



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

MD/ENV/ 257 /129/2019
Date: 25.06.2019

Subject: Submission of annual report of Bio - medical wastes in the prescribed format (Form-IV), of TATA Steel Hospital, Joda for a period 1st January 2018 to 31st December 2018, as per Bio-medical Waste Management Rule 2016.

Ref.: Bio-medical Waste Authorization of Joda East Iron Mine, TATA Steel Ltd., vide. Letter No. IND-IV_BW-186 /976/SPCB/Authorization (Biomedical Waste) dated: 24.01.2019 valid till 31.03.2024.

Dear Sir,

Kindly find attach the Bio-medical waste in the prescribed format (Form-IV) of TATA Steel Hospital, Joda for a period 1st January 2018 to 31st December 2018, as per Bio-medical Waste Management Rule 2016 along with the required documents.

We trust the information furnished is in line with your requirement. Kindly acknowledge the same.

Thanking you,

Yours sincerely,

Head (Planning), OMQ

Encl.: As above

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

TATA STEEL LIMITED

Mines Division Noamundi 833 217 India
Tel 91 9234301340 Fax 91 6596 290737

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

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																																																				
	(i) Name of the authorised person (occupier or operator of facility)	:	Dr. Ashok Kumar Ray																																																		
	(ii) Name of HCF or CBMWTF	:	Tata Steel Hospital, Joda (HCF)																																																		
	(iii) Address for Correspondence	:	Tata Steel Hospital, Joda west P.O.-Joda, Keonjhar-758034, Odisha.																																																		
	(iv) Address of Facility	:	Tata Steel Hospital, Joda west P.O.-Joda, Keonjhar-758034, Odisha.																																																		
	(v) Tel. No, Fax. No :	:	9040068251																																																		
	(vi) E-mail ID :	:	priyanka.upadhyay@tatasteel.com																																																		
	(vii) URL of Website	:	http://www.tatasteelindia.com/																																																		
	(viii) GPS coordinates of HCF or CBMWTF	:	22°06'47.5"N & 84°29'22.1"E																																																		
	(ix) Ownership of HCF or CBMWTF	:	Private																																																		
	(x). Status of Authorisation under the Bio-Medical Waste (Management and Handling) Rules	:	No. 976/SPCB/Authorisation(Biomedical Waste) Date 24.01.2019/IND-IV-BW-186, Valid upto: 31.03.2022																																																		
(xi). Status of Consents under Water Act and Air Act	:	Consent to operate received vide letter no:413/WPC/APC dated 22.12.2017																																																			
2	Type of Health Care Facility																																																				
	(i) Bedded Hospital	:	75																																																		
	(ii) Non-bedded hospital (Clinic or Blood Bank or Clinical Laboratory or Research Institute or Veterinary Hospital or any other)	:	NA																																																		
	(iii) License number and its date of expiry	:	No. 976/SPCB/Authorisation(Biomedical Waste) Date 24.01.2019/IND-IV-BW-186, Valid upto: 31.03.2022																																																		
3	Details of CBMWTF																																																				
	(i) Number healthcare facilities covered by CBMWTF	:	NA																																																		
	(ii) No of beds covered by CBMWTF	:	NA																																																		
	(iii) Installed treatment and disposal capacity of CBMWTF	:	NA																																																		
	(iv) Quantity of biomedical waste treated or disposed by CBMWTF	:	NA																																																		
4	Quantity of waste generated or disposed in Kg per annum (on monthly average basis)																																																				
		:	Yellow Category : 648.75 Kg																																																		
		:	Red Category : 280.06Kg																																																		
		:	White : 41.86 Kg																																																		
		:	Blue Category : 17.15Kg General Solid waste : 18.64Tonn																																																		
5	Details of the Storage, treatment, transportation, processing and Disposal Facility																																																				
	(i) Details of the on-site storage facility	:	Length: 20 f, Width: 22 f, Height: 9 f																																																		
		:	Capacity : 900 ft ³																																																		
		:	Provision of on-site storage (cold storage or any other provision) : Does not Required																																																		
	(ii) 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/ Annum</th> </tr> </thead> <tbody> <tr> <td>Incinerators</td> <td>1</td> <td>10kg/hour</td> <td>648.7kg</td> </tr> <tr> <td>Plasma Pyrolysis</td> <td>0</td> <td>0</td> <td>NA</td> </tr> <tr> <td>Autoclaves</td> <td>1</td> <td>1kg/day</td> <td>280kg</td> </tr> <tr> <td>Microwave</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Hydroclave</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Shredder</td> <td>1</td> <td>10kg/hour</td> <td>780 KG</td> </tr> <tr> <td>Needle tip cutter or destroyer</td> <td>6</td> <td></td> <td>41.86kg</td> </tr> <tr> <td>Sharps Encapsulation or concrete pit</td> <td>1</td> <td>0</td> <td>58.9kg</td> </tr> <tr> <td>Deep burial pits</td> <td>1</td> <td>As per standard</td> <td>0</td> </tr> <tr> <td>Chemical disinfection</td> <td>10% NaOCl</td> <td>12 kg Bucket</td> <td>For internal use only</td> </tr> <tr> <td>Any other treatment equipment</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Type of treatment Equipment	No. of Units	Capacity (Kg/day)	Quantity treated or disposed/ Annum	Incinerators	1	10kg/hour	648.7kg	Plasma Pyrolysis	0	0	NA	Autoclaves	1	1kg/day	280kg	Microwave	0	0	0	Hydroclave	0	0	0	Shredder	1	10kg/hour	780 KG	Needle tip cutter or destroyer	6		41.86kg	Sharps Encapsulation or concrete pit	1	0	58.9kg	Deep burial pits	1	As per standard	0	Chemical disinfection	10% NaOCl	12 kg Bucket	For internal use only	Any other treatment equipment			
		Type of treatment Equipment	No. of Units	Capacity (Kg/day)	Quantity treated or disposed/ Annum																																																
		Incinerators	1	10kg/hour	648.7kg																																																
		Plasma Pyrolysis	0	0	NA																																																
		Autoclaves	1	1kg/day	280kg																																																
		Microwave	0	0	0																																																
		Hydroclave	0	0	0																																																
		Shredder	1	10kg/hour	780 KG																																																
		Needle tip cutter or destroyer	6		41.86kg																																																
Sharps Encapsulation or concrete pit		1	0	58.9kg																																																	
Deep burial pits		1	As per standard	0																																																	
Chemical disinfection		10% NaOCl	12 kg Bucket	For internal use only																																																	
Any other treatment equipment																																																					
(iii) Quantity of recyclable wastes sold to authorized recyclers after treatment in kg per annum	:	Nil																																																			

	(iv) No of vehicles used for collection and transportation of biomedical waste	:	Not Applicable because all the waste is being treated inside the hospital only	
	(v) Details of incineration ash and ETP sludge generated and disposed during the treatment of wastes in Kg per annum	:	Quantity Generated	Where disposed
		:	Incineration Ash	38.54kg
		:	ETP Sludge	374550lit
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of	:	NA	
	(vii) List of member HCF not handed over bio-medical waste.	:	NA	
6	Do you have bio-medical waste management committee? If yes, attach minutes of the meetings held during the reporting period	:	No	
7	Details trainings conducted on BMW			
	(i) Number of trainings conducted on BMW Management	:	16	
	(ii) number of personnel trained	:	82	
	(iii) number of personnel trained at the time of induction	:	Not applicable because of no new entry	
	(iv) number of personnel not undergone any training so far	:	12	
	(v) whether standard manual for training is available?	:	Yes	
	(vi) any other information	:	No	
8	Details of the accident occurred during the year			
	(i) Number of Accidents occurred	:	0	
	(ii) Number of the persons affected	:	NA	
	(iii) Remedial Action taken (Please attach details if any)	:	NA	
	(iv) Any Fatality occurred, details.	:	NA	
9	Are you meeting the standards of Air Pollution from the incinerator?	:	YES	
	How many times in last year could not met the standards?	:	0	
	Details of Continuous online emission monitoring systems installed	:	NA, however the stack monitoring of incinerator is being done by external part	
10	Liquid waste generated and treatment methods in place How many times you have not met the standards in a year?	:	0	
11	Is the disinfection method or sterilization meeting the log 4 standards?	:	Yes	
	How many times you have not met the standards in a year?	:	0	
12	Any other relevant information	:	Air Pollution Control Devices attached with the Incinerator	

Certified that the above report is for the period from 01.01.2018 - 31.12.2018.

Date: 25/6/18
Place: Joda


Signature

Chief Medical Officer
TATA STEEL HOSPITAL, JODA

ANNUAL BIO-MEDICAL WASTE REPORT
TATASTEEL HOSPITAL JODA
FROM JANUARY 2018 TO DECEMBER 2018

MONTH	YELLOW (KG)	WHITE (KG)	BLUE (KG)	RED (KG)	GENERAL WASTE (KG)	INCINEARATED ASH (KG)	SHEREDDED PLASTIC (KG)	LIQUID CHEM. WASTE (LIT)
Jan 18	48.34	3.16	1.26	19.95	165.50	3.25	42.00	34.10
Feb 18	40.45	4.76	1.36	18.20	148.50	2.77	40.00	29.42
March 18	41.98	3.99	1.49	20.10	174.00	3.08	42.00	34.70
April 18	38.65	4.06	1.37	19.10	150.00	3.08	34.00	30.50
May 18	65.76	3.24	1.26	21.05	150.90	3.41	75.00	32.90
June 18	67.01	3.08	1.32	19.75	164.40	3.09	67.00	32.50
July 18	58.16	3.20	1.41	27.53	158.40	3.26	86.00	30.50
Aug 18	44.78	3.24	1.32	26.04	155.50	3.39	70.00	31.41
Sept 18	57.87	3.23	1.68	26.82	149.90	3.31	67.00	32.70
Oct 18	57.47	3.20	1.57	26.69	150.10	3.25	91.00	33.40
Nov 18	62.60	3.34	1.44	27.05	144.90	3.35	81.00	30.90
Dec 18	65.68	3.36	1.67	27.78	152.00	3.30	85.00	31.52
Total								
KG	648.75	41.86	17.15	280.06	1864.1	38.54	746	384.55

Bio-Medical Waste Management (Storage and Disposal)

Training for Health Care Workers and Others

Tata Steel Hospital Joda



Training schedule for contractual-employees of Tata Steel Hospital, Joda, Month of July 2018

Topic-Bio-medical waste management rule,2016

Name of Trainee	Group	Date	Time	Name of Facilitator
Jagdish Karua	Group 1	19.07.2018, 28.07.2018	4-5 PM	Rekha Gogoi Chetia, Dr. B.K.Pal
Biju Karua				
Ram Tiu				
Sadaf Gazala				
Aprajita Barik				
Kishan Shekhar				
Sunita Das				
Aarti Mohakud				
Padmini Karua				
Gouri Karua				
Saraswati Patra				
Janki Hembram				
Arnapurna Patra				
Himanshu Hemram				
Lalatendu Samal				
Rupali Sahoo				
Dara Singh Munda				
Tarani Patra				
Abhiram Sandil				
Biju Kulu				
Lalit				
Jayshree Sahoo	Group 2	13.07.2018, 16.07.2018, 21.07.2018, 27.07.2018	6-7 PM	
Sabitri Karua				
Reena Karua				
Rakhi Karua				
Sulachana Karua				
Damayanti Karua				
Jagannath Karua				
Sambhunath Karua				
Dhaneswar Karua				
Kashinath Moharana				
Sona Karua				
Deepak Karua				
Sujeet Karua				
Abhimanyu Karua				
Meena Gope				
Tapan Karua				
Baby Behera				
Sanjukta Karua				
Malati Karua				
Padma Karua				
Jashoda Karua				
Sukanti Karua				
Sukanti Karua				
Smitarani Mishra				
Urmila Naik				
Sangeeta Bahadur				
Sabita Mohakud				
Sangeeta Bahadur				
Sabita Mohakud				
Padmalaya Sahoo				

Training schedule for employees of Tata Steel Hospital, Joda; For the Month of July 2018

Topic-Bio-medical waste management rule,2016

Name of Trainee	Group	Date	Time	Name of Facilitator
Belo Bodra	GROUP 1	13.7.18		
Rita Karua				
Tikifullo Khuntia				
Sri Sudhir Giri				
Sri T.K. Pradhan				
Subash Karua				
Ms.Asha Peter				
Babita Behera				
Puspa Horo				
Jhansi rani Mishra				
Tanushree Mohanty				
Sarita Horo				
S.V.Saroja				
Niharika Behera				
Jayshree Sahoo				
Sri Uttam Kr.Dash	Group 2	18.7.18		DR. B K PAL
Miss Bhargabi Nayak				
Sri Uttam Kr. Jena				
Sri Devendra Mohanta				
Laxmi Goud				
Basanti Karua				
Soumya Behera				
Sanjukta Patra				
Babita Giri				
Reshma Majhi				
Sri A K Giri				
Sri Sanjeev Prasad				
Sri Rabindra Barik				
Sri Santosh Sunani				
Sri R. K. Mishra				
Priyanka Mishra	Group 3	26.07.2018		REKHA GOGOI CHETIA
Sabita Sahoo				
Bilasini Nayak				
Madhusmita Biswal				
Grace Tigga				
Yoshda Das				
Saroj Dang				
Ranjubala Mohanty				
Kamala Boipai				
Bina Hembram				
Sri Bijay Karua				
Bhimsen Patra				
Akilandewswari				
Manisha Tamang				

Inj. Hepatitis B & T. Toxoid
for 2018.

Sl. no	Name	Inj. Hep. B	Inj. T. Toxoid	Sign/Thumb imp
1	Jagannath Karna	13. 11. 2018	23. 11. 2018	Jagannath Karna
2.	Tapan Karna	✓	✓	Tapan Karna
3.	Dhaneswar	✓	✓	Dhaneswar Karna
4.	Sujeet	✓	✓	Sujeet
5.	Deepak	✓	✓	Deepak
6.	Abhinavjy	✓	✓	KALIA
7.	Kashinath	✓	✓	काशीनाथ
8.	Sambhunath	✓	✓	संभुनाथ
9.	Malti Karna	✓	✓	मालती कर्णा
10	Sanjukta	✓	✓	Sanjukta
11.	Baby	✓	✓	
12.	Yashoda	✓	✓	for Taka
13.	Urmila	✓	✓	उर्मिला
14.	Sabitri	✓	✓	
15.	Sukanti	✓	✓	Sukanti
16.	Damayanti	✓	✓	Damayanti
17.	Bijju	✓	✓	Bijju
18.	Jagdish	✓	✓	Jagdish

Renuka Gopi Chetis

Matron
TATA STEEL HOSPITAL, JODA



Ref.: env lab/18/R - 410

Date: 03.03.2018

ANALYSIS REPORT OF FLUE GAS

1. Name of Industry : Joda East Iron Mines (M/s TATA Steel Limited)

		<u>Date of Sampling</u>	: 16.02.2018 at 3.15pm
A	<u>General Information about Stack</u>	-	-
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	<u>Physical Characteristics of Stack:</u>	-	-
1	Height of the stack from ground level	:	30m (approx)
2	Diameter of the stack at sampling point	:	0.254m
3	Height of the sampling point from GL	:	7.5m (approx)
4	Area of Stack	:	0.0506 m ²
C	<u>Analysis / Characteristic of Stack:</u>	-	-
1	Fuel Used	:	N.A.
2	Fuel consumption	:	N.A.
D	<u>Results of Sampling & Analysis of Gaseous Emission</u>	-	<u>Analysis Results</u> <u>CPCB Limit</u>
1	Temperature of emission (°C)	:	42
2	Barometric pressure (mm of Hg)	:	714
3	Velocity of gas (m/sec.)	:	5.30
4	Quantity of gas flow (Nm ³ /hr.)	:	1198
5	Concentration of Carbon monoxide (%)	:	0.78
6	Concentration of Sulphur dioxide (mg/Nm ³)	:	1.2
7	Concentration of Nitrogen dioxide (mg/Nm ³)	:	20.8 400
8	Concentration of particulate Matters (mg/Nm ³)	:	25.7 -50
E	<u>Pollution control Device</u>		
	Details of pollution control		
	Device attached with the stack	:	Nil
F	<u>Remarks</u>		



For Visiontek Consultancy Services Pvt. Ltd.



Ref: ENVLAB/18/R-2406

Date: 1/06/2018

ANALYSIS REPORT OF FLUE GAS

1. Name of Industry : Joda East Iron Mines (M/s TATA Steel Limited)

		<u>Date of Sampling</u>	: 15.05.2018 at 3.15pm	
A	<u>General Information about Stack</u>	-	-	
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	<u>Physical Characteristics of Stack:</u>	-	-	
1	Height of the stack from ground level	:	30m (approx)	
2	Diameter of the stack at sampling point	:	0.254m	
3	Height of the sampling point from GL	:	7.5m (approx)	
4	Area of Stack	:	0.0506 m ²	
C	<u>Analysis / Characteristic of Stack:</u>	-	-	
1	Fuel Used	:	N.A.	
2	Fuel consumption	:	N.A.	
D	<u>Results of Sampling & Analysis of Gaseous Emission</u>	-	-	
			<u>Analysis Results</u> <u>CPCB Limit</u>	
1	Temperature of emission (°C)	:	45.0	
2	Barometric pressure (mm of Hg)	:	714	
3	Velocity of gas (m/sec.)	:	4.98	
4	Quantity of gas flow (Nm ³ /hr.)	:	1115.	
5	Concentration of Carbon monoxide (%)	:	0.94	
6	Concentration of Sulphur dioxide (mg/Nm ³)	:	1.8	
7	Concentration of Nitrogen dioxide (mg/Nm ³)	:	20.8	400
8	Concentration of particulate Matters (mg/Nm ³)	:	26.8	50
E	<u>Pollution control Device</u>			
	Details of pollution control			
	Device attached with the stack	:	Nil	
F	<u>Remarks</u>			



For Visiontek Consultancy Services Pvt. Ltd.



Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008
ISO 14001 : 2004
OHSAS 18001 : 2007

Ref.: Envlab/18/R-8641(E)

Date: 05.09.18

ANALYSIS REPORT OF FLUE GAS

1. Name of Industry : Joda East Iron Mines (M/s TATA Steel Limited)

<u>Date of Sampling</u>		:	20.08.2018 at 3.15pm	
A	General Information about Stack	-	-	
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	Physical Characteristics of Stack:	-	-	
1	Height of the stack from ground level	:	30m (approx)	
2	Diameter of the stack at sampling point	:	0.254m	
3	Height of the sampling point from GL	:	7.5m (approx)	
4	Area of Stack	:	0.0506 m ²	
C	Analysis / Characteristic of Stack:	-	-	
1	Fuel Used	:	N.A.	
2	Fuel consumption	:	N.A.	
D	Results of Sampling & Analysis of Gaseous Emission	-	-	
			<u>Analysis Results</u>	<u>CPCB Limit</u>
1	Temperature of emission (°C)	:	44.0	
2	Barometric pressure (mm of Hg)	:	714	
3	Velocity of gas (m/sec.)	:	5.1	
4	Quantity of gas flow (Nm ³ /hr.)	:	1078	
5	Concentration of Carbon monoxide (%)	:	0.88(%)	
6	Concentration of Sulphur dioxide (mg/Nm ³)	:	1.2	
7	Concentration of Nitrogen dioxide (mg/Nm ³)	:	19.2	400
8	Concentration of particulate Matters (mg/Nm ³)	:	25.6	50
E	Pollution control Device			
	Details of pollution control			
	Device attached with the stack	:	Nil	
F	Remarks			

