

To
The Environmental Engineer,
Punjab Pollution Control Board,
Plot 55, Phase 2,
S.A.S. Nagar, Mohali

Subject: Submission of Annual Bio-Medical Waste Report FY 2017(1st Jan 2017 to 31st Dec 2017)

Dear Sir,

Please find enclosed Annual Bio- Medical Waste Report for the year 2017 with below mentioned enclosures:

1. Annual Report Form IV
2. Accident Reporting Form 1
3. Specification for maintenance of BMW waste record month wise for the year 2017

With Best Regards,


Authorized Signatory

Fortis Healthcare Ltd, Mohali



A UNIT OF FORTIS HEALTHCARE LIMITED

Regd. Office : Fortis Hospital, Sector 62, Phase - VIII, Mohali - 160062
CIN No. : LB5110DL1996PLC076704

 **Fortis SPECIALITY** Hospital

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		
1.	Particulars of the Occupier	:	
	(i) Name of the authorised person (occupier or operator of facility)	:	Mr. Abhijit Singh
	(ii) Name of HCF or CBMWTF	:	FORTIS HEALTHCARE LTD
	(iii) Address for Correspondence	:	FORTIS HEALTHCARE LTD, C/O
	(iv) Address of Facility	:	FORTIS HOSPITAL, SEC-62, PH-VIII, MOHALI
	(v) Tel. No, Fax. No	:	0172-4692222
	(vi) E-mail ID	:	abhijit.singh@fortishealthcare.com
	(vii) URL of Website	:	www.fortishealthcare.com
	(viii) GPS coordinates of HCF or CBMWTF	:	NL-30.413832 EL-76.434924
	(ix) Ownership of HCF or CBMWTF	:	(State Government or Private or Semi Govt. or any other)
	(x). Status of Authorisation under the Bio-Medical Waste (Management and Handling) Rules	:	Authorisation No.: Z.D.-I/S.A.S.NAGAR/BMW/2014-17/ V-14.....valid up to 31.03.2018
	(xi). Status of Consents under Water Act and Air Act	:	Valid up to: WATER CONSENT 31-03-2018 AIR CONSENT 31-03-2018
2.	Type of Health Care Facility	:	HOSPITAL
	(i) Bedded Hospital	:	No. of Beds:.....360
	(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	:	- NA -
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:	:	- NA Kg per day

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(iv) Quantity of biomedical waste treated or disposed by CBMWTF	NIL Kg/day																																						
4. Quantity of waste generated or disposed in Kg per annum (on monthly average basis)	Yellow Category : 5941.03 Kg/mth (Avg) App Red Category : 7932.22 Kg/mth (Avg) App White: 509.958 Kg/mth (Avg) -do Blue Category : 2217.617 Kg/mth (Avg) -do General Solid waste: 912 Kg/day or 2774 Kg/mth (App) (Kitchen & Glw)																																						
5. Details of the Storage, treatment, transportation, processing and Disposal Facility																																							
(i) Details of the on-site storage facility	Size : 450-550 S-ft. Capacity : 750 Kg/day Provision of on-site storage (cold storage or any other provision)																																						
(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></td> <td rowspan="10"> </td> </tr> <tr> <td>Plasma Pyrolysis</td> <td></td> <td></td> </tr> <tr> <td>Autoclaves</td> <td></td> <td></td> </tr> <tr> <td>Microwave</td> <td></td> <td></td> </tr> <tr> <td>Hydroclave</td> <td></td> <td></td> </tr> <tr> <td>Shredder</td> <td></td> <td></td> </tr> <tr> <td>Needle tip cutter or destroyer</td> <td></td> <td></td> </tr> <tr> <td>Sharps encapsulation or concrete pit</td> <td></td> <td>N.A</td> </tr> <tr> <td>Deep burial pits:</td> <td></td> <td></td> </tr> <tr> <td>Chemical disinfection:</td> <td></td> <td></td> </tr> <tr> <td>Any other treatment equipment:</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 Pyrolysis			Autoclaves			Microwave			Hydroclave			Shredder			Needle tip cutter or destroyer			Sharps encapsulation or concrete pit		N.A	Deep burial pits:			Chemical disinfection:			Any other treatment equipment:		
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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	<table border="1"> <thead> <tr> <th>Quantity generated</th> <th>Where disposed</th> </tr> </thead> <tbody> <tr> <td>-</td> <td>-</td> </tr> </tbody> </table>	Quantity generated	Where disposed	-	-																																		
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	during the treatment of wastes in Kg per annum	Incineration Ash ETP Sludge
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of	M/S RAINBOW ENVIRONMENTS PVT. LTD. VILLAGE BALLYALI KALAN, TEHSIL KHARAR DISTT. MOHALI
	(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 (Minutes of meeting Attached)
7	Details trainings conducted on BMW	Attached
	(i) Number of trainings conducted on BMW Management.	56
	(ii) number of personnel trained	3484
	(iii) number of personnel trained at the time of induction	1277
	(iv) number of personnel not undergone any training so far	NIL
	(v) whether standard manual for training is available?	Yes
	(vi) any other information)	- NA -
8	Details of the accident occurred during the year	Major nil
	(i) Number of Accidents occurred	Needlestich injury (63)
	(ii) Number of the persons affected	63 (Internal benchmark)
	(iii) Remedial Action taken (Please attach details if any)	Vaccination / Trainings done
	(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?	Air Stack Emissions as well Indoor air quality maintained at facility (AQM)
	Details of Continuous online emission monitoring systems installed	NO -
10	Liquid waste generated and treatment methods in place. How many times you have not met the standards in a year?	Liquid waste standards Yes - As per standards & norms
11	Is the disinfection method or sterilization meeting the log 4	Yes - Disinfection methods & standard maintained as per norms

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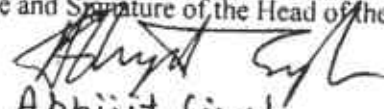
	standards? How many times you have not met the standards in a year?		NIL
12	Any other relevant information	:	(Air Pollution Control Devices attached with the Incinerator)

Certified that the above report is for the period from

..... 2nd January 2017 to 31st Dec, 2017

Date: 31st January, 2018
 Place: Mohali.

Name and Signature of the Head of the Institution


 Abhijit Singh
 (Facility Director)

BIOMEDICAL WASTE RECORD 2017

S. No	Month	Red Category		Yellow Category		Cytotoxic/ Yellow Category		Blue Category		White Category	
		Total Bags	Total Wt.	Total Bags	Total Wt.	Total Bags	Total Wt.	Total Bags	Total Wt.	Total Bags	Total Wt.
1	Dec-17	1248	6945.085	908	4281.2	28	180.555	209	1723.24	157	400.27
2	Nov-17	1318	7641.835	1013	4966.31	32	220.13	250	2217.535	205	537.3
3	Oct-17	1291	6956.42	1071	4871.85	24	151.59	300	2441.4	168	437.78
4	Sep-17	1521	8357.24	1261	5768.04	32	166.49	309	2607.38	178	518.37
5	Aug-17	1596	8873.89	1190	5552.58	28	164.79	311	2521.24	189	375.67
6	Jul-17	1367	6940.54	1208	5270.92	22	125.8	313	2457.53	170	350.26
7	Jun-17	1706	8658.15	1416	6135.31	30	185.14	243	2139.23	192	484.15
8	May-17	1758	9882.22	1442	6768.76	32	205.22	307	2487.44	230	585.76
9	Apr-17	1555	8202	1309	7114.61	36	233.11	272	1932.78	232	614.04
10	Mar-17	1734	8247.91	1482	6837.32	34	253.63	321	2204.83	250	722.57
11	Feb-17	1597	7297.65	1385	5698.88	32	224.38	272	1938.38	212	540.6
12	Jan-17	1646	7183.71	1753	5680.68	30	235.11	255	1940.42	188	552.72
Total		18337	95186.65	15438	68946.46	360	2345.95	3362	26611.41	2371	6119.49
Monthly Average		1528.083	7932.221	1286.500	5745.538	30.000	195.495	280.167	2217.617	197.583	509.958
Daily Average		50.238	260.785	42.296	188.894	0.986	6.427	9.211	72.908	6.496	16.766

Handwritten Signature

FORM - I
[(See rule 4(o), 5(i) and 15 (2))]

ACCIDENT REPORTING

1. Date and time of accident : *Needle stick injury (Asperamone III)*
2. Type of Accident : *Needle stick Injury*
3. Sequence of events leading to accident : *During segregation/injection*
4. Has the Authority been informed immediately : *NIL*
5. The type of waste involved in accident : *NIL*
6. Assessment of the effects of the accidents on human health and the environment: *Safety vaccination was done.*
7. Emergency measures taken : *Trainings provided to all healthcare providers.*
8. Steps taken to alleviate the effects of accidents : *Procedural trainings / segregat (with PPE)*
9. Steps taken to prevent the recurrence of such an accident : *Continuous Training*
10. Does your facility have an Emergency Control policy? If yes give details: *NO*

Date :*31-01-2017*.....
Place:*Mohali*.....

Signature*[Signature]*.....
Designation*FACILITY DIRECTOR*.....

MINUTES OF MEETING

FHM-BMW COMMITTEE (13th Dec 2017)

NAME OF UNIT – Fortis Hospital Mohali

NAME OF COMMITTEE: Bio-Medical Waste Committee

1. **Date & Time: 6.7.2017 (3pm – 4 pm)**
2. **Total no. of Members present in the meeting: 11**
3. **Agenda circulated prior to meeting (Yes/No): Yes**

List of Attendees:

1. **Dr Anita Sharma-Infection Control Officer, Lab Head –BMW Chairperson**
2. **Jolce Thomas-Assistant Chief of Nursing**
3. **Harjit Lubana-Assistant Chief of Nursing**
4. **Neeraj Tandon-Engg Head**
5. **Dr Tanvi Sood-Quality Head**
6. **Dr Apra Kalra-Head Blood Bank**
7. **Rajesh Sharma- Housekeeping Head**
8. **Dr Rajni Pathak-Quality Officer**
9. **Dr Pooja Singh-Microbiologist , Blood bank**
10. **Sheila Tirkey-ICN**
11. **Jyoti Sharma-ICN**

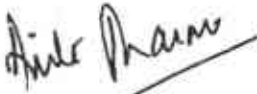
AGENDA

- **The latest conversation/Directions from PPCB (if any)**
- **Status of ETP-OT/Lab**
- **Clarification from PPCB-regarding 10% Hypochlorite**
- **Status on Non chlorinated bags-Waste bags and Blood bags**
- **Cardboard Box marking and placement solutions**
- **Compliance of BMW Training and self-assessment on Oracle-Current status**

				regarding reference of VIREX efficient for decontaminated of blood (wrt all blood borne pathogens)	
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Date and Time of Next Meeting: To be arranged.

Signature of Chairman and Secretary


Dr Anita Sharma


Sheila Tirkey

(Chairman)

(Secretary)

MINUTES OF MEETING

FHM-BMW COMMITTEE (6th July 2017)

NAME OF UNIT – Fortis Hospital Mohali

NAME OF COMMITTEE: Bio-Medical Waste Committee

1. **Date & Time: 6.7.2017 (3pm – 4 pm)**
2. **Total no. of Members present in the meeting: 12**
3. **Agenda circulated prior to meeting (Yes/No): Yes**

List of Attendees:

1. **Wg. Cdr. GBS Kang-MD**
2. **Dr Anita Sharma-Infection Control Officer, Lab Head**
3. **Dr Jasbir Kaur-AMS**
4. **Rajbir Kaur-Assistant Chief of Nursing**
5. **Neeraj Tandon-Engg Head**
6. **Dr Shweta Prabhakar-Head Quality Assurance**
7. **Dr Tanvi Sood-Quality officer**
8. **Dr Apra Kalra-Head Blood Bank**
9. **Rajesh Sharma- Housekeeping Head**
10. **Dr Navdeep Kaur-MSOT Co-ordinator**
11. **Sheila Tirkey-ICN**
12. **Subhash Prasad-CSSD Supervisor**

AGENDA

- **Selection of a new Chairperson to the BMW Committee.**
- **Update on the progress made from the last minutes of meeting.**
- **BMW training and self -assessment-Lessons learnt from last year.**
- **Discrepancies noted in Hospital wide BMW audit.**
- **Liquid Biomedical Waste/Chemical Waste generated out of disinfection processes -To be treated with 10% Hypochlorite solution before disposal in STP-Status**
- **Broken glass/ampoules/Intact glass bottles to be discarded in cardboard boxes with blue marking – Can we use Plastic crates to hold the cardboard boxes?**

The following points were discussed and responsibilities and timelines were agreed as in the table below.

S.No.	Issues	Responsibility	Expected Closure Date	Action points	Remarks
1	Selection of New Chairperson to BMW committee	FD	31 st July	Mall to be sent to FD regarding selection	Members unanimously propose Dr Anita Sharma's name
2	Placement of cardboard boxes for glass waste.	Rajesh Sharma	With immediate effect	Cardboard box to be placed inside plastic crates if kept on the floor.	PPCB is looking into some concerns regarding usage of cardboard boxes and it is likely to be amended.
3	Liquid Biomedical Waste/Chemical Waste generated out of disinfection processes To be treated with 10% Hypochlorite solution before disposal in STP	Neeraj Tandon	On going	One ETP machine is being pilot tested. The Unit to take special sanction for procurement of the second machine.	This process is under discussion with PPCB and efficacy of Hypochlorite solution for chemicals is being questioned. Few amendments from PPCB are likely.
4	Hepatitis B & Tetanus vaccination for all HCW	Dr Parvinder Chawla	On going	Vaccination camp to be organised to cover all HCW.	New joinees are already being offered. Will be a part of Annual health check-up.
5	Annual IC BMW Training and self-assessment in Oracle	HR/IC Team	Aug-Dec 2017	Hard copies of self - assessment to be uploaded in Oracle later by HR for senior clinicians.	To be discussed with HR-Kanwal Kaur Sandhu.
6	BMW mgmt. process audit to be done quarterly.	IC/Engg/Quality	First audit to be done in Sept 2017.	Checklist to be made by 31 st July.	To strengthen BMW process and be prepared for any internal/external audits.

Date and Time of Next Meeting: To be arranged.

Signature of Chairman and Secretary

(Chairman) 

Anita Khan

Sheila Tirkey


(Secretary)