No, Fax. No	Pin code 833217, Jharkhand.
	(vi) E-mail ID	Phone: 9031055738 / 7766914476
	(vii) URL of Website	E-mail: <a href="mailto:dharendra.kumar2@tatasteel.com">dharendra.kumar2@tatasteel.com</a> <a href="mailto:vinayak.deshpande@tatasteel.com">vinayak.deshpande@tatasteel.com</a>
	(viii) GPS coordinates of HCF or CBMWTF	Website: <a href="http://www.tatasteelindia.com">http://www.tatasteelindia.com</a>  GPS Location of HCF: Latitude - 22°08'49.5"N, Longitude - 85°29'38.1"E
	(ix) Ownership of HCF or CBMWTF	<b>PRIVATE (By TATA Steel Ltd.)</b>
	(x). Status of Authorization under the Bio-Medical Waste (Management and Handling) Rules	Authorization No.: <b>JSPCB/HO/RNC/BMW - 1355118/2017/28</b> dated 30 <sup>th</sup> Aug 2017 valid till <b>24.10.2021.</b>
(xi). Status of Consents under Water Act and Air Act	Consent to Operate (CTO) No.: <b>JSPCB/HO/RNC/CTO-1619551/2017/1284</b> dated 25 <sup>th</sup> Sep 2017 valid till 24.10.2021.	
2.	Type of Health Care Facility	
	(i) Bedded Hospital	No. of Beds: <b>75 (Seventy-five)</b>
	(ii) Non-bedded hospital  (Clinic or Blood Bank or Clinical Laboratory or Research Institute or Veterinary Hospital or any other)	The hospital is integrated with ICU, Blood Bank, Pathological Lab, X-ray Room, Ultra Sonography facility etc. The hospital also has biomedical waste disposal facility with double chambered Incinerator and 10 KLD effluent treatment plant (ETP).
	(iii) License number and its date of expiry	Hospital is registered as per Clinical Establishment Act (Registration & Regulation) 2010 from Govt. of Jharkhand and subsequently applied for renewal.  Registration No.: <b>JH/BB1311/98</b> valid till <b>31.12.2021.</b>
3.	Details of CBMWTF	
	(i) Number healthcare facilities covered by CBMWTF	Not applicable
	(ii) No of beds covered by CBMWTF	Not applicable
	(iii) Installed treatment and disposal capacity of CBMWTF:	Not applicable
	(iv) Quantity of biomedical waste treated or	Captive facilities

Sl. No.	Particulars																																																
	disposed by CBMWTF																																																
4.	Quantity of waste generated or disposed in Kg per annum (on monthly average basis)	Yellow Category : 1342Kg / yr (Average: -111.83 kg/ month)																																															
		Red Category : 999 Kg / yr (Average: -83.25 kg/ month)																																															
		White Category : 1775Kg / yr (Average: -147.91 kg/ month)																																															
		Blue Category : 668Kg / yr (Average: -55.66 kg/ month)																																															
		General Solid Waste: 5.872 tons/ yr (Average: -489.33 kg/ month)																																															
5.	Details of the Storage, treatment, transportation, processing and Disposal Facility																																																
	(i) Details of the on-site storage facility	Size : Yellow Category: Red Category } Provision for 48 hrs White Category : } storage only Blue Category } Double chambered Biomedical Waste Incinerator, Shredder, Autoclave with 10 KLD ETP Plant.																																															
		Capacity:																																															
		Provision of on-site storage: (cold storage or any other provision) <b>Not Available</b>																																															
	(ii) Details of the treatment or disposal facilities	<table border="1"> <thead> <tr> <th>Type of treatment Equipment</th> <th>No of units</th> <th>Capacity Kg/ day</th> <th>Quantity treated or disposed in kg per annum</th> </tr> </thead> <tbody> <tr> <td>Incinerators</td> <td>1</td> <td>25</td> <td>239 Kg/ Yr</td> </tr> <tr> <td>Plasma Pyrolysis</td> <td>Nil</td> <td>Nil</td> <td>Nil</td> </tr> <tr> <td>Autoclaves</td> <td>1</td> <td>25</td> <td>---</td> </tr> <tr> <td>Microwave</td> <td>Nil</td> <td>Nil</td> <td>Nil</td> </tr> <tr> <td>Hydroclave</td> <td>Nil</td> <td>Nil</td> <td>Nil</td> </tr> <tr> <td>Shredder</td> <td>1</td> <td>10</td> <td>150 (Aprox) Kg/ Annum</td> </tr> <tr> <td>Needle tip cutter or destroyer</td> <td>7 Cutter</td> <td>--</td> <td>100 (Approx.) Kg /Annum</td> </tr> <tr> <td>Sharps encapsulation or concrete pit</td> <td>1</td> <td>--</td> <td>-</td> </tr> <tr> <td>Deep burial pits:</td> <td>1</td> <td></td> <td>As per standard</td> </tr> <tr> <td>Chemical disinfection:</td> <td>1% Na<sub>2</sub>Cl</td> <td>10 Kg Bucket</td> <td>For internal use only</td> </tr> <tr> <td>Any other treatment /</td> <td colspan="3">10KLD Effluent Treatment Plant (ETP) &amp; Sewage Treatment Plant (STP)</td> </tr> </tbody> </table>	Type of treatment Equipment	No of units	Capacity Kg/ day	Quantity treated or disposed in kg per annum	Incinerators	1	25	239 Kg/ Yr	Plasma Pyrolysis	Nil	Nil	Nil	Autoclaves	1	25	---	Microwave	Nil	Nil	Nil	Hydroclave	Nil	Nil	Nil	Shredder	1	10	150 (Aprox) Kg/ Annum	Needle tip cutter or destroyer	7 Cutter	--	100 (Approx.) Kg /Annum	Sharps encapsulation or concrete pit	1	--	-	Deep burial pits:	1		As per standard	Chemical disinfection:	1% Na <sub>2</sub> Cl	10 Kg Bucket	For internal use only	Any other treatment /	10KLD Effluent Treatment Plant (ETP) & Sewage Treatment Plant (STP)	
Type of treatment Equipment	No of units	Capacity Kg/ day	Quantity treated or disposed in kg per annum																																														
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Any other treatment /	10KLD Effluent Treatment Plant (ETP) & Sewage Treatment Plant (STP)																																																
(iii) Quantity of recyclable wastes sold to authorize recyclers after treatment in kg per annum.	Red Category (like plastic, glass etc.) <b>Nil</b>																																																
(iv) No of vehicles used for collection and transportation of biomedical waste.	<b>Nil</b> Since entire waste is been treated & incinerated in the premises.  However, municipal solid waste such as discarded food, plastic etc. is been collected & disposed as per norms																																																
(v) Details of incineration ash and ETP sludge generated and disposed during the treatment of wastes in Kg per annum	<table border="1"> <thead> <tr> <th></th> <th>Quantity generated</th> <th>Where disposed</th> </tr> </thead> <tbody> <tr> <td>Incineration Ash</td> <td>16.2 Kg</td> <td>As per standard</td> </tr> </tbody> </table>		Quantity generated	Where disposed	Incineration Ash	16.2 Kg	As per standard																																										
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Sl. No.	Particulars	
		ETP Sludge      Incinerated – 2 kg
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of.	Nil. Bio-medical waste is collected and disposed internally. The list of incinerator operators is attached in annexure.
	(vii) List of member HCF not handed over bio-medical waste.	--
6.	Do you have bio-medical waste management committee? If yes, attach minutes of the meetings held during the reporting period	At district level, a bio-medical waste management committee made, chaired by Hon. Dy. Commissioner, East Singhbhum.  At local level an EHS committee made.
7.	Details trainings conducted on BMW	
	(i) Number of trainings conducted on BMW Management.	Five training sessions was conducted in this year with a frequency of 1 session in every three months. The training session is given to all paramedical staff, biomedical waste handlers and other nursing staff. The training was conducted by Chief Medical Officer and few internal experts including Environment Officer.
	(ii) number of personnel trained	70 heads (Approx.)
	(iii) number of personnel trained at the time of induction	All (100%) staff. This year special training given to 12 nos new Nursing staff & 6 nos. waste handlers for Bio-medical Waste Management
	(iv) number of personnel not undergone any training so far	Nil (Zero) All paramedical staff & healthcare workers undergone for training.
	(v) Whether standard manual for training is available?	Yes
	(vi) any other information	All healthcare workers undergone for immunization for Hepatitis B and Tetanus regularly.
8.	Details of the accident occurred during the year	
	(i) Number of Accidents occurred	Nil (Not any such). However, a NIL accident report is attached herewith.
	(ii) Number of the persons affected	
	(iii) Remedial Action taken (Please attach details if any)	
(iv) Any Fatality occurred, details.		
9.	Are you meeting the standards of air Pollution from the incinerator? How many times in last year could not met the standards?	Yes. All the times
	Details of Continuous online emission monitoring systems installed	Online monitoring facility is not installed. However, from recognized agency emission

Sl. No.	Particulars	
		monitoring been done regularly. All the monitoring results are attached herewith in annexure.
10.	Liquid waste generated and treatment methods in place. How many times you have not met the standards in a year?	<ol style="list-style-type: none"> <li>1. Yes, all liquid waste generated being pre-treated and neutralized for 1-2% sodium hypochloride dosing. All the liquid waste after pre-treatment is been treated in effluent treatment plant.</li> <li>2. Integrated Effluent Treatment Plant of 10 KLD is installed and regularly been operated.</li> <li>3. All the waste water from hospital is been collected and connected to 10 KLD Sewage Treatment Plant in the area.</li> <li>4. The required standard is met always.</li> <li>5. All the monitoring results are attached herewith.</li> </ol>
11.	Is the disinfection method or sterilization meeting the log 4 standards? How many times you have not met the standards in a year?	All the times.
12.	Any other relevant information	<p>Air Pollution device such as mist spray is attached with incinerator.</p> <p>Double chambered incinerator is installed as per standard.</p>

Certified that the above report is for the period of one year from January 2019 to December 2019.

Date: 9<sup>th</sup> March 2020

Place: Tata Steel Hospital Noamundi



Chief Medical Officer (Mines)  
Tata Steel Hospital, Noamundi

Name and Signature of the Head of the Institution



**YEARLY REPORT OF BIO-MEDICAL WASTE**  
**TATA STEEL HOSPITAL, NOAMUNDI**  
**JANUARY 2019 - DECEMBER 2019**

MONTH	YELLOW	RED	BLUE	WHITE	LIQUID	GARBAGES
	kg	kg	kg	kg	(Gallon)	kg
JAN-19	62.000	46.500	31.000	93.000	31000	232.50
FEB-19	88.000	63.000	44.000	126.000	34000	465.00
MAR-19	114.000	84.000	57.000	168.000	46000	428.50
APR-19	82.000	58.500	41.000	117.000	35500	307.50
MAY-19	98.000	73.500	46.000	138.000	38500	355.00
JUN-19	106.000	79.500	53.000	159.000	47000	399.50
JUL-19	130.000	97.500	65.000	139.000	65000	349.00
AUG-19	194.000	145.500	97.000	279.000	117000	735.00
SEP-19	164.000	123.000	82.000	220.000	125000	1080.00
OCT-19	106.000	79.500	53.000	115.000	128000	530.00
NOV-19	92.000	69.000	46.000	106.000	108000	460.00
DEC-19	106.000	79.500	53.000	115.000	128000	530.00
<b>TOTAL</b>	<b>1342.000</b>	<b>999.000</b>	<b>668.000</b>	<b>1775.000</b>	<b>903000</b>	<b>5872.00</b>
Monthly Average (Kg)	<b>111.833</b>	<b>83.250</b>	<b>55.667</b>	<b>147.917</b>	<b>75250</b>	<b>490</b>

**INCINERATION REPORT**  
**TATA STEEL HOSPITAL, NOAMUNDI**  
**JANUARY 2019 - TO DECEMBER 2019**

SL. NO.	MONTH	INCINERABLE MATERIAL PER MONTH (KG)	INCINERATOR ASH GENERATED PER MONTH (KG)
1	JAN-19	18	1.15
2	FEB-19	20	1.40
3	MAR-19	21	1.45
4	APR-19	18	1.15
5	MAY-19	18	1.15
6	JUN-19	19	1.25
7	JUL-19	19	1.25
8	AUG-19	25	1.80
9	SEP-19	21	1.50
10	OCT-19	18	1.15
11	NOV-19	21	1.45
12	DEC-19	21	1.50
<b>TOTAL</b>		<b>239</b>	<b>16.20</b>

Note: Incinerable ash is disposed in separate ash pit at Hospital premises at Noamundi.

## Form - I

[(See rule 4(O), 5 (i) &amp; 15 (2))]

**ACCIDENT REPORTING****NIL REPORT**

- |  |   |                       |              |
|--|---|-----------------------|--------------|
| 1. Date and time of accident   | : | NIL.                  | Not any such |
| 2. Type of Accident  | : | NIL.                  | Not any such |
| 3. Sequences of events leading to accident                                       | : | NIL.                  | Not any such |
| 4. Has the authority been informed immediately                                   | : | NIL.                  | Not any such |
| 5. The type of waste involved in accident  | : | NIL.                  | Not any such |
| 6. Assessment of the effects of the accident on human health and the environment | : | NIL.                  | Not any such |
| 7. Emergency measure taken   | : | NIL.                  | Not any such |
| 8. Steps taken to alleviate the effects of accidents                             | : | NIL.                  | Not any such |
| 9. Steps taken to prevent the recurrence of such an accident                     | : | Various measure taken |              |
| 10. Does your facility has an Emergency Control Policy? If yes give details :    |   |                       |              |

The hospital doesn't have any separate Emergency Control Policy. However, various emergency measures such as fire detection devices, fire alarm, fire hydrants, fire extinguishers, separate storage of gas (LPG etc. used in cooking), day-night 24 hours ambulance service, all the wards / rooms are regularly being monitored by Sister In-charge and Medical Officer. The Hospital always has a well-qualified Medical Officer for 24 hours to address any eventuality. Apart from above the hospital is certified for ISO: 9001:2015, ISO: 14001:2015 & ISO:45001:2018 integrated with other units.

Date: 09<sup>th</sup> March 2020

Place: Tata Steel Hospital, Noamundi

Signature:   
 Chief Medical Officer (Mines)  
 Tata Steel Hospital, Noamundi  
 Designation: Chief Medical Officer

Note: As per Bio-medical waste Management Rule 2016, this report is been made.

# Bio-medical Waste Management (Storage & Disposal) Training for all Health Care Workers & Others 2019

TATA Steel Hospital, Noamundi



Bio-medical Waste Management (Storage & Disposal)  
Training for all Health Care Workers & Clerks

## Swachhata Pakhwada Celebration 16<sup>th</sup> Nov to 30<sup>th</sup> Nov 2019 TATA Steel Hospital, Noamundi



Message by Chief Medical officer to all staff & targeting Zero Waste Hospital by practicing adequate & safe disposal of Bio-medical waste generated in hospital.



**JHARKHAND STATE POLLUTION CONTROL BOARD**  
 T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI -834004  
 Phone.:2400852, 2400851, Fax:0651- 2400850 www. jspcb.org

**FORM III**  
**(See Rule 10)**  
**AUTHORISATION**

(AUTHORISATION FOR OPERATING A FACILITY FOR COLLECTION, RECEPTION, TREATMENT, STORAGE, TRANSPORT AND DISPOSAL OF BIOMEDICAL WASTES)

1. File no. of authorisation and date of issue: JSPCB/HO/RNC/BMW-1355118/2017/28 30/08/2017

2. M/s TATA STEEL HOSPITAL NOAMUNDI, DHIRENDRA KUMAR an occupier or operator of the facility located at TATA STEEL CAMPUS BABULINE NOAMUNDI WEST SINGHBHUM JHARKHAND 833217 is hereby granted an authorisation for:

Generation, segregation	✓	Collection	✓
Storage	✓	Transportation	✓
Reception	✓	Use	
Recycling		Offering for sale	
Packaging	✓	Transfer	
Treatment or Processing or Conversion	✓	Disposal or destruction	
Any other form of handling			

3. M/s TATA STEEL HOSPITAL NOAMUNDI is hereby authorized for handling of biomedical waste as per the capacity given below:

(i) Number of beds of HCF: 60

(ii) Number of health care facilities covered by CBMWTF:

(iii) Installed treatment and disposal capacity:

(iv) Area or distance covered by CBMWTF:

(v) Quantity of Biomedical waste handled, treated or disposed: Cat. -1, 3,4,6,7,8 total - 831.17 Kg/year and cat. 8 - 3810940 Ltrs/ year

4. This authorisation shall be in force for a period of 24-10-2021 Years from the date of issue.

5. This authorisation is subject to the conditions stated below and to such other conditions as may be specified in the rules for the time being in force under the Environment (Protection) Act, 1986

Date: 30/08/2017

Place:

Digitally signed by  
 Dinesh Prasad Singh  
 Date: 2017.08.30  
 22:27:07 +05'30'

( Dinesh Prasad Singh)  
 Asstt. Env. Engineer

**Terms and Conditions of Authorisation**

1. The authorisation shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.

2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the prescribed authority.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the biomedical wastes without obtaining prior permission of the prescribed authority.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. It is the duty of the authorised person to take prior permission of the prescribed authority to close down the facility and such other terms and conditions may be stipulated by the prescribed authority.

**Specific Conditions:**

6. That the occupier shall not mix bio-medical waste with general waste and shall under no circumstances, hand over untreated wastes to the municipality for disposal in land fill site.
7. That, the occupier shall segregate bio-medical wastes and collect in colored containers/bags at the point of generation as per the Rules and shall transport them in covered containers labeled with the symbols of bio-hazard & cytotoxicity.
8. That, the occupier shall treat the segregated bio-medical wastes in the manner prescribed under the Rules and shall ensure requisite treatment of segregated wastes at the individual or common facility, duly authorized by State Pollution Control Board, Jharkhand.
9. That, the authorized person shall treat the biomedical waste containing more than or equal to 50 PPM of mercury and shall dispose of it (them) as per the provisions of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2016.
10. The occupier of health care unit shall submit the statement related to spillage and collection of mercury during the period from January to December of previous year, along with the annual report latest by 30th June of every year.
11. The authorized person of the unit shall maintain records related to the generation, collection, receipt, storage, transportation, treatment, disposal and/or any form of handling of Bio-medical Waste and all records shall be subject to inspection and verification by the State Pollution Control Board, Jharkhand at any time.
12. That, the occupier shall upload online application for renewal of authorization 90 days prior to the date of expiry of this authorization under Rule 10 of the Bio-Medical Waste Rules, 2016 with CTO copy issued under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974 along with compliance of all the above conditions.
13. That, the occupier shall do pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilization on-site the manner as prescribed by the World Health organization (WHO) of National AIDS Control Organization (NACO) guidelines and then send to the common bio-medical waste treatment facility for final disposal.
14. That, the occupier shall ensure segregation of liquid chemical waste at source and ensure pre-treatment or neutralization prior to mixing with other effluent generated from health care facilities;
15. That, the occupier shall submit an annual report to the prescribed authority in Form-IV, on or before the 30th June of every year.
16. That. the occupier shall submit analysis report of ETP to the Board yearly.

Memo No.: JSPCB/HO/RNC/BMW-1355118/2017/28

Dated:30/08/2017

**Copy To:**

**Deputy Commissioner, Jamshedpur / Director in Chief, Health Services, Department of Health,**



**Ranchi/ Civil Surgeon, Jamshedpur / Regional Officer, Regional Office-Cum-Laboratory,  
Jamshedpur for information and necessary action.**

Digitally signed by  
Dinesh Prasad Singh  
Date: 2017.08.30  
22:27:38 +05'30'

**( Dinesh Prasad Singh )  
Asstt. Env. Engineer**

## Compliance of Bio-Medical Waste Authorization Conditions

UNIT: TATA Steel Hospital, Noamundi  
 Bio-Medical Waste Authorization NO.: JSPCB/HO/RNC/BMW-1355118/2017/28  
 ISSUE DATE: 30.08.2017. Valid till 24.10.2021  
 COMPLIANCE PRIOD: 01.01.2019 – 31.12.2019

CONSENT CONDITIONS	COMPLIANCE STATUS
<b>(A) General Conditions</b>	
1. The authorization shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.	Complied with. All the provisions of the Environment (Protection) Act, 1986 and the rules made there under shall be abided in true sense.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the prescribed authority.	Complied with.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the biomedical wastes without obtaining prior permission of the prescribed authority.	Complied with. The bio-medical waste authorization shall not be transferred without prior permission from prescribed authority in any case.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.	Complied with and shall be abided truly.
5. It is the duty of the authorized person to take prior permission of the prescribed authority to close down the facility and such other terms and conditions may be stipulated by the prescribed authority.	Complied with. Prior permission of the prescribed authority shall be taken before closing of TATA Steel Hospital, Noamundi.
<b>(B) Specific Conditions</b>	
6. That the occupier shall not mix bio-medical waste with general waste and shall under no circumstances, hand over untreated wastes to the municipality for disposal in land fill site.	Complied. Strictly followed in Hospital. The Bio-medical waste at any case shall not be mixed with municipal waste and shall not be disposed with municipal waste in any landfill site of area.
7. That, the occupier shall segregate bio-medical wastes and collect in colored containers/bags at the point of generation as per the Rules and shall transport them in covered containers labeled with the symbols of bio-hazard & cytotoxicity.	Complied and strictly followed in unit. Different colored (Yellow, Red, Blue & White) container as per norms placed at various generation points (different wards, OPD, Pathology, Blood Bank, ICU etc) and all the waste is segregated at

**CONSENT CONDITIONS**

8. That, the occupier shall treat the segregated bio-medical wastes in the manner prescribed under the Rules and shall ensure requisite treatment of segregated wastes at the individual or common facility, duly authorized by State Pollution Control Board, Jharkhand.

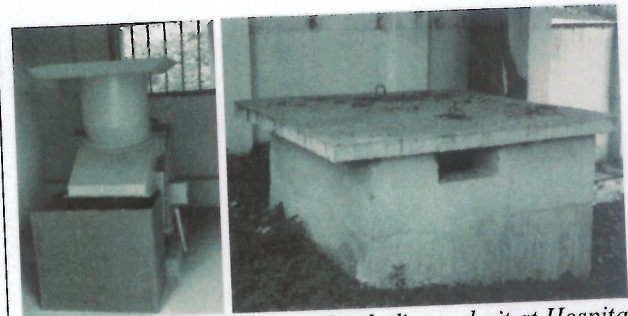
**COMPLIANCE STATUS**

generation point and disposed in in-house incinerator & ETP after pre-treatment (for solid & liquid bio-medical waste) as per norms.

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.



*Double chambered incinerator & autoclave at Hospital*

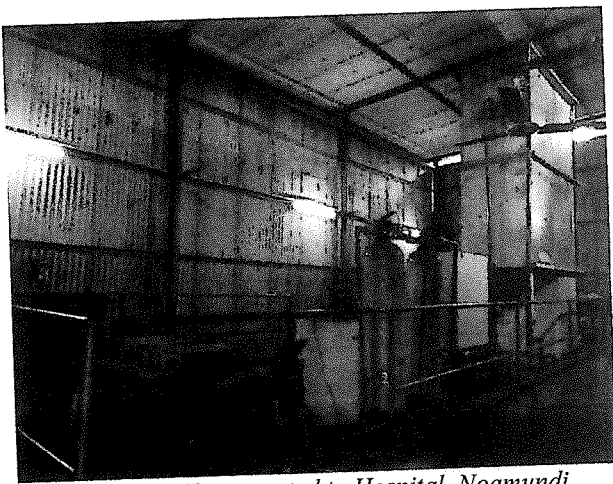


*Plastic shredder, deep burial-ash disposal pit at Hospital*

The liquid chemical waste generated from pathological, blood bank etc is pre-treated in neutralization pit. Followed by treatment in 10 KLD Effluent Treatment Plant.



*10 KLD ETP at TATA Steel Hospital, Noamundi*

CONSENT CONDITIONS	COMPLIANCE STATUS
<p>9. That, the authorized person shall treat the biomedical waste containing more than or equal to 50 PPM of mercury and shall dispose of it (them) as per the provisions of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2016.</p> <p>10. The occupier of health care unit shall submit the statement related to spillage and collection of mercury during the period from January to December of previous year, along with the annual report latest by 30th June of every year.</p> <p>11. The authorized person of the unit shall maintain records related to the generation, collection, receipt, storage, transportation, treatment, disposal and/or any form of handling of Bio-medical Waste and all records shall be subject to inspection and verification by the State Pollution Control Board, Jharkhand at any time.</p> <p>12. That, the occupier shall upload online application for renewal of authorization 90 days prior to the date of expiry of this authorization under Rule 10 of the Bio-Medical Waste Rules, 2016 with CTO copy issued under the Air (Prevention and Control of Pollution) Act, 1981 and the Water</p>	<p>Apart from above 10 KLD STP is also been installed.</p>  <p><i>10 KLD STP connected to Hospital, Noamundi</i></p> <p>Complied with. Currently no such waste been generated at Hospital.</p> <p>Being complied with. Currently no such waste been generated/ disposed from Hospital.</p> <p>All the records of generation of Bio-medical waste are well maintained in Hospital. The summery sheet waste generated and disposed is attached herewith.</p> <p>Complied with. The Hospital shall apply renewal 90 days prior to the date of expiry of this authorization. The QC code has also been procured by the hospital.</p>

UNIT: TATA Steel Hospital, Noamundi  
 Bio-Medical Waste Authorization NO.: JSPCB/HO/RNC/BMW-1355118/2017/28  
 ISSUE DATE: 30.08.2017. Valid till 24.10.2021  
 COMPLIANCE PRIOD: 01.01.2019 – 31.12.2019

CONSENT CONDITIONS	COMPLIANCE STATUS
<p>(Prevention and Control of Pollution) Act, 1974 along with compliance of all the above conditions.</p>	
<p>13. That, the occupier shall do pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilization on-site the manner as prescribed by the World Health organization (WHO) of National AIDS Control Organization (NACO) guidelines and then send to the common bio- medical waste treatment facility for final disposal.</p>	<p>Pre-treatment such as neutralization of contamination of waste by using 1-2% Hypochlorite dosing &amp; autoclaving is practiced regularly before incineration of waste.</p>
<p>14. That, the occupier shall ensure segregation of liquid chemical waste at source and ensure pre-treatment or neutralization prior to mixing with other effluent generated from health care facilities.</p>	<p>Complied with. Pre-treatment by using 1-2% Hypochlorite dosing of liquid waste is been done. All the liquid waste drains are connected to Effluent Treatment plant for final treatment after Hypochlorite dosing and finally discharged to 10 KLD Sewage Treatment Plant for final treatment.</p>
<p>15. That, the occupier shall submit an annual report to the prescribed authority in Form-IV, on or before the 30<sup>th</sup> June of every year.</p>	<p>Complied regularly.</p>
<p>16. That. the occupier shall submit analysis report of ETP to the Board yearly.</p>	<p>Complied with. All the environmental monitoring results are attached as annexure.</p>





## JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004

Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No. JSPCB/HO/RNC/CTO-1130746/2017/562

Dated : 2017-05-12

**Consent to operate (CTO) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981**

1. Application (s) dated 2016-12-21 of TATA STEEL HOSPITAL NOAMUNDI, Occupier Name :DHIRENDRA KUMAR for consent under section 25 (1) (b)/25 (1) (c)/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21(1) of the Air (Prevention & Control of Pollution) Act,1981.

2. **Documents Relied Upon:**

(a) The content of Inspection Report (I/R), Ref No. 660, R O, Regional Office-Cum-Laboratory, Jamshedpur Dated – 17.04.2017.

3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to operate the project in Mauza -91/745 , P S -NOAMUNDI , District -WEST SINGHBHUM , as follows:

Project	Site-Area		Investment (Rs)	Product & Capacity	Period of CTO
	Plot Nos.	Area			
Before Expansion	91/745, At - Noamundi, Dist - West Singhbhum	Not mention	308.0 Lac	Treatment of Patient-Bed No. 60	Date of issue to 24.10.2021

(A) **General Conditions :**

- (1) That, the occupier shall comply with all conditions of EC, Ref No NA , Dated 11/05/2017, CTE, Ref No NA , and dated 11/05/2017 , previous CTO, Ref No NAdated11/05/2017 and shall submit report to this effect with supporting documents.
- (2) That, the occupier shall maintain the **National Ambient Air Quality Standard** given below:

S N	Pollutant	Time Weighted Average	Concentration in Ambient Air	
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Govt.)
(1)	(2)	(3)	(4)	(5)
1.	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Annual 24 hours	50 80	20 80
2.	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Annual 24 hours	40 80	30 80
3.	Particulate Matter (size less than 10 µm) or PM <sub>10</sub> , µg/m <sup>3</sup>	Annual 24 hours	60 100	60 100
4.	Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub> , µg/m <sup>3</sup>	Annual 24 hours	40 60	40 60
5.	Ozone(O <sub>3</sub> ), µg/m <sup>3</sup>	8 hours 1 hour	100 180	100 180
6.	Lead (Pb) µg/m <sup>3</sup>	Annual 24 hours	0.50 1.0	0.50 1.0
7.	Carbon Monoxide (CO) mg/m <sup>3</sup>	8 hours 1 hour	02 04	02 04
8.	Ammonia (NH <sub>3</sub> ) µg/m <sup>3</sup>	Annual 24 hours	100 400	100 400
9.	Benzene (C <sub>6</sub> H <sub>6</sub> ) µg/m <sup>3</sup>	Annual	05	05
10.	Benzo(a) Pyrene(BaP) Particulate Phase only ng/m <sup>3</sup>	Annual	01	01
11.	Arsenic (As) ng/m <sup>3</sup>	Annual	06	06
12.	Nikel (Ni) ng/m <sup>3</sup>	Annual	20	20

**Note : Serial no. 1 to 4 – Mandatory  
Serial no. 5 to 12 As applicable for specific type of industry.**



- (3) That, the occupier shall maintain the emission quality within the standard and the quantity, as follows:

S N	Parameter	Standard
1	Particulate Matter	150 mg/ Nm <sup>3</sup>

- (4) That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:

S N	Parameter	Standard
1	Total Suspended Solids	100 mg/L
2	BOD	30 mg/L
3	COD	250 mg/ L
4	Oil & Grease	10 mg/ L

- (5) That, the occupier shall dispose of solid wastes as follows:

S N	Waste Type	Mode of Disposal
1	Hazardous Carbonaceous Wastes	In co-processing in high temperature furnaces or kilns
2	Hazardous Non-Carbonaceous Wastes	In TSDF
3	Non-Carbonaceous Non-Hazardous solid wastes/ Mine Over Burden	As a substitute of Soil or Mineral

- (6) That, the occupier shall keep D G Set(s) within acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.

- (7) That, the occupier shall install and maintain Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge and submit the photographic view of the structures within a month.

- (8) That, the occupier shall grow and maintain greenery of the project in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

- (9) That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports, every year latest by 30th September of the next financial year.

- (10) That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory in compliance sub-para (2), (3), (4) and (5) of paragraph 3 of this CTO yearly at required periodicity.

- (11) That, this CTO is valid subjected to the validity of mining Lease/Mining Plan/Ecofriendly/Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.
- (12) That, this CTO is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ occupier.
- (13) That, this CTO shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.
- (14) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules made there under.

**(B) Specific Conditions:**

- i. That, the occupier shall ensure treatment and disposal of liquid waste in accordance with Water (Prevention and Control of Pollution) Act, 1974.
  - ii. That, the occupier shall dispose off bio-medical wastes in accordance with the provisions of Bio Medical Waste Rules, 2016.
  - iii. That, the occupier shall dispose off solid waste other than bio-medical waste in accordance with provisions of respective waste management rules made under the relevant laws and amended from time to time.
  - iv. That, the occupier shall ensure segregation of liquid chemical waste at source and ensure pre-treatment of neutralization prior to mixing with other effluent generated from health care facilities.
  - v. That, the occupier shall ensure separate treatment for bio-medical waste and municipal solid wastes.
  - vi. That, the occupier shall submit Environmental Statement every year by 30th September.
  - vii. That, the occupier shall submit applications for renewal of consent under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 again 120 days prior to the date of expiry of this consent i.e. 24.10.2021, with documents showing compliance of all of the above conditions.
4. **That, this CTO shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.**
  5. **That, this CTO is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTO will be revoked if any of the information/documents/certificates/undertaking given by the occupier is found false/fictitious/forged in future.**
  6. **The Order shall be valid subject to compliance of all other legal requirements applicable to the unit.**

**This is issued with the approval of the Competent authority**

SINGH DINESH  
PRASAD

Digitally signed by SINGH DINESH  
PRASAD  
Date: 2017.05.12 18:34:05 +05'30'

**(Dinesh Prasad Singh)**  
Asstt. Env. Engineer

Dated : 2017-05-12

Memo No. : JSPCB/HO/RNC/CTO-  
1130746/2017/562

**Copy to:** Regional Officer, Regional Office-Cum-Laboratory, Jamshedpur for information & ensuring compliance of the above.

SINGH DINESH  
PRASAD

Digitally signed by SINGH DINESH  
PRASAD  
Date: 2017.05.12 18:34:41 +05'30'

**(Dinesh Prasad Singh)**  
Asstt. Env. Engineer



# COMPLIANCE OF EMISSION & DISCHARGE CONSENT CONDITIONS

UNIT: TATA Steel Hospital, Noamundi  
 CONSENT ORDER NO.: JSPCB/HO/RNC/CTO-1619551/2017/1284  
 ISSUE DATE: 25.09.2017. Valid till 24.10.2021  
 COMPLIANCE PRIOD: 01.01.2019 – 31.12.2019

## CONSENT CONDITIONS

## COMPLIANCE STATUS

### (A) General Conditions

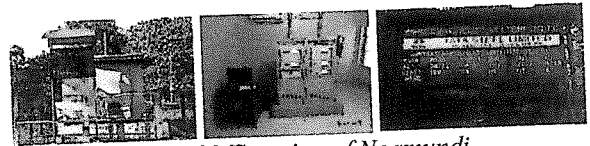
1. That, the occupier shall maintain the national ambient air quality within the standard given below:

Sr. No.	Pollutant	Time Weighted Average	Concentration in Ambient Air	
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area
(1)	(2)	(3)	(4)	(5)
1.	Sulphur Dioxide(SO <sub>2</sub> ), µg/m <sup>3</sup>	Annual 24 hrs.	50 80	20 80
2.	Nitrogen Dioxide(NO <sub>2</sub> ), µg/m <sup>3</sup>	Annual 24 hrs	40 80	30 80
3.	Particulate Matter (size less than 10 µm) or PM <sub>10</sub> , µg/m <sup>3</sup>	Annual 24 hrs	60 100	60 100
4.	Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub> , µg/m <sup>3</sup> .	Annual 24 hrs	40 60	40 60
5.	Ozone(O <sub>3</sub> ), µg/m <sup>3</sup>	8hrs. 1 hr.	100 180	100 180
6.	Lead(Pb) µg/m <sup>3</sup>	Annual 24 hrs	0.50 1.0	0.50 1.0
7.	Carbon Monoxide(CO) mg/m <sup>3</sup>	8 hrs. 1 hr.	02 04	02 04
8.	Ammonia (NH <sub>3</sub> ) µg/m <sup>3</sup>	Annual 24 hrs	100 400	100 400
9.	Benzene (C <sub>6</sub> H <sub>6</sub> ) µg/m <sup>3</sup>	Annual	05	05
10.	Benzo(α)Pyrene(BaP)Particulate phase only ng/m <sup>3</sup>	Annual	01	01
11.	Arsenic (As) ng/m <sup>3</sup>	Annual	06	06
12.	Nickel (Ni) ng/m <sup>3</sup>	Annual	20	20

Note: Serial no. 1 to 4 – Mandatory, Serial no. 5 to 12 – As applicable for specific type of industry

We are maintaining the national ambient air quality within the standard. All the results of ambient air quality are being submitted regularly to JSPCB on monthly basis. Complete environmental monitoring report of Hospital is attached as annexure.

Two numbers of continuous online ambient quality stations (CAAQMS) are also installed in the Noamundi mines area. Various parameters such as PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, NO<sub>x</sub> is being monitored for every 15 minutes and the data of same is continuously uploaded in Pollution Control Board server. The data is same is also been displayed using electronic display board in public domain.



*CAAQMS station of Noamundi*

2. That, the occupier shall maintain the emission quality and the quantity, as follows:

Sr. No.	Parameter	Standard
I.	Particulate Matter	100 mg/Nm <sup>3</sup>

A doubled chamber incinerator is installed at TATA Steel Hospital Noamundi for treatment & disposal of bio-medical waste generated from hospital. All the results are attached.



*Double chambered incinerator with 60m chimney*

3. That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:

All the effluent generated is recycled in close-circuit to maintain zero discharge. An effluent treatment plant (ETP) of 10 KLD is been installed in Hospital. The effluent quality is

**CONSENT CONDITIONS**

Sr. No.	Parameter	Standard
I.	Total Suspended Solids	100 mg/L
II.	BOD	30 mg/L
III.	COD	250 mg/L
IV.	Oil & Grease	10 mg/L
V.	Quantity of Discharge	

**COMPLIANCE STATUS**

maintained as per standard and effluent quality report is being submitted regularly.



10 KLD ETP at TATA Steel Hospital, Noamundi

4. That, the occupier shall dispose of solid waste as follows:

Sr. No.	Type of Waste	Mode of Disposal
I.	Hazardous Carbonaceous Wastes	In co-processing in high temp. furnaces or Kilns
II.	Hazardous non-Carbonaceous Wastes	In TSDF
III.	Non-carbonaceous non-hazardous solid wastes/ mine over burdan	As a substitute of soil or mineral

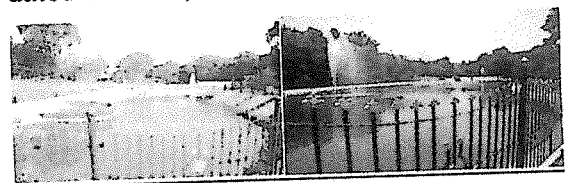
No Hazardous waste is generated from Hospital except ETP sludge. The same is been disposed / incinerated as per standard. All the biomedical waste is generated is disposed as per standard.

5. That, the occupier shall keep D G Set(s) within the acoustic enclosure (s) and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norms.

Small DG sets of various capacities are provided in area for lighting purpose in the area. The height(s) of exhaustive pipe as per norms.

6. That, the occupier shall install and maintain Central Ground Water Board / State Ground Water Directorate approved system of rain water harvesting –cum-ground water recharge and submit the photographic view of the structures within a month.

Noamundi hospital is an integrated part of Noamundi Mine. All the rain water harvesting ponds and ground water recharge structures have been constructed and rain water harvesting plan is been approved from Ground Water Directorate, Jharkhand, Ranchi vide letter no. GWD 317/Ranchi, dated 14<sup>th</sup> Jun, 2012.



RWH structure for augmentation in the area

At Noamundi area the various RWH structures in the form of Check Dams, Saucer ponds, Gabion Structures, Trenches and contour are made based on recommendation of Hon. Director, Ground Water Directorate,

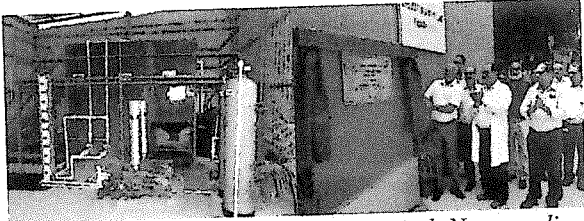
UNIT: TATA Steel Hospital, Noamundi  
 CONSENT ORDER NO.: JSPCB/HO/RNC/CTO-1619551/2017/1284  
 ISSUE DATE: 25.09.2017. Valid till 24.10.2021  
 COMPLIANCE PRIOD: 01.01.2019 – 31.12.2019

CONSENT CONDITIONS	COMPLIANCE STATUS
7. That, the occupier shall grow and maintain greenery in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.	Water Resources Dept. Jharkhand and available land in the area.  We are continuously growing and maintaining the greenery in the periphery and other available spaces.
8. That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports by 30 <sup>th</sup> Sept. every year.	Environmental Statement is being submitted as per requirement before 30 <sup>th</sup> of Sept. every year.
9. That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory in compliance of sub-para (2), (3), and (5), of paragraph 3 of this CTO yearly at required periodicity.	Complied with. The monitoring report of various parameters from NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory is monthly submitted. The same is been attached as annexure.
10. That, this CTO is valid subject to the validity of mining lease / Mining Plan / Ecofriendly / Environmental Clearance, if applicable. In case of no renewal of mining lease / mining Plan, this consent shall be treated as revoked automatically.	Complied. The unit has all regulatory clearances. The mine lease is valid till year 2030.
11. That, this CTO is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time being in force, rests with the industry / unit occupier.	Noted and being complied.
12. That, this CTO shall not in any way, adversely affect or jeopardize the legal proceeding, if any, instituted in the past or that could be, instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.	Noted and being complied.
13. That the occupier shall abide by the applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water Prevention & Control of Pollution) Cess Act 1977; the Air (Prevention & Control of Pollution) Act 1981; and	Being complied with

UNIT: TATA Steel Hospital, Noamundi  
 CONSENT ORDER NO.: JSPCB/HO/RNC/CTO-1619551/2017/1284  
 ISSUE DATE: 25.09.2017. Valid till 24.10.2021  
 COMPLIANCE PRIOD: 01.01.2019 – 31.12.2019

CONSENT CONDITIONS	COMPLIANCE STATUS
<p>the Environment (Protection) Act, 1986 and rules there under.</p>	
<b>(B) Specific Conditions</b>	
<ol style="list-style-type: none"> <li>1. This CTO will supersede the previous CTO issued vide ref. no. JSPCB/ HO/ RNC/ CTO – 1130746 /2017/ 562 dt. 12-5-2017.</li> <li>2. That, the occupier shall ensure treatment and disposal of liquid waste in accordance with Water (Prevention and Control of Pollution) Act, 1974.</li> <li>3. That, the occupier shall dispose off bio-medical waste in accordance with the provisions of respective Bio-medical waste management Rules, 2016 made under the relevant</li> <li>4. That, the occupier shall dispose off solid waste other than bio-medical waste in accordance with provisions of respective waste management rules</li> </ol>	<p>Noted down</p> <p>Being complied with. The liquid chemical waste generated from pathological, blood bank etc is pre-treated in neutralization pit. Followed by treatment in 10 KLD Effluent Treatment Plant &amp; Sewage Treatment Plant.</p> <p>All the bio-medical waste is dispose off as per Bio-medical Waste Management Rule 2016. Double chambered incinerator is installed and operated at Hospital along with 10 KLD Effluent Treatment Plant, plastic shredder autoclave, deep burial facility, ash pit etc.</p> <div data-bbox="874 1120 1476 1355" data-label="Image"> </div> <p style="text-align: center;"><i>Incinerator &amp; autoclave at Hospital</i></p> <div data-bbox="885 1377 1476 1624" data-label="Image"> </div> <p style="text-align: center;"><i>Plastic shredder, ash disposal pit at Hospital</i></p> <p>The solid waste such as food waste generated from hospital is been disposed as per norms on daily basis.</p>



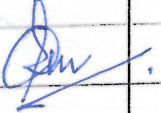
CONSENT CONDITIONS	COMPLIANCE STATUS
<p>made under the relevant laws and amended from time to time.</p> <p>5. That, the occupier shall ensure segregation of liquid chemical waste at source and ensure pre-treatment of neutralization prior to mixing with other effluent generated from health care facilities.</p> <p>6. That, the occupier shall ensure separate treatment for bio-medical waste and municipal solid wastes.</p> <p>7. That, the occupier shall submit Environmental Statement every year by 30<sup>th</sup> September.</p> <p>8. That, the occupier shall submit applications for renewal of consent under section 25/26 of the Water (Prevention &amp; Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention &amp; Control of Pollution) Act, 1981 again 120 days prior to the expiry of this consent i.e. 24.10.2021, with requisite fee and documents showing compliance of all the above conditions.</p>	<p>The liquid chemical waste generated from pathological, blood bank etc is pre-treated in neutralization pit. Followed by treatment in 10 KLD Effluent Treatment Plant &amp; effluent Treatment plant.</p>  <p><i>10 KLD ETP at TATA Steel Hospital, Noamundi</i></p> <p>Complied with, Separate establishment for municipal solid waste is done at Mine.</p> <p>Complied with Environmental Statement of hospital submitted vide letter no. MD/ENV/351/125/219, dated 25.09.2019</p> <p>Application for renewal of consent under section 25/26 of the Water (Prevention &amp; Control of Pollution) Act 1974 and under section 21 of the Air (Prevention &amp; Control of Pollution) Act, 1981 shall be done 120 days prior to the expiry of this consent i.e. 24.10.2021.</p>

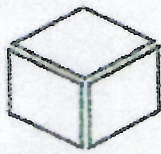


SL. NO.	NAME	IMMUNIZATION DETAILS - 2019		
01.	Chitranshu Behera	✓	✓	✓
02.	Monalisa Barik	✓	✓	✓
03.	Sukdev Marandi	✓	✓	✓
04.	Kanchan Rout	✓	✓	✓
05.	Kiran Chhetri	✓	✓	✓
06.	Ananth Reddy	✓	✓	✓
07.	Sudha Sandil	✓	✓	✓
08.	Krishna Karua	✓	✓	✓
09.	Rameshwari Tanti	✓	✓	✓
10.	Vikash Karua	✓	✓	✓
11.	Subashi Topno	✓	✓	✓
12.	Sonibari Terai	✓	✓	✓
13.	Arti Kohar	✓	✓	✓
14.	Shippa Deo	✓	✓	✓
15.	Sunika Guchhait	✓	✓	✓
16.	Puja Guchhait	✓	✓	✓
17.	Vishnu Karua	✓	✓	✓
18.	Punam Bagti	✓	✓	✓
19.	Nutan Sashi Birua	✓	✓	✓
20.	Sunika Xlunga	✓	✓	✓
21.	Puja Kohar	✓	✓	✓
22.	Sanis Karua	✓	✓	✓
23.	Anamika Karua	✓	✓	✓
24.	Rocky Karua	✓	✓	✓
25.	Nita Behera	✓	✓	✓
26.	Ruby Swati Aind	✓	✓	✓
27.	Madhuri Hembram	✓	✓	✓
28.	Chunki Guchhait	✓	✓	✓
29.	Anita Karua	✓	✓	✓
30.	Puja Karua	✓	✓	✓
31.	Amit Karua	✓	✓	✓
32.	Raj Kishor Karua	✓	✓	✓
33.	Kishan Das	✓	✓	✓
34.	...	✓	✓	✓

SL. NO.	NAME			
35.	Vicky Karua.	✓	✓	✓
36.	Gomti Karua.	✓	✓	✓
37.	Submi Guchhait	✓	✓	✓
38.	Sajan Nag.	✓	✓	✓
39.	Sohan Karua.	✓	✓	✓
40.	Gurudev Karua.	✓	✓	✓
41.	Rakesh Rout.	✓	✓	✓
42.	Satish Shakur.	✓	✓	✓
43.	Sonu Nayak	✓	✓	✓
44.	Suren Karua	✓	✓	✓
45.	Rajkumardas	✓	✓	✓
46.	Biswani Karua	✓	✓	✓
47.	Didip Das	✓	✓	✓
48.	Sumi Suren	✓	✓	✓
49.	Punam Kujur	✓	✓	✓
50.	Anamika	✓	✓	✓

\*\* Above mentioned names covers Inj. T. T & Inj. Hepatitis B full course.

  
 Matron  
 Tisco Hospital  
 Noamundi



# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)  
(ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 Certified)

Annexure - VIII



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Certificate No.: TC-7944  
Format No.: 7.8.2/FMT/TR-06

## TEST REPORT (ETP WATER QUALITY ANALYSIS REPORT - NOVEMBER -2019)

Customer Name & Address	M/S. NOAMUNDI IRON MINES (M/s TATA Steel Limited)		
Test Report No	ENV/lab/19/P-6084	Report Release Date	3.12.19
Sample Code	ETPW-1 TO ETPW-2	Sampled By	VC SPL Representative
Sample Name	Domestic Effluent	Sampled On	05.11.2019
Sample Condition	Sealed & Ice Preserved	Sampling Location	ETPW-1: Inlet of ETP 10 KLD ETPW-2: Outlet of ETP 10 KLD
Test Started On	06.11.2019	Sample Received On	06.11.2019
		Test Completed On	13.11.2019

Sl. No.	Parameters	Testing Methods	Unit	Standards (In land Surface water)	Analysis Results	
					ETPW-1	ETPW-2
1	*Colour & Odour	APHA23 <sup>rd</sup> Edn,2017 2120 B, C & APHA23 <sup>rd</sup> Edn,2017 2150 B	Hazen	Colourless/Odourless as far as practicable	028 pungent smell	CL3 U/O
2	Suspended Solids	APHA23 <sup>rd</sup> Edn,2017: 2540 D	mg/l	100	56	18
3	*Particulate size of SS	APHA23 <sup>rd</sup> Edn,2017 2540 D		Shall pass 850 micron IS Sieve	< 850	< 850
4	pH Value	APHA23 <sup>rd</sup> Edn,2017: 4500H' B	--	5.5-9.0	7.12	7.21
5	*Temperature	APHA23 <sup>rd</sup> Edn,2017 2550-B	°C	Shall not exceed 5°C above the receiving water temperature	26	26
6	Oil & Grease(max)	APHA23 <sup>rd</sup> Edn,2017: 5520 B	mg/l	10	ND	ND
7	*Total Residual Chlorine	APHA23 <sup>rd</sup> Edn,2017: 4500Cl, B	mg/l	1	ND	ND
8	Ammonical Nitrogen (as N)	APHA23 <sup>rd</sup> Edn,2017: 4500-NH <sub>3</sub> C	mg/l	50	4.4	5.2
9	Total Kjeldahl nitrogen (as NH <sub>3</sub> )	APHA23 <sup>rd</sup> Edn,2017: 4500-N <sub>org</sub> B	mg/l	100	13.2	14.1
10	*Free ammonia (as NH <sub>3</sub> )	APHA23 <sup>rd</sup> Edn,2017: 4500-NH <sub>3</sub> F	mg/l	5	ND	ND
11	BOD(3 days at 27°C) (max)	APHA23 <sup>rd</sup> Edn,2017 5210 B	mg/l	30	26	18
12	Chemical Oxygen Demand as COD	APHA23 <sup>rd</sup> Edn,2017 5220-B	mg/l	250	182	174
13	*Arsenic as As	APHA23 <sup>rd</sup> Edn,2017 3114 B	mg/l	0.2	<0.004	<0.004
14	Mercury (Hg)	APHA23 <sup>rd</sup> Edn,2017 3112 B	mg/l	0.01	<0.004	<0.004
15	Lead as Pb(max)	APHA23 <sup>rd</sup> Edn,2017 3111 B	mg/l	0.1	<0.01	<0.01
16	Cadmium as Cd (max)	APHA23 <sup>rd</sup> Edn,2017 3111 B	mg/l	2	<0.01	<0.01
17	*Hexavalent Chromium as Cr <sup>VI</sup>	APHA23 <sup>rd</sup> Edn,2017 3500Cr B	mg/l	0.1	<0.01	<0.01
18	Total Chromium (Cr)	APHA23 <sup>rd</sup> Edn,2017 3111 B	mg/l	2	<0.05	<0.05
19	Copper as Cu (max)	APHA23 <sup>rd</sup> Edn,2017 3111 B	mg/l	3	0.32	<0.02
20	Zinc as Zn(max)	APHA23 <sup>rd</sup> Edn,2017 3111 B	mg/l	5	0.68	<0.01
21	*Selenium (Se) (max)	APHA23 <sup>rd</sup> Edn,2017 3114 B	mg/l	0.05	<0.001	<0.001
22	Nickel (Ni)	APHA23 <sup>rd</sup> Edn,2017 3111 B	mg/l	3	<0.05	<0.05
23	*Cyanide as CN (max)	APHA23 <sup>rd</sup> Edn,2017 4500-CN-C,D	mg/l	0.2	ND	ND
24	*Fluoride as F (max)	APHA23 <sup>rd</sup> Edn,2017 4500F-C	mg/l	2	0.03	0.012
25	*Dissolved Phosphates (P)	APHA23 <sup>rd</sup> Edn,2017 4500-P,D	mg/l	5	0.62	<0.05
26	*Sulphide (S)	APHA23 <sup>rd</sup> Edn,2017 4500-S-D	mg/l	2	<0.1	<0.1
27	*Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH (max)	APHA23 <sup>rd</sup> Edn,2017 5530 B, D	mg/l	1	<0.05	<0.05
28	*Bio-assay test	IS 6582 (Part-2) 2001	%	90% survival of fish after 96 hours in 100% effluent	90%	92%
29	Manganese (Mn)	APHA23 <sup>rd</sup> Edn,2017 3111 B	mg/l	2	0.048	<0.05
30	Iron as Fe (max)	APHA23 <sup>rd</sup> Edn,2017 3111 B	mg/l	3	3.1	0.82
31	*Vanadium (V)	APHA23 <sup>rd</sup> Edn,2017 3500-V	mg/l	0.2	<0.001	<0.001
32	*Nitrate Nitrogen	APHA23 <sup>rd</sup> Edn,2017 4500-NO <sub>3</sub> I	mg/l	10	4.6	1.94
33	*Faecal Coliform	APHA23 <sup>rd</sup> Edn,2017 9221 F	MPN/100 ml	Shall not be detectable in any 100 ml sample	<1.8	<1.8

Note Above (\*) parameters are not in our scope. Note: CL: Colorless, ND: Not Detected.

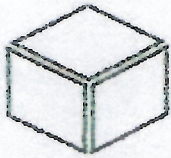
BDL (Below Detectable Limits) Values: Cu- 0.02 mg/l, Mn- 0.05 mg/l, Cr<sup>VI</sup> 0.05 mg/l, Hg- 0.004 mg/l, Cd- 0.01 mg/l, Se- 0.001 mg/l, As- 0.001 mg/l, FC- 1 SPMN/100ml Pb- 0.01 mg/l, Zn- 0.03 mg/l, Cr<sup>III</sup>- 0.01 mg/l, Al- 0.01 mg/l, B- 0.1 mg/l, Ni- 0.05 mg/l, PO<sub>4</sub>- 0.05 mg/l, CN- 0.01mg/l.

- The test values are reported based on the samples received.
- Samples will be destroyed after 7 days from date of issues of the test report subject to nature of preservation. Sample will be preserved as per standard method.
- The test report shall not be reproduced, without written approval of laboratory

Authorized Signatory

VISIONTEK CONSULTANCY SERVICES PVT LTD





# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)

(ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 Certified)



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Certificate No.: TC-7944

Format No.: 7.8.2/FMT/TR-06

## TEST REPORT

### (STACK ANALYSIS ANALYSIS REPORT- NOV-2019)

Customer Name & Address	M/S. NOAMUNDI IRON MINES ( M/s TATA Steel Limited)		
Test Report No	Envlab/191R-6289	Report Release Date	05 12 19
Sample Code	ST-1	Sampled By	VCSPL Representative
Sample Name	Stack	Sampled On	17 11 2019
Sample Condition	Scaled & Ice Preserved	Sampling Location	ST-1:Hospital Incinerator
Test Started On	18 11 2019	Sample Received On	18 11 2019
		Test Completed On	25 11 2019

<b>A</b>	<b>General Information about Stack</b>		
1	Stack Connected to		Incinerator
2	Emission due to		Burning of H.S Diesel
3	Material of Construction of stack		MS
4	Shape of stack		Circular
5	Whether stack is provided with permanent platform & ladder		Yes
6	Generation capacity		N.A.
<b>B</b>	<b>Physical Characteristics of Stack:</b>		
1	Height of the stack from ground level		60 m (Approx)
2	Diameter of the stack at sampling point		0.30 m
3	Height of the sampling point from G.L.		15.0 m (Approx)
4	Area of Stack		0.0707 m <sup>2</sup>
<b>C</b>	<b>Analysis / Characteristic of Stack:</b>		
1	Fuel Used		N.A
2	Fuel consumption		N.A
<b>D</b>	<b>Results of Sampling &amp; Analysis of Gaseous Emission</b>		<b>Analysis Results</b>
1	Temperature of emission (°C)		62
2	Barometric pressure (mm of Hg)		714
3	Velocity of gas (m/sec.)		7.4
4	Quantity of gas flow (Nm <sup>3</sup> /hr.)		1406.2
5	Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )		118.4
6	*Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )		3.2
7	*Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )		19.6
8	Concentration of particulate Matters (mg/Nm <sup>3</sup> )		24.6
<b>E</b>	<b>Pollution control Device</b>		
	Details of pollution control		Nil
	Device attached with the stack		
<b>F</b>	<b>Remarks</b>		

Note Above (\*) parameters are not in our NABL scope.

1. The test values are reported based on the samples received. 2. Samples will be destroyed after 7 days from date of issue of the test report subject to nature of preservation. Sample will be preserved as per standard method.

3. The test report shall not be reproduced, without written approval of laboratory



