

21<sup>st</sup> January, 2022

To

The District Environmental Engineer,  
Tamil Nadu Pollution Control Board  
Kappalur  
Madurai – 8

Dear Sir,

Sub: Annual report for Bio medical waste -Reg

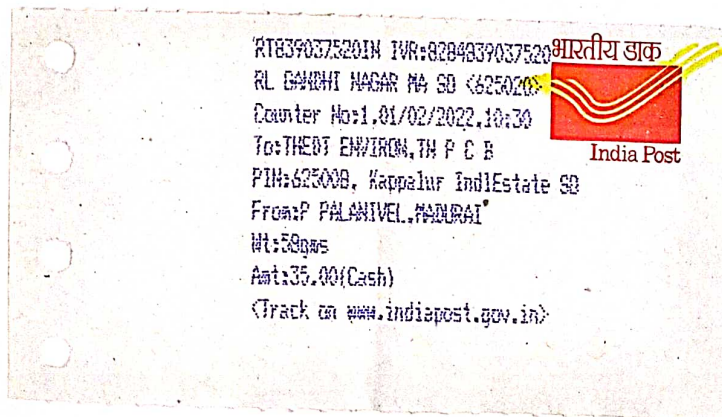
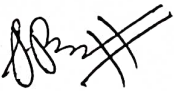
We here with furnish the Annual report for Bio medical waste for the year 2021 in Form IV as per BMW Rules-2016.

With warm regards,

for APOLLO SPECIALITY HOSPITALS – MADURAI,



**Dr. ROHINI SRIDHAR**  
Sr. Vice President – Medical Services



Apollo Speciality Hospitals, Lake View Road, K.K. Nagar, Madurai-625 020. Tele No. : (0452)2580892 - 94, 2581148 - 50  
Fax : 91-452-2580199, Email : [apollo\\_madurai@apollohospitals.com](mailto:apollo_madurai@apollohospitals.com) Emergency : (0452)2581111 / 1066

Registered Office : Apollo Hospitals Enterprise Limited, No. 19, Bishop Gardens, Raja Annamalaipuram, Chennai - 600 028.  
Corporate Identity Number (CIN) : L85110TN1979PLC008035



**From -IV  
(See rule 13)  
Annual Report**

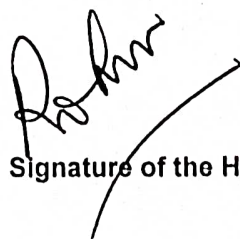
[To be submitted to the prescribed authority on or before 30<sup>th</sup> June every year for the period from January to December of the preceding year, by the Occupier of Health Care Facility (HCF) or common bio-medical waste treatment facility (CBWTF)]

Sl.No	Particulars																																																						
1.	Particulars of the Occupier	:																																																					
	(i) Name of the authorized person (occupier or operator of facility)	:	Dr. Rohini Sridhar, Sr. Vice President – Medical Services																																																				
	(ii) Name of HCF or CBMWTF	:	Apollo Speciality Hospitals, Madurai																																																				
	(iii) Address for Correspondence	:	Lake View Road K.K. Nagar, Madurai - 625020																																																				
	(i) Address of Facility	:	Lake View Road K.K. Nagar, Madurai - 625020																																																				
	(ii) Tel. No. Fax. No.	:	9842981211																																																				
	(V) E-mail ID	:	palanivel_p@apollohospitals.com																																																				
	(i) URL of Website	:	www.apollohospitals.com																																																				
	(ii) GPS coordinates of HCF of CBMWTF	:	----																																																				
	(iii) Ownership of HCF of CBMWTF	:	M/s. Ramky Energy and Environment Ltd																																																				
	(iv) Status of Authorization under the Bio-Medical Waste (Management and Handling) Rules.	:	AuthorizationNo.21BAC37251170 Dated 13/11/2021 Valid up to 31/03/2024																																																				
	(v) Status of Consents under Water Act and Air Act.	:	Air & Water consent Order No: 2105237293211 & 2105137293211 Valid up to: 31/03/2024																																																				
2.	Type of Health Care Facility	:	Speciality Hospitals																																																				
	(i) Bedded Hospital	:	No. of Beds: 250																																																				
	(ii) Non-Bedded Hospital (Clinic or Blood Bank or Clinical Laboratory or Research Institute or Veterinary Hospital or any other)	:	----																																																				
	(iii) License number and its date of expiry.	:	AuthorizationNo.21BAC37251170 Dated 13/11/2021 Valid up to 31/03/2024																																																				
3.	Details if CBMWTF	:	----																																																				
	(i) Number healthcare facilities covered by CBMWTF	:	----																																																				
	(ii) No. of beds covered by CBMWTF	:	----																																																				
	(iii) Installed treatment and disposal capacity of CBMWTF	:	----																																																				
	(iv) Quantity of biomedical waste treated or disposal by CBMWTF	:	----																																																				
4.	Quantity of waste generated or disposed in Kg per annum (on monthly average basis)	:	Yellow category: 1554.16 KG Red Category: 2129.08 KG White: 1250 KG (Puncture proof container) Blue Category: 224.83 KG General Solid Waste: ----																																																				
5.	Details of the Storage, treatment, transportation, processing and Disposal Facility	:																																																					
	(i) Details of the on-site storage facility	:	Size : 8.75 feet x 6.00 feet Capacity: 50 sqft x 4 Rooms																																																				
	(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 In Kg per Annum</th> </tr> </thead> <tbody> <tr> <td>Incinerators</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Plasma Paralysis</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></td> </tr> <tr> <td>Sharps</td> <td></td> <td></td> <td></td> </tr> <tr> <td>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 Equipment	No of Units	Capacity Kg/day	Quantity treated or disposed In Kg per Annum	Incinerators				Plasma Paralysis				Autoclaves				Microwave				Hydroclave				Shredder				Needle tip cutter or destroyer		---		Sharps				encapsulation or concrete pit		----		Deep Burial pits:				Chemical disinfection:		----		Any other treatment equipment:			
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	(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.	:	----
	(v) Details of incineration ash and ETP sludge generated and disposal during the treatment of wastes in Kg per annum)	:	----
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of	:	M/s. Ramky Energy and Environment Ltd.
	(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.	:	Yes Attached
7.	Detail trainings conducted on BMW		
	(i) Number of training conducted on BMW Management.		12
	(ii) Number of personnel trained		369
	(iii) Number of personnel trained at the time of induction		218
	(iv) Number of personnel not undergone any training so far.		----
	(v) Whether standard manual for training is available ?		Available
	(vi) Any other information)		----
8.	Details of the accident occurred during the year		Nil
	(i) Number of Accidents occurred		----
	(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?		----
	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.		We have 100 KLD STP
11.	It 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		----

Certified that the above report is for the period from January/2021 to December/2021



Name and Signature of the Head of the Institution

Date: 21/01/2022

Place: Madurai



**APOLLO SPECIALITY HOSPITALS, MADURAI**  
**BIOMEDICAL WASTE - 2021**  
**YEARLY STATEMENT**

MONTH	RED	YELLOW	White (SHARP)	BLUE	TOTAL
JANUARY	1942	1406	96	230	3674
FEBRUARY	1776	1329	88	218	3411
MARCH	2604	1502	106	226	4438
APRIL	1956	1372	95	193	3616
MAY	1765	1269	87	149	3270
JUNE	1778	1325	88	200	3391
JULY	2250	1626	98	242	4216
AUGUST	2329	1790	104	247	4470
SEPTEMBER	2362	1792	113	249	4516
OCTOBER	2339	1824	110	255	4528
NOVEMBER	2230	1706	109	249	4294
DECEMBER	2218	1709	109	240	4276
Total	25549	18650	1203	2698	48100
Per Month Avarage	2129.083333	1554.166667	100.25	224.8333333	4008.333333
Per Day Avarage	71	52	3	7	134

*n.46-*  
**G. SARANAM IYYAPPA**  
Sr. Executive - Housekeeping

*P. Palanivel*  
**P.PALANIVEL**  
General Manager - Engineering

*Dr. Rohini Sridhar*  
**Dr. ROHINI SRIDHAR**  
Sr. Vice President - Medical Services

Hospital name: Apollo Speciality Hospitals, Madurai

## MEETING MINUTES

Committee Name:	Infection Control Committee		
Date of Meeting:	25.02.2021	Time:	
Location:	Conference Hall	Start:	12.30 p.m.
Minutes Prepared By:	Kevin William – Quality	End:	01.30 p.m.
Presided by:	Dr. Senthur Nambi		

### 1. Attendance at Meeting (add rows as necessary)

Dr. Rohini Sridhar, COO	Dr. Vinothkumar, Pharmacy
Dr. Senthur Nambi, Infectious Diseases	Ms. Yamuna menon, Nursing Administrator
Dr. K. Praveen Rajan, ADMS	Ms. Joy, Nursing
Dr. Usha Rani, Lab Services	Mr. Anand, Pharmacy
Dr. Bennet, General Surgery	Ms. Emy, Infection Control
Dr. Ram Murugan, Microbiology	Ms. Suganthi, Infection Control
Dr. Meenalatha, ICU	Ms. Krishnaveni, Lab Services
Dr. Jude vinoth, Emergency consultant	Ms. Selvi, Housekeeping
Dr. Harikrishnan, Pulmonology	Dr. Kevin, Quality
Dr. Meenatchi, Microbiology	Critical care & Emergency, MOT-Incharge

### 2. Meeting Agenda

Infection Control Quality Indicators Review  
Microbiology Data Review  
Antibiotics Data Review

### 3. Previous meeting discussions/ follow ups (if any):



Hospital name: Apollo Speciality Hospitals, Madurai



**1. Action Items/ Decision tracker (add rows as necessary)**

Key Issues Discussed	Root Cause Identified	Agreed Action/ Decision	Assigned To/ Responsibility	Due Date	Follow up/ Status
Drug resistant index to be issued to consultant	To know by the consultant	To be circulated once in every 3 months to the consultants. To be displayed in OT, Emergency, ICU, DMO's room, common notice board	Mr. Ananth		
Urine sample	To know the reason for Mixed growth	Training to the staff	Nurse Educator		
Surgical site Infection form incision time and antibiotic timing not mentioned	To follow the incision timing SSI	To track appropriately	ALL consultant & nurses		Done
	To improve the analysis	Analysis of non-compliance moments	Ms. Emy & Ms. Suganthi		Done
Antibiotic drug chart and HEA Form to be followed circular to be given	To strengthen AMS	Policy – to be followed for all patients	Dr.praveen		
					Done
Unit specific anti biogram to be circulated	To know the specification				
Proper indication to be followed for central line insertion					
Antibiotic susceptibility pattern chart		To be circulated all the department	Mr.Ananth		

General comments (if any): nil

Signed by:

(Chairperson)

Hospital name: Apollo Speciality Hospitals, Madurai

## MEETING MINUTES

Committee Name:	Infection Control Committee		
Date of Meeting:	22.06.2021	Time:	
Location:	Conference Hall	Start:	12.30 p.m.
Minutes Prepared By:	Ramya - Quality	End:	01.30 p.m.
Presided by:	Dr. Rohini sridhar		

### 1. Attendance at Meeting (add rows as necessary)

Dr. Rohini Sridhar, COO  
 Dr. K. Praveen Rajan, ADMS  
 Dr. Usha Ram, Lab Services  
 Dr. Ram Murugan, Microbiology  
 Dr. Sridhar, senior cardiothoracic surgeon,  
 Dr. Rikesh, CT-Anesthetist  
 Dr. Sannath, cardiothoracic surgeon  
 Dr. Murugan jeyaraman, paediatrics  
 Dr. Harikrishnan, Pulmonology  
 Dr. Meenatchi, Microbiology  
 Dr. Vignothkumar, Pharmacy  
 Dr. Nikil thiwari  
 Ms. Yamuna menon, Nursing Administrator

Ms. Joy, Nursing  
 Mr. Anand, Pharmacy  
 Ms. Emy, Infection Control  
 Ms. Suganthi, Infection Control  
 Ms. Saranamiyyapa, Housekeeping  
 Mr. Marichamy, MOT-Incharge  
 Ms. Dheepa, CTOT-Incharge

### 2. Meeting Agenda

Infection Control Quality Indicators Review  
 Microbiology Data Review  
 Antibiotics Data Review

### 3. Previous meeting discussions/ follow ups (if any)



Hospital name: Apollo Speciality Hospitals, Madurai



**4. Action Items/ Decision tracker (add rows as necessary)**

Key Issues Discussed	Root Cause Identified	Agreed Action/ Decision	Assigned To/ Responsibility	Due Date	Follow up/ Status
Post operative patients education to be strengthened	To reduce the risk of SSI	Training to be given to post operative patient and attenders	Ms.Emy	w.i.e	
Strengthen the Bundle compliance	To reduce Blood stream infections	Training to be given to staff regarding central line management Do's& Don'ts	Ms.Emy	w.i.e	
To create awareness about Covid vaccination	To reduce the risk of covid 19		All concerned		
Correlate PCT and Culture in ICU cases	To track all the patient in sepsis with PCT and culture reports		ICU Consultants	20.7.2021	

General comments (if any):nil

Signed by:

(Chairperson)



Hospital name: Apollo Speciality Hospitals, Madurai



## MEETINGMINUTES

CommitteeName:	InfectionControl Commiltee		
DateofMeeting:	29.09.2021	Time:	
Location:	ConferenceHall	Start:	12.00p.m.
MinutesPreparedBy:	Ramya V-Quality Systems	End:	01.30p.m.
Presidedby:	Dr.Senthur Nambi		

### 1.AttendaceatMeeting(addrowsasnecessary)

1. Dr.K.PraveenRajan, JD
2. Dr. Nikhil Tiwari GM Ops
3. Dr. O R Kumaran Sr. Consultant General Medicine
4. Dr. Padma Prakash, Consultant ICU
5. Dr. Bennett Rajmohan Consultant General Surgery
6. Dr. Ravindran Consultant Anaesthesiology
7. Dr.Harikrishnan, Pulmonology
8. Dr. Meenatchi Asst Consultant Microbiology
9. Dr. Vinothkumar, Pharmacy
10. Ms.Joy, Assistant Nursing Superintendent
11. Mr.Anand, Clinical Pharmacist
12. Ms.Emy, Sr. Infection Control Nurse
13. Ms. Suganthi, Infection Control Nurse
14. Ms.Saranam Ayyapa, House keeping
15. Ms. Ramya V, Manager Quality

### 2.MeetingAgenda

#### Infection Control Quality Indicators Review

- Hospital Acquired Infection
- Hand Hygiene
- Bundle Compliance
- Needle Stick Injury
- Covid -19 Data & Vaccination

#### Microbiology Data Review

- Surveillance data
- Susceptibility Pattern
- Notifiable Diseases

#### Antibiotics Data Review

- Sensitive Pattern
- Surgical Prophylaxis

#### Review of Policy& Manual

Hospital name: Apollo Speciality Hospitals, Madurai

### 3. Previous Meeting Points

Nil

### 4. Action Items/Decision Tracker (add rows as necessary)

Key Issues Discussed	Root Cause Identified	Agreed Action/Decision	Assigned To/Responsibility	Due Date	Followup/Status
To reduce the risk of SSI	Post-Operative patient education.	To prepare Patient Education material in the form of a Pamphlet or a Short Video explaining about the Do's and Don't for such patients	Ms. Emy		
Urinary track infection	To reduce the UTI	To check the antibiotics used for the patients having UTI.	Ms. Emy & Ms. Suganthi		
VAP data	VAP data is nil from Jan to Aug 2021	To Revisit the COVID Patients (Culture & Antibiotic)	Ms. Emy & Ms. Suganthi		
Hand Hygiene compliance		To Analyze the data as follows : a) No. of Moments missed b) Compliance to each moment c) Area wise compliance d) Cadre wise compliance	Ms. Emy & Ms. Suganthi		
Bundle Compliance		To analyze the data as follows a) All the bundle compliance shall be analyzed separately b) Area wise	Ms. Emy & Ms. Suganthi		
Notifiable	Missed	To Include the	Ms. Jincy		



Hospital name: Apollo Speciality Hospitals, Madurai

disease	Mucormycosis in the list of notifiable disease	Mycor Mycosis in the Notifiable disease.	Thomas & Mr. Robin		
Infection Control Manual	NABH 5 <sup>th</sup> Edition	To update the manual as per the 5 <sup>th</sup> Edition of NABH Standards	Ms. Emy & Ms. Suganthi Ms. Ramya		
ECG Gel	Culture Growth is seen in Gel used for ECG & USG.	Brand has been changed for GEL (Arrow).	Mr. Anand Ms. Emy & Ms. Suganthi		

*Handwritten signature*

Hospital name: Apollo Speciality Hospitals, Madurai



### MINUTES OF THE MEETING

Committee Name:	Infection Control Committee		
Date of Meeting:	22.12.2021	Time:	
Location:	Conference Hall	Start:	12.00p.m.
Minutes Prepared By:	Ramya V-Quality Systems	End:	01.30p.m.
Presided by:	Dr.Senthurnambi		

#### 1.Attendance at Meeting(add rows as necessary)

1. Dr.K.Praveen Rajan, JD	Present
2. Dr. Nikhil Tiwari GM Ops	Present
3. Dr. Sridhar V Sr. Consultant CTVS	Present
4. Dr. Rikesh, Consultant Anesthesiology	Present
5. Dr. Ram Murugan Consultant Microbiology	Present
6. Ms.Joy, Assistant Nursing Superintendent	
7. Mr.Anand, Clinical Pharmacist	
8. Ms.Emy, Sr. Infection Control Nurse	
9. Ms. Suganthi, Infection Control Nurse	
10. Ms.SaranamAyyapa, Housekeeping	
11. Ms. Ramya V, Manager Quality	

#### 2.MeetingAgenda

##### Infection Control Quality Indicators Review

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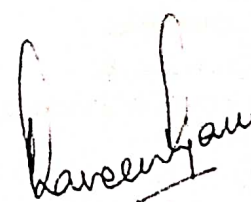
Hospital name: Apollo Speciality Hospitals, Madurai

### 3. Previous Meeting Points

NII

### 4. Action Items/Decision tracker (add rows as necessary)

Key Issues Discussed	Root Cause Identified	Agreed Action/Decision	Assigned To/Responsibility	Due Date	Follow up/Status
Bundle Compliance		Compliance and Deviation need to be specified for all the bundles.	Ms. Emy & Ms. Suganthi		
Drug pattern		Drug Sensitivity Pattern to microbes need to be Shared with the Consultants (mail/What app)	Mr. Ananth		
Covid status with regards to Employees (Post Infection/ Vaccination Status)		To Include the data on staff vaccination and positive swab reported Staffs to Covid - 19 in the presentation.	Ms. Emy & Ms. Suganthi		



**Dr. K. PRAVEEN RAJAN**  
M.B.B.S., PGDHM., FCD., MBA., PGDMLE  
Joint Director of Medical Services  
Apollo Speciality Hospitals  
Lake View Road, K.K. Nagar, MADURAI-20