



KMCH AC: ADMIN: 008:2020

18 February 2020

To,

The Environmental Officer,
Karnataka State Pollution Control Board,
Regional Office
Baikampady Industrial Area
Mangalore

Dear Sir,

Sub: Submission of Annual Report regarding handling of Bio Medical Waste.

With reference to the subject cited above, please find enclosed herewith triplicate of the Annual report for the period January 2019 to December 2019 for handling and disposing of Bio Medical Waste pertaining to this hospital Tower 1.

Please acknowledge the receipt of the above.

Thanks & Regards,

Regional Chief Operating Officer

Received
18/02/20
REGIONAL OFFICE
Karnataka State Pollution Control Board
Plot No.10-B, Baikampady Industrial Area
MANGALORE-575011

Regional Chief Operating Officer
KMC Hospital
Dr. B R Ambedkar Circle
MANGALURU - 575 001

KMC Hospital

Dr. B R Ambedkar Circle, Mangaluru 575 001 P + 91 824 2444 590 www.mangalore.manipalhospitals.com

Registered Office

Manipal Health Enterprises Pvt Ltd

The Annexe, #98/2, Rustom Bagh Road, Off HAL Airport Road, Bangalore 560 017 P +91 80 4936 0300 www.manipalhospitals.com
CIN : U85110KA2010PTC052540

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)]

#	Particulars		
1.	Particulars of the Occupier :	:	
	(i) Name of the authorized person (occupier or operator of facility)	:	Regional Chief Operating Officer
	(ii) Name of HCF or CBMWTF	:	Kasturba Medical College Hospital, Ambedkar Circle – Tower 1
	(iii) Address for Correspondence	:	KMC Hospital, Dr. B.R. Ambedkar Circle, Mangalore – 575001.
	(iv) Address of Facility	:	KMC Hospital, Dr. B.R. Ambedkar Circle, Mangalore – 575001.
	(v) Tel. No, Fax. No	:	0824-2444590 0824-2421140
	(vi) E-mail ID	:	info@kmchospitalsmangalore.com
	(vii) URL of Website	:	www.manipalhospitals.com
	(viii) GPS coordinates of HCF or CBMWTF	:	NA
	(ix) Ownership of HCF or CBMWTF	:	Private
	(x). Status of Authorization under the Bio-Medical Waste (Management and Handling) Rules	:	Authorization no. KSPCB/BMW/2017-18/Reg.No.147980/OB/437 .Valid up to-30.06.2021
	(xi). Status of Consents under Water Act and Air Act	:	Valid up to:01.07.2016 to 30.06.2021
2.	Type of Health Care Facility	:	Super Specialty
	(i) Bedded Hospital	:	No. of Beds: 240
	(ii) Non-bedded hospital	:	NA
	(Clinic or Blood Bank or Clinical Laboratory or Research Institute or Veterinary Hospital or any other)		

	(iii) License number and its date of expiry	:	DKA00356AAHP-3 rd Sept. 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 : Avg. 1521kgs / month		
		:	Yellow C Category : Avg. 0.111 kgs / month		
		:	Red Category: Avg. 3938kgs /month		
		:	White can: Avg. 186kgs /month		
		:	Blue Category: Avg. 1201 kgs /month		
		:	General Solid waste : Avg. 6819.917 kgs./ Month		
5.	Details of the Storage, treatment, transportation, processing and Disposal Facility				
	(i) Details of the on-site storage facility	:	Size : Width of the area 6ft, Height – 8.3ft, Length – 4ft.		
		:	Capacity : Total 1500kg for all waste		
		:	Provision of on-site storage : (cold storage or any other provision): NA		
	(ii) Details of the treatment or : disposal facilities	Type of treatment equipment	No. of units	Capacity Kg/day	Quantity treated or disposed in kg per annum
		Incinerators		NA	
		Plasma Pyrolysis		NA	
		Autoclaves		NA	
		Microwave		NA	
		Hydroclave		NA	
Shredder			NA		
Needle tip cutter or destroyer			NA		
Sharps encapsulation or			NA		

		concrete pit Deep burial pits: Chemical disinfection:		
		Any other treatment equipment	NA	
	(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	:	M/s. Ramky Energy & Environment Ltd.	
	(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 ETP Sludge	NA
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of	:	M/s. Ramky Energy & Environment Ltd.	
	(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 trainings conducted on BMW	:		
	(i) Number of trainings conducted on BMW Management	:	45	
	(ii) number of personnel trained	:	300	
	(iii) number of personnel trained at the time of induction	:	160	
	(iv) number of personnel not undergone any training so far	:	NA	
	(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	:	6	
	(ii) Number of the persons affected	:	NIL	
	(iii) Remedial Action taken (Please attach details if any)	:	NA	
	(iv) Any Fatality occurred, details.	:	NO	
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	:	
10.	Liquid waste generated and treatment Methods in place. How many times you have not met the standards in a year ?	:	NA
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
	Any other relevant information	:	(Air Pollution Control Devices attached with the Incinerator)NA

Certified that the above report is for the period from 01.01.2019 to 31.12.2019 is as per the records held at this hospital.

Date: 18/02/2020
Place: Mangaluru


Regional Chief Operating Officer
KMC Hospital
Dr. B R Ambedkar Circle
MANGALURU - 575 001



Manipal Integrated Services
Tower 1 - KMC Hospital - Ambedkar Circle, Mangalore

Data of Bio- Medical Waste for the year of 2019													
Month	Yellow in KG's	Average /day	Yellow C in KG's	Average /day	Red in KG'S	Average /day	Blue in KG'S	Average /day	Can in KG'S	Average /day	Total in KG's	Black in KG'S	Average /day
Jan	1992.6	64		0	4524	146	1641	53	267	9	8424.6	8224	265
Feb	1617	52		0	3955.7	128	1146	37	235.5	8	6954.2	7334	237
Mar	2157.5	70		0	4286	138	1573.5	51	280	9	8297	8917.5	288
Apr	1994.4	64		0	4360.5	141	1583	51	191	6	8128.9	8119	262
May	2015.5	65		0	4432.5	143	1422.5	46	285	9	8155.5	7770	251
Jun	1794.5	58		0	3991	129	1531.5	49	71	2	7388	6929.5	224
Jul	850.3	27		0	3061	99	507.5	16	249	8	4667.8	3702	119
Aug	775.5	25		0	3085	100	555	18	128	4	4543.5	4493	145
Sep	584.5	19	10.5	0.338709677	2958	95	428	14	112	4	4093	4257	137
Oct	1612.9	52	19.5	0.629032258	4358	141	1440.5	46	179	6	7609.9	7744	250
Nov	1467.8	47	11.5	0.370967742	4200	135	1288.5	42	68.5	2	7036.3	7556.5	244
Dec	1386	45	0	0	4044	130	1291.5	42	167	5	6888.5	6792.5	219
Total	18248.5	588.66129	41.5	1.338709677	47255.7	1524.3774	14408.5	464.79032	2233	72.0322581	82187.2	81839	2639.967742
Average/Month	1521		0.11155914		3938		1201		186		6845.475	5819.917	

Regional Chief Operating Officer
KMC Hospital
Dr. B R Ambedkar Circle
MANGALURU - 575 001



KMCH AC: ADMIN: 007: 2020

18 February 2020

To,

The Environmental Officer,
Karnataka State Pollution Control Board,
Regional Office
Baikampady Industrial Area
Mangalore

Dear Sir,

Sub: Submission of Annual Report regarding handling of Bio Medical Waste.

With reference to the subject cited above, please find enclosed herewith triplicate of the Annual report for the period January 2019 to December 2019 for handling and disposing of Bio Medical Waste pertaining to this hospital Tower 2.

Please acknowledge the receipt of the above.

Thanks & Regards,

Regional Chief Operating Officer

Regional Chief Operating Officer
KMC Hospital
Dr. B R Ambedkar Circle
MANGALURU - 575 001

REGIONAL OFFICE
Karnataka State Pollution Control Board
Plot No.10-B, Baikampady Industrial Area
MANGALORE-575011

KMC Hospital

Dr. B R Ambedkar Circle, Mangaluru 575 001 P + 91 824 2444 590 www.mangalore.manipalhospitals.com

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[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)]

#	Particulars		
1.	Particulars of the Occupier :	:	
	(i) Name of the authorized person (occupier or operator of facility)	:	Regional Chief Operating Officer
	(ii) Name of HCF or CBMWTF	:	Kasturba Medical College Hospital, Ambedkar Circle – Tower 2
	(iii) Address for Correspondence	:	KMC Hospital, Dr. B.R. Ambedkar Circle, Mangalore – 575001.
	(iv) Address of Facility	:	KMC Hospital, Dr. B.R. Ambedkar Circle, Mangalore – 575001.
	(v) Tel. No, Fax. No	:	0824-2444590 0824-2421140
	(vi) E-mail ID	:	info@kmchospitalsmangalore.com
	(vii) URL of Website	:	www.manipalhospitals.com
	(viii) GPS coordinates of HCF or CBMWTF	:	NA
	(ix) Ownership of HCF or CBMWTF	:	Private
	(x). Status of Authorization under the Bio-Medical Waste (Management and Handling) Rules	:	Authorization no. KSPCB/BMW/HCE/2016/Reg.No.119074 /OB/943 .Valid up to- 30.06.2021
	(xi). Status of Consents under Water Act and Air Act	:	Valid up to: 30.06.2021
2.	Type of Health Care Facility	:	Super Specialty
	(i) Bedded Hospital	:	No. of Beds: 200
	(ii) Non-bedded hospital	:	NA
	(Clinic or Blood Bank or Clinical Laboratory or Research Institute or Veterinary Hospital or any other)		
	(iii) License number and its date of expiry	:	DKA00356AAHP – 3 rd Sept. 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 : Avg. 1741kgs / month Yellow C Category: Avg. 55kgs./month Red Category: Avg. 1967kgs /month White can: Avg. 77kgs /month Blue Category: Avg. 806 kgs /month General Solid waste : Avg. 4729.55 kgs./ Month																																				
5.	Details of the Storage, treatment, transportation, processing and Disposal Facility																																						
	(i) Details of the on-site storage facility	:	Size : Width of the area 18.6ft, Height -8.6ft, Length – 5 ft. Capacity : Total 3000kg for all waste Provision of on-site storage : (cold storage or any other provision): Na																																				
	(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></td> <td>NA</td> <td></td> </tr> <tr> <td>Plasma Pyrolysis</td> <td></td> <td>NA</td> <td></td> </tr> <tr> <td>Autoclaves</td> <td></td> <td>NA</td> <td></td> </tr> <tr> <td>Microwave</td> <td></td> <td>NA</td> <td></td> </tr> <tr> <td>Hydroclave</td> <td></td> <td>NA</td> <td></td> </tr> <tr> <td>Shredder</td> <td></td> <td>NA</td> <td></td> </tr> <tr> <td>Needle tip cutter or destroyer</td> <td></td> <td>NA</td> <td></td> </tr> <tr> <td>Sharps encapsulation or concrete pit Deep burial pits:</td> <td></td> <td>NA</td> <td></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		NA		Autoclaves		NA		Microwave		NA		Hydroclave		NA		Shredder		NA		Needle tip cutter or destroyer		NA		Sharps encapsulation or concrete pit Deep burial pits:		NA	
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		Chemical disinfection:		
		Any other treatment equipment	NA	
	(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	:	M/s. Ramky Energy & Environment Ltd.	
	(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 ETP Sludge	NA
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of	:	M/s. Ramky Energy & Environment Ltd.	
	(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 trainings conducted on BMW	:		
	(i) Number of trainings conducted on BMW Management	:	30	
	(ii) number of personnel trained	:	250	
	(iii) number of personnel trained at the time of induction	:	250	
	(iv) number of personnel not undergone any training so far	:	NIL	
	(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	:	1	
	(ii) Number of the persons affected	:	NIL	
	(iii) Remedial Action taken (Please attach details if any)	:	NA	
	(iv) Any Fatality occurred, details.	:	NO	
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 ?	:	NA
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
	Any other relevant information	:	(Air Pollution Control Devices attached with the Incinerator)NA

Certified that the above report is for the period from 01.01.2019 to 31.12.2019 is as per the records held at this hospital.

Date: 18/02/2020
Place: Mangaluru


Regional Chief Operating Officer
KMC Hospital
Dr. B R Ambedkar Circle
MANGALURU - 575 001



Manipal Integrated Services
Tower II - KMC Hospital - Ambedkar Circle, Mangalore

Data of Bio-Medical Waste for the year of 2019

Month	Yellow in KG's	Average /day	Yellow C In KG's	Average /day	Red in KG'S	Average /day	Blue in KG'S	Average /day	Can in KG'S	Average /day	Total in KG's	Black in KG'S	Average /day
Jan	2256	73	22	2.3475546	2355.91	76	890	29	134.5	4	5636.41	4996	161
Feb	1621	52	25	1.6867846	1691.5	55	735	24	75.5	2	4123	4755	153
Mar	2036.8	66	91	2.1194589	2174.5	70	751.5	24	41	1	5003.8	5422	175
Apr	1517	49	111.5	1.578564	1770.5	57	531	17	21	1	3839.5	4393	142
May	1911	62	41	1.9885536	1913.5	62	636	21	60.5	2	4521	4855.5	157
Jun	1685.5	54	56	1.7539022	1993	64	720	23	99.5	3	4498	4704	152
Jul	1518	49	71	1.5796046	1872.9	60	879.5	28	60.5	2	4330.9	3933.5	127
Aug	1803.15	58	37.5	1.8763267	2102	68	896.5	29	96	3	4897.85	5205	168
Sep	1731.5	56	48.5	1.801769	2028	65	964.5	31	111.5	4	4835.5	5263.1	170
Oct	1553.5	50	60.5	1.6165453	1954	63	842	27	59	2	4408.5	4698	152
Nov	1869.1	60	50.5	1.9449532	2008.3	65	998	32	68.5	2	4943.9	4143.5	134
Dec	1386.8	45	40.1	1.4430801	1743.5	56	830.6	27	94.2	3	4055.1	4386	141
Total	20889.35	673.85	654.6	21.737097	23607.61	761.53561	9674.6	312.08387	921.7	29.732258	56093.26	56754.6	1830.7935
Average/Month	1741		55		1967		806		77		4591.105	4729.5	

Regional Chief Operating Officer
KMC Hospital
Dr. B R Ambedkar Circle
MANGALURU - 575 001