



To  
The Environmental Officer  
Karnataka State Pollution Control Board  
Regional Office-Mahadevapura  
3<sup>rd</sup> Floor, Nisaraga Bhavana,  
Shinanagar, Rajajinagar,  
Bengaluru-560010

Date: 24-01-2022

Respected Sir,

Sub: Submission of Bio-Medical Waste Annual Returns in **Form-IV**

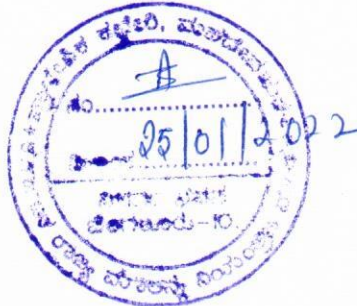
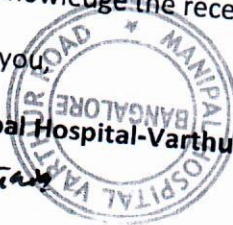
With reference the above subject, we here with submitting the Bio-medical waste annual returns in **Form-IV (see rule-13)** towards generation and disposal of Bio-medical waste for the year **2021** for the period from **01-01-2021 to 31-12-2021** with annexure-1 for Non covid Bio medical waste & Annexure-II for Covid Bio medical waste as per BMW rules.

Kindly acknowledge the receipt of the same,

Thanking you

For Manipal Hospital-Varthur Road

Authorized Signatory



Manipal Hospital Varthur Road  
Survey No. 10P & 12P, Ramagondanahalli Village, Varthur Hobli, Whitefield, East Taluk,  
Bengaluru 560 066, Karnataka P +91 80 6165 6666

Manipal Hospitals Private Limited  
(Formerly Columbia Asia Hospitals Private Limited)  
CIN: U85110KA2003PTC033055

Regd. Off. The Annexe, #98/2, Rustom Bagh. Off. HAL Airport Road, Bengaluru - 560 017  
P +91 80 4936 0300 E info@manipalhospitals.com www.manipalhospitals.com

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

To be submitted to the prescribe authority on or before 30<sup>th</sup> June every year for the period from January to Decèmber of the proceeding year by the occupier of health care facility (HCF) or common bio-medical waste treatment facility(CBMWTF)

Sl No.	Particulars	
1.	Particulars of the Occupier	
	i) Name of the authorized Person (Occupier of : operator of facility	Dr. Chaitanya Patania Hospital Director
	ii) Name of HCF or CBMWTF	<b>M/s. Manipal Hospital-Varthur Road</b>
	iii) Address of the Correspondence	No,10 P & 12 P, Ramagondanahalli Village,
	iv) Address of the Facility	Varthur Hobli, Whitefield, Bengaluru-560066
	v) Tel. No, Fax No.	080-61656666
	VI) E-Mail ID	facilities.whitefield@manipalhospitals.com
	vii) URL of Website	www.manipalhospitals.com
	viii) GPS coordinate of HCF or CBMWTF	----
	ix) Ownership of HCF CBMWTF	(State Government or Private or Semi Govt. or any other) <b>Private</b>
	x) Status of Authorization under the Bio-Medical Waste (Management and Handling) Rules.	Authorization No <b>KSPCB/84/BMW/2017/Reg No.131411</b> <b>Valid up to : 30-06-2022</b>
	xi) Status of the Consent under Water Act and Air Act.	<b>Valid up to : 30-06-2022</b>
2.	Type of Health Care Facility	Multispecialty Hospital
	i) Bedded Hospital	162 Beds
	ii) Non Bedded Hospital laboratory( Clinic or Blood Bank or Clinically or Research Institute or Veterinary Hospital or any other)	NA
	lii ) Licence Number & its date of expiry	NA
3	Details of CBMWTF	<b>Anu Auto Clave &amp; Incine services</b>
	i) Number of Healthcare facilities covered by CBMWTF	Handled by above mentioned vendor
	ii) Number of beds covered by CBMWTF	-----  -----
	iii) installed treatment and disposal capacity of CBMWTF	-----  -----
	iv) Quantity of Bio-medical waste treated or disposed by CBMWTF	-----  -----

*Gautam*



4.	Quantity of waste generated or disposed in Kgs per Annum( <b>on monthly average basis</b> )	<table border="1"> <thead> <tr> <th></th> <th>Non Covid waste</th> <th>Covid waste</th> </tr> </thead> <tbody> <tr> <td>Yellow Category :</td> <td>1743 Kg/month</td> <td>533.5 kg/month</td> </tr> <tr> <td>Red Category:</td> <td>2552 kg/month</td> <td>323 kg/month</td> </tr> <tr> <td>White:</td> <td>56 kg/month</td> <td>14.5 kg/month</td> </tr> <tr> <td>Blue: Category:</td> <td>277 Kg/month</td> <td>95 kg/month</td> </tr> <tr> <td colspan="3">General Solid waste: Dry garbage-35 kg/day</td> </tr> </tbody> </table>			Non Covid waste	Covid waste	Yellow Category :	1743 Kg/month	533.5 kg/month	Red Category:	2552 kg/month	323 kg/month	White:	56 kg/month	14.5 kg/month	Blue: Category:	277 Kg/month	95 kg/month	General Solid waste: Dry garbage-35 kg/day																																				
	Non Covid waste	Covid waste																																																					
Yellow Category :	1743 Kg/month	533.5 kg/month																																																					
Red Category:	2552 kg/month	323 kg/month																																																					
White:	56 kg/month	14.5 kg/month																																																					
Blue: Category:	277 Kg/month	95 kg/month																																																					
General Solid waste: Dry garbage-35 kg/day																																																							
5.	Details of storage, treatment, transportation, processing and disposal facility																																																						
	On																																																						
	i)Details of the site storage facility	Size: 8 ft* 8 ft																																																					
		Capacity: can store up to 154 kg/day 32 kg/day																																																					
		Provision of on-site storage: cold storage or any other provision- <b>Cold Storage</b>																																																					
	Disposal facilities	<table border="1"> <thead> <tr> <th>Type of treatment of Equipment</th> <th>No of Unit</th> <th>cap acit y</th> <th>quantity treaedo r</th> </tr> <tr> <th></th> <th></th> <th>S kg/ Day</th> <th>disposed in kg Per Annum</th> </tr> </thead> <tbody> <tr> <td>Incinerators</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Plasma Pyrolysis</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Autoclaves</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Microwave</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Hydroclave</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Shredder</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Needle tip cutter or – destroyer</td> <td></td> <td></td> <td>-----NA-----</td> </tr> <tr> <td>Sharps encapsulation or – concrete pit</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Deep burial pits:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Chemical - disinfection:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Any other treatment equipment:</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Type of treatment of Equipment	No of Unit	cap acit y	quantity treaedo r			S kg/ Day	disposed in kg Per Annum	Incinerators				Plasma Pyrolysis				Autoclaves				Microwave				Hydroclave				Shredder				Needle tip cutter or – destroyer			-----NA-----	Sharps encapsulation or – concrete pit				Deep burial pits:				Chemical - disinfection:				Any other treatment equipment:			
Type of treatment of Equipment	No of Unit	cap acit y	quantity treaedo r																																																				
		S kg/ Day	disposed in kg Per Annum																																																				
Incinerators																																																							
Plasma Pyrolysis																																																							
Autoclaves																																																							
Microwave																																																							
Hydroclave																																																							
Shredder																																																							
Needle tip cutter or – destroyer			-----NA-----																																																				
Sharps encapsulation or – concrete pit																																																							
Deep burial pits:																																																							
Chemical - disinfection:																																																							
Any other treatment equipment:																																																							
	iii Quantity of recyclable wastes : sold to authorized recyclers after treatment in kg per annum.	Red Category (like plastic, glass etc.																																																					
	iv) No of vehicles used for collection : and transportation of biomedical waste	Handled by CBMWTF																																																					
	(v) Details of incineration ash and Quantity Where ETP sludge generated and disposed generated disposed during the treatment of wastes in Kg per annum	<table border="1"> <thead> <tr> <th></th> <th>Quantity Generated</th> <th>Where disposal</th> </tr> </thead> <tbody> <tr> <td>Incineration Ash</td> <td></td> <td></td> </tr> <tr> <td>ETP Sludge</td> <td></td> <td></td> </tr> <tr> <td colspan="3">Handled by CBMWTF</td> </tr> </tbody> </table>			Quantity Generated	Where disposal	Incineration Ash			ETP Sludge			Handled by CBMWTF																																										
	Quantity Generated	Where disposal																																																					
Incineration Ash																																																							
ETP Sludge																																																							
Handled by CBMWTF																																																							

*Guthrie*

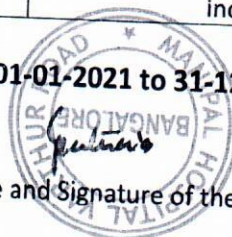
	(vi) Name of the Common Bio- : Medical Waste Treatment Facility Operator through which wastes are disposed of		Anu Auto Clave & Incine services
	(vii) List of member HCF not handed over bio-medical waste		NA
6	Do you have bio-medical waste management committee? If yes, attach minutes of the meetings held during the reporting period		Yes, we have infection control committee.
7.	Details trainings conducted on BMW		-
	(i) Number of trainings conducted on BMW Management.		Monthly 2 trainings
	(ii) number of personnel trained		200 Members
	(iii) number of personnel trained at the time of induction		For all department for new joiners, nurses, housekeeping we conduct training about BMW
	(iv) number of personnel not undergone any training so far		NA
	(v) whether standard manual for training is available		Yes available
	(vi) any other information		Nil
8	Details of the accident occurred during the yea		Nil
	(i) Number of Accidents occurred		Nil
	(ii) Number of the persons affected		Nil
	(iii) Remedial Action taken (Please attach details if any		NA
	(iv) Any Fatality occurred, details.		Nil
9	Are you meeting the standards of air Pollution from the incinerator? How many times in last year could not met the standards		---
	Details of Continuous online emission monitoring systems installed		NA
10	Liquid waste generated and treatment. Methods in place. How many times you have not met the standards in a year		LWTP is provided & well-functioning
11	Is the disinfection method or sterilization meeting the log 4 standards? How many times you have not met the standards in a year?		---
12	Any other relevant information		: (Air Pollution Control Devices attached with the incinerator NA

Certified that the above report is for the period from: **01-01-2021 to 31-12-2021**

Date: 24-01-2022

Place: Bengaluru

Name and Signature of the Head of the Institution





**Annexure-I**

**M/s. Manipal Hospital- Varthur Road,**

**MONTH WISE GENERATION OF BIO-MEDICAL WASTE FOR THE YEAR 2021**

**For the period from 01-01-2021 to 31-12-2021**

Month & Year	Cat.1,3,5 Yellow in Kg's	Cat.6 (Blue) in Kg's (Glass)	Cat.7 (Red) in Kg's	Cat.4 ( White-PPC) in Kg's
January-2021	1493.36	268.65	2270.36	63.74
February-2021	1554.42	196.89	2289.22	56.30
March-2021	1772.35	292.88	2721.37	52.58
April-2021	1526.89	193.86	2259.06	43.41
May-2021	1147.09	145.50	1779.80	18.63
June-2021	1427.70	217.07	2131.09	51.56
July-2021	1753.18	297.78	2579.03	50.75
August-2021	2049.58	345.97	2649.64	81.55
September-2021	1748.06	284.43	2681.78	64.13
October-2021	2221.20	352.36	3029.41	63.27
November-2021	1942.67	323.49	2972.40	64.33
December-2021	2256.10	410.10	3264.65	59.10
<b>TOTAL</b>	<b>20921 Kg's</b>	<b>3329 Kg's</b>	<b>30628 Kg's</b>	<b>669 Kg's</b>



Annexure-II

M/s. Manipal Hospital- Varthur Road,

Covid waste

MONTH WISE GENERATION OF BIO-MEDICAL WASTE FOR THE YEAR 2021

For the period from 01-01-2021 to 31-12-2021

Month & Year	Cat,1,3,5 Yellow in Kg's	Cat,6 (Blue) in Kg's (Glass)	Cat,7 (Red) in Kg's	Cat,4 ( White-PPC) in Kg's
January-2021	345.03	36.74	168.95	3.19
February-2021	315.02	31.20	120.08	5.22
March-2021	468.85	118.12	242.09	8.80
April-2021	1022.88	240.06	663.82	34.77
May-2021	1832.60	368.50	1544.72	60.24
June-2021	1145.69	139.17	539.94	29.48
July-2021	332.04	77.50	122.35	11.17
August-2021	341.47	34.01	177.46	3.43
September-2021	128.93	7.76	67.15	1.74
October-2021	137.14	26.28	48.22	1.55
November-2021	152.52	14.75	83.89	5.46
December-2021	181.11	44.12	96.16	8.67
<b>TOTAL</b>	<b>6403 Kg's</b>	<b>1138 Kg's</b>	<b>3875 Kg's</b>	<b>174 Kg's</b>

