



LettNo.MHB/BMW001/Form-IV/BMW-April/2021

27th April, 2021

To,

The Environmental Officer,
Karnataka State Pollution Control Board,
Bangalore-City East
"Nisarga Bhavan", 3rd Floor,
Timmaiah road, 7th D Cross, Opp Pushpanjali Theatre,
Shivanagar, Bangalore-560 010.

Dear Sir,

Reg Letter No: KSPCB/BCE/BMW-HCE/2021-22/75, dated 17th April 2021.

Sub: Submission of Biomedical Waste Annual Report for the year January 2020 to December 2020

With reference to the above letter and the subject, we are herewith submitting the Annual report in prescribed Form-IV for Biomedical Waste generated by M/s. Manipal Hospital, Bangalore for the period Jan 2020 to Dec 2020.

Kindly acknowledge the receipt of same.

Thanking you,

Manish Rai
Dr Manish Rai,
Hospital Director,
Manipal Hospital, Bangalore



Enclosures: 1. Annual report in Form-IV and Annexure

2. Accident Report in Form-I

RA
(CHA/BBB/ASMA)
ENVIRONMENTAL ENGINEER
Minutes of Biomedical Waste Management Committee Meeting

Manipal Hospital HAL Airport Road

#98, HAL Airport Road, Bengaluru 560017 P +91 80 4011 9000. +91 80 2502 3344/4444 www.manipalhospitals.com



For any medical emergency

☎ 2222 1111

Registered Office

Manipal Health Enterprises Pvt Ltd

The Annexe, #98/2, Rustom Bagh Road, Off HAL Airport Road, Bengaluru 560 017 P +91 80 4936 0300 www.manipalhospitals.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	Description
1	Particulars of the Occupier	Ms Manipal Hospitals, Bangalore
	(i) Name of the authorised person (occupier or operator of facility)	Dr Manish Rai, Hospital Director, Manipal Hospital, Bangalore
	(ii) Name of HCF or CBMWTF	Ms Manipal Hospitals, Bangalore
	(iii) Address for Correspondence	Manipal Hospital, Bangalore No 98, Rustom Bagh, HAL Airport Road, Bangalore – 560 017
	(iv) Address of Facility	Not Applicable
	(v) Tel. No, Fax. No	Tel No: +91 80 4011 9000 Fax No : +91 80 2526 6757
	(vi) E-mail ID	info@manipalhospitals.com
	(vii) URL of Website	https://www.manipalhospitals.com/oldairportroad/bio-medical-report/
	(viii) GPS coordinates of HCF or CBMWTF	--
	(ix) Ownership of HCF or CBMWTF (State Government or Private or Semi Govt. or any other)	Private
	(x). Status of Authorisation under the Bio-Medical Waste (Management and Handling) Rules	Authorisation No.: KSPCB/BMW/HCE/2018/Reg. No. 145590/H-277, Dated 14 th June 2018, Valid Up to: 30.06.2021
	(xi). Status of Consents under Water Act and Air Act	Consent No: AW-312819, Dated:24/05/2019 Valid up to: 30/06/2021
2	Type of Health Care Facility	Super Speciality Quaternary care hospital
	(i) Bedded Hospital	No. of Beds : 600
	(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	Authorisation No.: KSPCB/BMW/HCE/2018/Reg. No.145590/H-277 Dated: 14 th June 2018 Valid Up to: 30.06.2021



3	Details of CBMWTF	NA																				
	(i) Number healthcare facilities covered by CBMWTF	NA																				
	(ii) No of beds covered by CBMWTF	NA																				
	(iii) Installed treatment and disposal capacity of CBMWTF in Kg/day	NA																				
	(iv) Quantity of biomedical waste treated or disposed by CBMWTF in Kg/day	NA																				
4	Quantity of waste generated or disposed in Kg per annum (on monthly average basis)	Total	Covid	Non-Covid																		
		Yellow :13974.32 Kg	Yellow :3454.63 Kg	Yellow :10519.69 Kg																		
		Red : 15189.79Kg	Red :2363.86 Kg	Red : 12825.93 Kg																		
		White (Sharp Waste): 448.12 Kg	White (Sharp Waste): 66.91 Kg	White (Sharp Waste): 381.20 Kg																		
		White with blue colour marking : 2291.41 Kg	White with blue colour marking : 302.95 Kg	White with blue colour marking : 1988.46 Kg																		
5	(i) Details of the Storage, treatment, transportation, processing and Disposal Facility	Size -NA-																				
	(ii) Details of the on-site storage Facility disposal facilities	Capacity -NA-																				
		Provision of on-site storage : (cold storage or any other provision) - NA-																				
		<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 colspan="3" rowspan="6" style="text-align: center;">-NA-</td> </tr> <tr> <td>Plasma</td> </tr> <tr> <td>Pyrolysis</td> </tr> <tr> <td>Autoclaves</td> </tr> <tr> <td>Microwave</td> </tr> <tr> <td>Hydroclave</td> </tr> <tr> <td>Shredder</td> <td colspan="3" rowspan="2" style="text-align: center;">-NA-</td> </tr> <tr> <td>Needle tip</td> </tr> </tbody> </table>			Type of treatment equipment	No of units	Capacity Kg/day	Quantity Treated or disposed in kg per annum	Incinerators	-NA-			Plasma	Pyrolysis	Autoclaves	Microwave	Hydroclave	Shredder	-NA-			Needle tip
	Type of treatment equipment	No of units	Capacity Kg/day	Quantity Treated or disposed in kg per annum																		
Incinerators	-NA-																					
Plasma																						
Pyrolysis																						
Autoclaves																						
Microwave																						
Hydroclave																						
Shredder	-NA-																					
Needle tip																						

		<table border="1"> <tr><td>cutter or destroyer</td></tr> <tr><td>Sharps encapsulation or concrete pit</td></tr> <tr><td>Chemical disinfection</td></tr> <tr><td>Any other treatment equipment:</td></tr> </table>	cutter or destroyer	Sharps encapsulation or concrete pit	Chemical disinfection	Any other treatment equipment:					
cutter or destroyer											
Sharps encapsulation or concrete pit											
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.) -NA-									
	(iv) No of vehicles used for collection and transportation of biomedical waste	-NA-									
	(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</td> <td colspan="2" rowspan="3">-NA-</td> </tr> <tr> <td>Ash</td> </tr> <tr> <td>ETP Sludge</td> </tr> </tbody> </table>		Quantity generated	Where disposed	Incineration	-NA-		Ash	ETP Sludge	
	Quantity generated	Where disposed									
Incineration	-NA-										
Ash											
ETP Sludge											
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of	M/s. Anu Autoclave & Incin Services (w.e.f April 2018) CBWTF operator for the period January 2020 to December 2020									
	(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									
7	Details of trainings conducted on BMW										
	(i) Number of trainings conducted on BMW Management	36									
	(ii) number of personnel trained	Total: 3015									
	(iii) number of personnel trained at the time of induction	2576									
	(iv) number of personnel not undergone any training so far	--									
	(v) Whether standard manual for training is available?	Training through PPT									
	(vi) any other information	Nil									
8	Details of the accident occurred during										



	the year	
	(i) Number of Accidents occurred	
	(ii) Number of persons affected	Nil
	(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?	-NA-
	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?	Yes, the treated effluent is well within the limits and Hospital has always met with the required effluent standards.
11	Is the disinfection method or sterilization meeting the log 4 standards? How many times you have not met the standards in a year?	-NA-
12	Any other relevant information (Air Pollution Control Devices attached with the Incinerator)	-NA-

Certified that the above report is for the period from Jan 2020 to Dec 2020.

Date: 27.04.2021

Place: Bangalore

Dr Manish Rai

Hospital Director, Manipal Hospital, Bangalore

Name and Signature of the Head of Institution