

Date : 28.02.2020

To

The District Environmental Engineer,
Tamil Nadu Pollution Control Board
No.25, SIDCO Industrial Estate,
Thuvakudy, Trichy – 620015.

Sir,

Sub : Annual report for Bio Medical Waste – Reg

With subject to the above we have furnished herewith the **Annual Report for Bio Medical Waste for the year of 2019 in Form IV** as per BMW Rules - 2016

Thanking You,

For APOLLO SPECIALITY HOSPITALS – TRICHY



Dr. ROHINI SRIVIDHAR
Chief Operating Officer

Encl: 1. Form – IV
2. BMW Management Committee Meeting Minutes



Apollo Speciality Hospitals, Chennai By-pass Road, Ariyamangalam, Old Palpannai, Trichy - 620 010.
Ph : 0431 - 330 77 77 / 220 77 77 Website : www.apollohospitals.com

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



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).

	Particulars	
1	Particulars of the Occupier	
	(i) Name of the authorised person (occupier or operator of facility)	Dr. ROHINI SRIDHAR, Chief Operating Officer
	(ii) Name of HCF	Apollo Speciality Hospitals
	(iii) Address for Correspondence	Chennai Bye pas road, Ariyamangalam, Old Palpannai, Trichy - 620010
	(iv) Address of Facility	Chennai Bye pas road, Ariyamangalam, Old Palpannai, Trichy - 620010
	(v) Tel. No. Fax. No	0431 – 6607777, 2207777
	(vi) E-mail ID	Palanivel_p@apollohospitals.com
	(vii) URL of website	www.apollohospitals.com
	(viii) GPS coordinates of HCF	----
	(ix) Ownership of HCF	----
	(x) Status of Authorisation under the Bio-Medical waste (Management and Handling) Rules	Authorization : 19BAZ19361411 Valid upto : 31.03.2020
	(xi) Status of Consents under Water Act and Air Act	Air – Cosent Order No : 160826497959 Valid upto : 31.03.2020 Water – Consent Order No : 160816497959 Valid upto : 31.03.2020
2	Type of Health Care Facility	Speciality Hospital
	(i) Bedded Hospital	200
	(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	Registration No : 8035 of 1979
3	Details of 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 disposed by CBMWTF	----
4	Quantity of waste generated or disposed in Kg per annum (on monthly average basis)	Red – 10036.5 Kg Yellow – 8484 Kg Sharp – 272.2 Kg Blue – 1078.8 Kg Black - 0

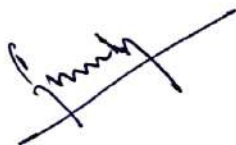
5	Details of the storage, treatment, transportation, processing and Disposal Facility				
	(I) Details of the on-site storage facility	Size : 1) 9.10ft x 4.9 ft 2) 9.10ft x 4.9 ft 3) 9.10ft x 4.9 ft 4) 9.10ft x 4.9 ft 5) 9.10ft x 4.9 ft			
	(ii) Disposal facilities	Type of treatment equipment	No of units	Capacity Kg/day	Quantity treated or disposed in kg per annum
		Incinerators Plasma Pyrolysis Autoclaves Microwave Hydroclave Shredder Needle tip cutter or destroyer 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.				
	(iv) No of vehicles used for collection and transportation of biomedical waste				
	(v) Details of incineration ash and ETP sludge generated and disposed during the treatment of wastes in Kg per annum	Description	Quantity Generated	Where Disposed	
		Incineration			
		Ash			
		ETP Sludge			
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of				
	(vii) List of member HCF not handed over bio-medical waste.				
6	Do you have bio-medical waste Management committee? If yes,	Yes			

	attach minutes of the meetings held during the reporting period	
7	Details trainings conducted on BMW	
	(i) Number of trainings conducted on BMW Management.	24
	(ii) number of personnel trained	254
	(iii) number of personnel trained at the time of induction	105
	(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	
	(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 150 KLD STP
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	----


Certified that the above report is for the period from: 01.01.2019 to 31.12.2019

Date : 28.02.2020

Place : Trichy



APOLLO SPECIALTY HOSPITALS, TRICHY					
BIO MEDICAL WASTE-2019					
YEARLY STATEMENT					
MONTH	RED	YELLOW	WHITE(sharp)	BLUE	TOTAL
January	912.8	729.8	18.8	96.3	1757.7
February	821.9	650	25.7	84	1581.6
March	918.1	678	27.2	121.5	1744.8
April	765.6	586.5	23	82.7	1457
May	847.9	634.3	19.4	86.9	1588.5
June	751	609.8	18	79.5	1458
July	869	716.4	22.7	77.8	16853.9
August	825.2	715.5	24.4	83.2	1648.3
September	808.5	775.5	22.4	92.6	1699
October	850.3	782	21.4	105.4	1759.8
November	885.2	871.1	22.9	98.8	1878
December	781	735.1	26.3	70.1	1612.8
TOTAL	10036.5	8484	272.2	1078.8	19871.7
PER MONTH AVERAGE	871.1	1736	18.6	108.5	2734.2
PER DAY AVERAGE	28.1	56	0.6	3.5	88.2


M. Gunasekaran
HK-HOD



APOLLO SPECIALITY HOSPITALS, TRICHY-10



HIC Committee Minutes for the Month of March 2019

Date: 13.03.2019

Venue: Conference hall

Agenda:

- Statistics
- Nursing practice
- Infection control activity
- Training Programme
- Antibiotic sensitivity pattern
- MRSA and MDR organisms isolated
- Environmental surveillance
- Hand hygiene Audit
- Antibiotic consumption (Surgical Prophylaxis)
- Notifiable diseases
- CSSD

ATTENDANCE

S.NO	NAME	DESIGNATION	ATTENDANCE
1.	Dr.S.Senthilkumar	Hospital Administrator &ADMS	Present
2.	Dr.V.Ramasubramanian	Consultant ID Physician	Present
3.	Dr.V.A.Sivam	Medical Admin / ICO	Present
4.	Dr.Diego Edwin	Consultant Microbiologist	Present
5.	Ms. Krishnaveni.S	Infection control Nursing officer	Present
6.	Dr.MD.Mansoor	General surgeon	Present
7.	Dr.K.Kumar	ICU Consultant	Present
8.	Dr.Annamalai periyana	Consultant Emergency	Present
9.	Dr.K.Balasubramanian	Consultant Orthopedic	Present
10.	Dr.Gopinath	Consultant Medicine	Present
11.	Dr.R.Vidhun	Consultant Plastic Surgery	Present
12.	Dr.Venkatadevanathan	Consultant CTVS	Absent
13.	Dr.Arungeethayan	Consultant Orthopedic	Absent
14.	Ms.Leborin Viji	Nursing Superintendent	Present
15.	Mr.R.Sangeeth	Sr.Manager - Operations	Present
16.	Mr.R.Jegadesh	Clinical Pharmacist	Present
17.	Ms.D.Chitradevi	Charge Nurse	Present
18.	Mr.Gunasekaran	HOD - Engineering	Present
19.	Ms.KokilaRani	Dietician	Present
20.	Ms.Nivetha	Quality Executive	Present
21.	Ms.K.Gandhimathi	Nursing officer	Present

**1. Past Meeting Minutes:**

S No	Points Discussed & Person Discussed	Reason for discussion	Designated Department (HOD)	Current Status
1	Second line Infection Control Nurse – Dr.V.Ramasubramanian	To strengthen the department	HR / NS / ICN	Staff Ms.Suguna Jeyakumari is identified and started training
2	Culture for all IV Antibiotics needs to be monitored	To reinforce the antimicrobial stewardship	Clinical pharmacist / ICN	Completed
3	Antibiotic utilization details to be presented in graphical state – Dr.V.Ramasubramanian	To strengthen the department	Clinical pharmacist	Completed
4	Patient cot to recovery room moving needs to be minimized, confirm the wheels are disinfected before shifting-HIC Team	To avoid the cross contamination	OT team	It's under control but needs continuous monitoring
5	Plan for the month from February to entire year is targeting on MDRO's will be focussed – HIC team	Feb month plan is Housekeeping - cleaning efficacy assessment, education, engagement activities	HIC team	Four training sessions conducted
6	Endotoxins level has to be mentioned in the presentation	For the Surveillance report presentation	Infection Control Officer	Rectified
7	The practice of sending for culture before start of high end antibiotics needs to be reinforced – Dr.V.Ramasubramanian	For Antimicrobial stewardship	Clinical pharmacist	Presented in this meeting



APOLLO SPECIALITY HOSPITALS, TRICHY-10



8	High end antibiotics de-escalation needs to be enhanced - Dr.V.Ramasubramanian	For Antimicrobial stewardship	Clinical pharmacist	Presented in this meeting
9	Adequate culture sample needs to be measured by weighing the blood culture bottle - Dr.V.Ramasubramanian	For the accuracy of reporting the blood culture	Infection Control Officer	Process started

2. Hospital acquired Infections

Jan'19	No. of cases	Feb'19	No. of cases
VAP	NIL	VAP	NIL
CLABSI	NIL	CLABSI	NIL
CAUTI	NIL	CAUTI	NIL
SSI	1(0.9)	SSI	NIL
NSI/ Body Fluid Exposure	NIL	NSI / Body Fluid Exposure	NIL

3. Nursing practices

HAND HYGIENE Jan -2019	CATEGORY	CORRECT MOMENTS / TOTAL MOMENTS	PERCENTAGE
	DOCTOR'S	353 / 457	77.24%
	NURSES	388 / 501	77.44%
	ALLIED	87 / 103	84.46%
	ANCILLARY	189/284	66.54%

4. Nursing practices

HAND HYGIENE Feb -2019	CATEGORY	CORRECT MOMENTS / TOTAL MOMENTS	PERCENTAGE
	DOCTOR'S	380/465	81.72%
	NURSES	462 / 520	88.80%
	ALLIED	134 / 145	92.41%
	ANCILLARY	163/213	76.52%



APOLLO SPECIALITY HOSPITALS, TRICHY-10



5. Infection control activity

Month	Jan'19	Feb'19
No. of staff vaccinated	Inj.Hepatitis B - 5	Inj.Hepatitis B - 7
Needle stick Injury / Body Fluid Exposure	0 / 0	0 / 0

6. Training programme:

DATE	TOPIC	Speaker	CATEGORY	NO.OF STAFF ATTENDED
03.01.2019	Hospital Acquired Pressure ulcer	Mr.Johnson Arjo Huntleigh	Nursing	22
07.01.2019	Induction	Ms.Krishnaveni	All category staff	16
11.01.2019	Microbiology Sample Collection	Dr.Diego Edwin	Nursing	8
17.01.2019	Infection Control practices	Ms. Krishnaveni.S	Nursing	18
18.01.2019	Infection Control practices – Hand Hygiene	Ms. Krishnaveni.S	Nursing	24
29.01.2019	Best Practices in IV therapy	Mr.Seeni Farrok (BD company)	Nursing	16
01.02.2019	Blood Bank protocol	Ms.Menaka	Nursing	19
05.02.2019	Tracheostomy & Suctioning	Ms.Krishnaveni	Nursing	17
08.02.2019	Cleaning & Disinfection	Ms.Krishnaveni	House keeping	10
12.02.2019	Bio Medical Waste Management - Activity	Ms.Krishnaveni	House keeping	17
21.02.2019	Infection Control in Hospital	Dr.Diego Edwin-microbiologist	Housekeeping & Engineering	17
21.02.2019	Isolation Policy	Dr.Ramasubramanian,ID Consultant	Nursing	29
28.02.2019	Culture Sampling & Infection Control practices	Dr.Ramasubramanian,ID Consultant	Nursing	25
28.02.2019	Stress Management	Mr.Santhosh –Marketing	House keeping	24

7. Antibiotic sensitivity pattern - Copy enclosed

8. MRSA & resistant organism isolated - Copy enclosed



9. Environmental surveillance - Copy enclosed

10. Clinical Pharmacy - Copy enclosed

- ↓ Days of therapy for antibiotics
- ↓ Creatinine clearance Audit (under/over Dose suggestion details)
- ↓ Culture and sensitivity details
- ↓ Spectrum of antibiotic
- ↓ Drug safety alert as per PVPI guidelines
- ↓ Antibiotic Utilization details

• Antibiotic Consumption-IP: Surgical Prophylaxis

	Jan'19	Feb'19
INTERVALS BETWEEN THE ANTIBIOTIC STARTED TIME AND INCISION TIME IN PERCENTAGE	100%	100%
COMPLIANCE WITH THE FIRST CHOICE OF ANTIBIOTICS IN PERCENTAGE	100%	99%

10. Notifiable disease

S.NO	NAME OF THE DISEASE	Jan'19	Feb'19
1.	PUO	10	10
2.	Meningitis	1	-
3.	Acute gastro Enteritis	1	3
4.	Hepatitis B	4	4
5.	Tuberculosis	-	1
6.	Hepatitis C	1	1
7.	Dengue	4	1
8.	Typhoid Fever	2	-
9.	Swine Flu	2	-
10.	Chicken pox	-	2



11. CSSD

- Recall procedure - NIL
- Re autoclaving - Yes it was done for routine expired trays (30 days)

12. Present Meeting discussions:

S No	Points Raised & Person raising	Reason for discussion	Designated Person	EDC
1	Product change has to be notified to the infection control team - ICT	As per policy	Materials Manager	Immediately
2	Surgical prophylaxis for ortho surgery Inj. Cefazolin is approved – Dr. Balasubramanian	Antimicrobial Stewardship	ICN / Clinical Pharmacist	Immediately

General comments (if any):

Signed by:

(Chairperson)

Hospital name: Apollo Speciality Hospitals



MEETING MINUTES

Committee Name	Hospital Infection Control Committee Meeting		
Date of Meeting: (DD/MM/YYYY)	12.11.19	Time: 12noon	
Location:	Conference Hall	Start:	12.15pm
Minutes Prepared By:	Ms.Krishnaveni.S	End:	1.30pm
Presided by:	Dr.S.Senthilkumar		

1. Attendance at Meeting: (add name and signature)

Hospital name: Apollo Speciality Hospitals

S.NO	NAME	DESIGNATION	ATTENDENCE
1.	Dr.S.Senthilkumar	Hospital Administrator &ADMS	Present
2.	Dr.V.Ramasubramanian	Consultant ID Physician	Present
3.	Dr.V.A.Sivam	Medical Admin / ICO	Present
4.	Dr.Diego Edwin	Consultant Microbiologist	Present
5.	Ms. Krishnaveni.S	Infection control Nursing officer	Present
6.	Dr.MD.Mansoor	General surgeon	Present
7.	Dr.Alagappan	Urologist	Present
8.	Dr.S.Karthik.V.S.	Consultant Anaesthesiology	Present
9.	Mr.R.Sangeeth	Sr.Manager - Operations	Absent
10.	Mr.Krishnakumar	Pharmacy HOD	Present
11.	Mr.R.Jegadesh	Clinical Pharmacist	Present
12.	Ms.Dhanushri	Dietician	Present
13.	Ms.Sophia	Quality Executive	Absent
14.	Ms.Kanimozhi	Operation theatre	Absent
15.	Ms.K.Gandhimathi	Charge Nurse	Absent
16.	Ms.Leborin	Nursing Superintendent	Present
17.	Dr.Umavelmurugan	Gynaecologist	Present
18.	Dr.Minu	ICU-DMO	Present
19.	Mr.Mathivanan	F & B Manager	Present
20.	Mr.Saravanan	Engineering	Present
21.	Ms.Vetriselvi	HouseKeeping	Present
22.	Dr.Mahendravarman	Nephrologist	Present
23.	Dr.Vijayamoorthy	Medicine	Present
24.	Dr.Balasubramanian	Ortho surgeon	Present
25.	Dr.Sethuraman	Medicine	Present
26.			

Hospital name: Apollo Speciality Hospitals

AP

Action Item / Decision Tracker					
Key Issues	Identified	Discussion	Responsibility	Timeline	Remarks
Revisiting SSI prevention	Head ring gel pillow was used in OT 2 and OT 3 was growing MRSA	It has to be replaced with new one since it is damaged and has fissures and pilling on it	Mr.Ravi - materials/Ms. Krishnaveni.S - ICNO	1 month	To take for opinion.
Using cell phones inside the OT	Cell phones were used to take photos	To explore the possibility of a camera in OT. Urgent calls will be manned by circulating nurse away from the field of surgery	Mr.Sangeeth - DGM Operations / Ms.Krishnaveni.S - ICNO / Ms.Kanmozhi - OT Incharge	1 month	
Wearing scrub suits outside the OT	Few of the surgeon conducted ward rounds in scrubs	All surgeons are discouraged to wear scrubs outside the theater. In the event of an emergency requiring their presence outside the OT, they have to change the scrubs before reentering the OT.	All Surgeons	Immediately	
Antibiotic policy to ER	Antimicrobial stewardship initiative	Antibiotic initiation for patients coming to the hospital emergency department, will be decided by the emergency consultant unless the patient is specifically referred to a hospital consultant	Dr.Annamalai - Consultant Emergency	Immediately	

Hospital name: Apollo Speciality Hospitals

Antibiotic App	Antimicrobial stewardship initiative		Dr.V.Ramasubramanian - ID consultant	1 month	
Viral markers for low risk procedures	Query raised by ortho surgeon	ID consultant will send a letter to administration to justify tiered system for BBV screening	Dr.V.Ramasubramanian - ID consultant	1 month	
Ultrasonic cleaner in OT	Not used by OT staff	The machine will be moved to CSSD and cleaning will be done for specified instruments	Dr. V. Ramasubramanian / Ms.Krishnaveni.S - ICNO	Immediately	
Cultures before IV Antibiotics	Query raised by the infection control team	Guidelines and indication on drawing culture before administration of therapeutic and broad spectrum parenteral antibiotic were discussed	Mr.Jegadesh - Clinical pharmacist	Immediately	
Card test method for notifiable diseases	Query raised by Dr.Diego	Dr.Diego mentioned that the diagnosis of Dengue by the card method from outside labs should not be notified to the corporation	Infection control team	Immediately	
Use of newer antibiotics (Zavicefta)	Query raised by Dr.Bharani ICU Consultant	Choice of patient can be decided only by carba R test, currently unavailable. To try to get e strips from the company	Dr. V. Ramasubramanian		
Duration of therapy for pneumonia	Query raised by Dr.Bharani ICU Consultant	5-7 days for CAP; For HAP 7-10days	Dr. V. Ramasubramanian		

Hospital name: Apollo Speciality Hospitals

27.	Dr.Annamall	ER consultant	Present
28.	Dr.Tamilarasan	Pulmo	Present
29.	Dr.Nandakumar	Urologist	Present
30.	Dr.Gobinath	Medicine	Present
31.	Mr.Balamurugan	ER charge nurse	Present
32.	Dr.Baranidaran	ICU consultant	Present
33.	Dr.Thilagavathy	Gynaecologist	Present
34.	Ms.Suguna Jeyakumari	ICN	Present

2. Meeting Agenda

- Statistics
- Nursing practice
- Infection control activity
- Training Programme
- Antibiotic sensitivity pattern
- MRSA and MDR organisms isolated
- Environmental surveillance
- Hand hygiene Audit
- Antibiotic consumption (Surgical Prophylaxis)
- High end antibiotic utilization
- Culture Vs Antibiotics
- Notifiable diseases
- CSSD

Hospital name: Apollo Speciality Hospitals

1. Provide a brief summary of the meeting (Date, Time, Location, etc.)				
S N o	Points Discussed & Person Discussed	Reason for discussion	Designated Department (HOD)	Current Status
1	Chickenpox vaccine for the staff	Employee safety	HR /ICN	Started giving to the staff
2	Antibiotic policy revised	Antimicrobial stewardship	ID physician / Microbiologist / ICN	Antibiotic handbook will be printed and will be circulated to all consultant



Hospital name: Apollo Speciality Hospitals

Dialysis Infection control- revisit	Updation with European Society Guidelines	ID Consultant will prepare the new guidelines	Dr.V.Ramasubramanian - ID consultant	1 month	
-------------------------------------	---	---	--------------------------------------	---------	--

General comments (if any):

Signed by:

(Chairperson)

BMW FORM-IV - 2019

आर.पी.54
R.P.-54

भारतीय डाक विभाग
DEPARTMENT OF POSTS, INDIA
प्राप्ति स्वीकृति / ACKNOWLEDGEMENT

अनावश्यक को काट दिया जाए
Strike out if not relevant

रजिस्ट्री-पत्र / पार्सल प्राप्त हुआ

Received Registered Letter/Parcel

क्रमांक/ No.

तारीख/ Dated

का/ of

* बीमे का मूल्य रुपये में

* Insured for Rupees

पाने वाले

Addressed to

THE DISTRICT ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD

को/On NO. 25, SIDCO INDUSTRIAL ESTATE

THUVAKUDY, TRICHY - 620 015

वितरण अधिकार की तारीख/माहर
Date Stamp of office of delivery

हस्ताक्षर और नाम / Signature and Name

25. 11.