

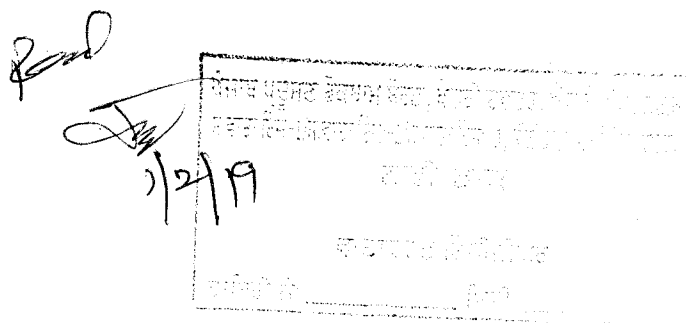
Mohali

**Fortis Hospital**  
Sector 62, Phase-VIII  
Mohali - 160 062  
Tel.: 91-172-469-2222, 91-172-502-1222  
Fax: 91-172-4692221, 91-172-509-6221  
E-mail: contactus.mohali@fortishealthcare.com  
Website: www.fortishealthcare.com

To

30/01/2019

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



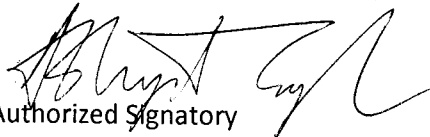
Subject: Submission of Annual Bio-Medical Waste Report FY 2018 (1st Jan 2018 to 31st Dec 2018)

Dear Sir,

Please find enclosed Annual Bio- Medical Waste Report for the year 2018 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 2018

With Best Regards,

  
Authorized Signatory

Fortis Healthcare Ltd, Mohali

*Handwritten mark*



A UNIT OF FORTIS HEALTHCARE LIMITED

Regd. Office : Fortis Hospital, Sector 62, Phase - VIII, Mohali - 160062  
CIN No. : L85110DL1996PLC076704

**Fortis** SPECIALITY Hospital

**Form - 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 authorised person (occupier or operator of facility)	:	Mr. Abhijit Singh
	(ii) Name of HCF or CBMWTF	:	FORTIS HEALTHCARE LTD.
	(iii) Address for Correspondence	:	C/O FORTIS HOSPITAL Sec 62, Ph 8, Mohali
	(iv) Address of Facility	:	Fortis Hospital, Ph 8, Sec 62, SAS Ngr.
	(v) Tel. No, Fax. No	:	0172-4692222-NRIP
	(vi) E-mail ID	:	abhijit.singh@fortishealthcare.com
	(vii) URL of Website	:	www.fortishealthcare.com
	(viii) GPS coordinates of HCF or CBMWTF	:	NL - 30.4138 52 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.: BMW/Renewal/SAS/2018/7043399 .....valid up to ...31-3-2019
	(xi). Status of Consents under Water Act and Air Act	:	Valid up to: 31-3-2019
2.	Type of Health Care Facility	:	HOSPITAL
	(i) Bedded Hospital	:	No. of Beds: 366
	(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	:	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

	(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 65962.35 (5496.86 Kg/month) Red Category: 10678.430 PA (8898.70 Avg) White: 4031.0961 Kg PA (335.997/month) months Blue Category: 2232.970 Kg PA (1864.414 Kg/month) General Solid waste (Avg) 2855 kg/months (Kitchen + 42 (937.48 kg/day))																																																
5	Details of the Storage, treatment, transportation, processing and Disposal Facility																																																		
	(i) Details of the on-site storage facility	:	Size : 450 - 550 S. Ft. <del>ft</del> Capacity : 750 kgs/day (Approx) Provision of on-site storage : (cold storage or any other provision) NIL																																																
	(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></td> </tr> <tr> <td>Plasma Pyrolysis</td> <td></td> <td></td> <td>1</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>NA</td> </tr> <tr> <td>Needle tip cutter or destroyer</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sharps 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 Pyrolysis			1	Autoclaves				Microwave				Hydroclave				Shredder			NA	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.) - 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	282 kg -
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of		M/s Rainbow Environments Pvt. Ltd Village Balyali 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 meetings attached)
7	Details trainings conducted on BMW		
	(i) Number of trainings conducted on BMW Management.		34 Nos (34)
	(ii) number of personnel trained		617
	(iii) number of personnel trained at the time of induction		276
	(iv) number of personnel not undergone any training so far		NIL
	(v) whether standard manual for training is available?		Yes.
	(vi) any other information)		
8	Details of the accident occurred during the year		Major Nil
	(i) Number of Accidents occurred		Needle Stich injuries (74)
	(ii) Number of the persons affected		74 (Internal benchmarks)
	(iii) Remedial Action taken (Please attach details if any)		Vaccinated & aware (Training reinforced)
	(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?		Yes (NIL)
	Details of Continuous online emission monitoring systems installed		NIL
10	Liquid waste generated and treatment methods in place. How many times you have not met the standards in a year?		Yes as per norms & standards
11	Is the disinfection method or sterilization meeting the log 4		Yes, disinfection method as per norms are followed.

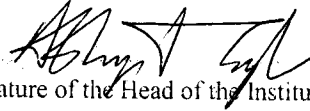
	standards? How many times you have not met the standards in a year?		NIL
12	Any other relevant information	:	(Air Pollution Control Devices attached with the Incinerator)

Certified that the above report is for the period from

..... 1st January 2018 to 31st December 2018

.....

.....



Name and Signature of the Head of the Institution

Date: 30th JAN, 2019

Place FORTIS, MOHALI

**Abhijit Singh**  
**Zonal Director**  
**Fortis Hospital**  
**Sector-62, Phase-VIII, Mohali**

Signature of the Head of the Institution

Mohali

## BIOMEDICAL WASTE RECORD 2018

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-18	1845	10018.595	1538	6922.855	29	186.455	201	1897.525	173	426.711
2	Nov-18	1779	9116.270	1472	5951.870	26	184.224	202	1993.880	151	370.645
3	Oct-18	1813	9447.305	1584	6042.485	26	171.605	213	2006.285	154	357.210
4	Sep-18	1721	8734.860	1394	5447.370	27	191.345	205	1934.245	158	433.755
5	Aug-18	2396	9608.600	1549	6420.565	28	194.910	224	2001.270	150	383.605
6	Jul-18	1763	9192.470	1344	5371.420	27	153.475	214	1812.130	148	327.300
7	Jun-18	2022	9293.455	1315	5201.535	27	109.420	213	1730.300	152	287.005
8	May-18	1637	8797.205	1125	4751.665	28	107.320	193	1553.230	97	193.350
9	Apr-18	1529	8825.395	1150	4690.625	25	111.331	184	1509.455	160	305.580
10	Mar-18	1533	8733.860	1027	4679.555	27	111.355	201	1656.320	115	213.205
11	Feb-18	1445	8152.605	949	4260.370	28	175.065	276	2195.460	139	299.760
12	Jan-18	1273	6863.810	854	4255.390	39	270.145	224	1842.870	156	433.835
<b>Total</b>		<b>20756</b>	<b>106784.430</b>	<b>15301</b>	<b>63995.705</b>	<b>337</b>	<b>1966.650</b>	<b>2550</b>	<b>22132.970</b>	<b>1753</b>	<b>4031.961</b>
<b>Avg./Month</b>		<b>1730</b>	<b>8898.703</b>	<b>1275</b>	<b>5332.9754</b>	<b>28</b>	<b>163.8875</b>	<b>213</b>	<b>1844.4142</b>	<b>146</b>	<b>335.9968</b>
<b>Avg./day</b>		<b>57</b>	<b>292.560</b>	<b>42</b>	<b>175.331</b>	<b>1</b>	<b>5.388</b>	<b>7</b>	<b>60.638</b>	<b>5</b>	<b>11.046</b>

*M. J. Anderson*

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

ACCIDENT REPORTING

1. Date and time of accident : Needle Stich Injury (Asper amexure<sup>III</sup>)
2. Type of Accident : Needle Stich Injury
3. Sequence of events leading to accident : During Segregation /
4. Has the Authority of 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 : For Safety Vaccination done
7. Emergency measures taken : Training provided with test to all healthiness -
8. Steps taken to alleviate the effects of accidents : Procedural Trainings / Training with PPE & on segregation
9. Steps taken to prevent the recurrence of such an accident : Continuous Training
10. Does your facility has Emergency Control policy? If yes, give details : NO

Date : 30/01/2019

Place : Mohali

Signature

Designation

Abhijit Singh  
Zonal Director  
Fortis Hospital  
Sector-62, Phase-VIII, Mohali





## MINUTES OF MEETING

### FHM-BMW COMMITTEE (28<sup>th</sup> June 2018)

**NAME OF UNIT – Fortis Hospital Mohali**

**NAME OF COMMITTEE: Bio-Medical Waste Committee**

1. Date & Time: 6.7.2017 (12pm - 1pm)
2. Total no. of Members present in the meeting: 9
3. Agenda circulated prior to meeting (Yes/No): Yes

**List of Attendees:**

1. Wg. Cdr. GBS Kang-MD
2. Dr Bhavna Ahuja-MS
3. Dr Anita Sharma-Infection Control Officer, Lab Head –BMW Chairperson
4. Joice Thomas-Assistant Chief of Nursing
5. Dr Apra Kalra-Head Blood Bank
6. Rajesh Sharma- Housekeeping Head
7. Dr Rajni Pathak-Quality Officer
8. Harmanjeet Kaur-Nsg. Supervisor-Oncology
9. Sheila Kispotta-ICN

**AGENDA**

- Update on the progress made from the last minutes of meeting.
- Shortfalls in BMW management as noted by the Auditors
- Discrepancies noted in BMW audit checklist:
  - Absence of MS signatures
  - inconsistent format of checklist
  - Audit not performed within the first two weeks of the month.
- BMW mixing especially in green bins-ways to stop it
- Mutilation of plastic waste e.g. IV bottles/flexi bags, tubings and gloves as observed by PPCB officials on 27.6.18

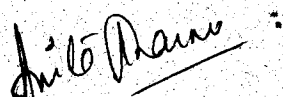
The following points were discussed and responsibilities and timelines were agreed as in the table below.

S.No.	Issues	Responsibility	Expected Closure Date	Action points	Remarks
1	Inappropriate removal and transportation of BMW	Rajesh Sharma/Rajbir Kaur	Immediate	Yellow/red bins to have lids, Bio-hazardous stickers, should not be overflowing, HK to use proper PPE, Hub cutters not to be kept on slabs	
2	Inadequate and Incomplete collection of BMW records	RS	Immediate	Vendor signature should be present on receipt/register, daily weight record to be maintained on register and receipts to be saved/photocopied as proof, over writing/under recording to be avoided	
3	Status on Non-chlorinated bags	RS/Neeraj Tandon	31 Jul 2018	NT to discuss the purchase of biodegradable bags with the CBU	
4	All high risk areas to be audited/month and complete maintenance of BMW audit checklists wrt Signatures of MS, IC doctor, ICN with dates/areas	Sheila Tirkey/ICNs	Immediate	ST will counter check all audit reports before filing	Monthly tracker to be maintained
5	BMW reporting on Website	NT	Immediate	NT to ensure all receipts and register records are present for verification	
6	Status of ETP	NT	30 <sup>th</sup> Sep 2018	Budget has been approved	For Blood Bank, COT, Ortho OT, MSOT

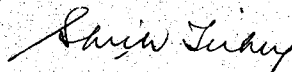
7	BMW mixing in green bins	RK/ICN/RS	Immediate	Daily segregation in the DU is going on before transportation	Name of non-compliant area to be shared in the morning meeting by RS
8	Mutilation of gloves/IV tubings /bottles etc.	RK/ICNs	Immediate	Education, Re-enforcement and continuous monitoring	Scissors to be procured

Date and Time of Next Meeting: To be arranged in the month of November 2018

Signature of Chairman and Secretary

  
Dr Anita Sharma

(Chairman)

  
Sheila Kispotta

(Secretary)



## MINUTES OF MEETING

### FHM-BMW COMMITTEE (19<sup>th</sup> Dec 2018)

NAME OF UNIT – Fortis Hospital Mohali

NAME OF COMMITTEE: Bio-Medical Waste Committee

1. Date & Time: 19.12.2018 (12pm - 1pm)
2. Total no. of Members present in the meeting: 12
3. Agenda circulated prior to meeting (Yes/No): Yes

#### List of Attendees:

1. Dr Anita Sharma-Infection Control Officer, Lab Head –BMW Chairperson
2. Jaspreet Kaur –Admin Head
3. Rajbir Kaur - DCNO
4. Joice Thomas-Assistant Chief of Nursing
5. Dr Apra Kalra-Head Blood Bank
6. Rajesh Sharma- Housekeeping Head
7. Dr Tanvi Sood – Quality Assurance
8. Jyoti Sharma-ICN
9. Kiranpreet Kaur-ICN
10. Poonam- ICN
11. Arvind Thakur- Engineering
12. Harvinder Kaur-Nursing Education

#### AGENDA

1. Update on the progress made from the last minutes of meeting.
2. BMW mixing especially in green bins - ways to stop it
3. Mutilation of plastic waste e.g. IV bottles/flexi bags, tubing and gloves as observed by  
PPCB officials on 27.6.18 -Progress

#### New Additions /Concerns

1. Balyali Visit
2. Shortage/New Hub cutters – Feedback & Way forward
3. Sharps Management - Improper segregation of guide wires/trochars

4. TT & HBV Vaccination –An Update

5. Green Waste bins in MICU

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

S.No.	Issues	Discussion	Responsibility	Expected Closure Date	Remarks
<b>Issues from previous meeting</b>					
1	Inappropriate removal and transportation of BMW	Yellow/red bins to have lids, Bio-hazardous stickers, should not be overflowing, HK to use proper PPE, Hub cutters not to be kept on slabs	Rajesh Sharma/Rajbir Kaur	Immediate	Completed
2	Inadequate and Incomplete collection of BMW records	Vendor signature should be present on receipt/register, daily weight record to be maintained on register and receipts to be saved/photocopied as proof, over writing/under recording to be avoided	RS	Immediate	Completed
3	Status on Non-chlorinated bags	All bags are now non-chlorinated apart from the ones used in blood bank and Path Lab. This is because non-chlorinated bags are unable to withstand autoclaving. Need further clarification from PPCB on the same. Would need list of vendors from where autoclave friendly	NT	31st Jan 2019	Closed  Pending

		non-chlorinated bags can be procured.			
4	All high risk areas to be audited/month and complete maintenance of BMW audit checklists wrt Signatures of MS, IC doctor, ICN with dates/areas	IC Team have revised BMW Audit checklist with a tracker sheet at the front. All high risk areas covered each month and audit reports are being signed by ICO & MS each month.	IC Team	Immediate	Closed
5	BMW reporting on Website	NT to ensure all receipts and register records are present for verification	NT		Ongoing
6	Status of ETP	Budget has been approved. Pipework has been installed.	NT	31 <sup>st</sup> Jan 19	WIP
7	BMW mixing in green bins	Daily segregation in the DU is going on before transportation Training of staff Frequent rounding to ensure compliance	Nursing Teams/ICNs/RS		Ongoing
8	Mutilation of gloves/IV tubings /bottles etc.	Education, Re-enforcement and continuous monitoring Scissors to be procured	Nursing Team/ICNs	31st Jan 2019	Ongoing
<b>New Additions/ Concerns</b>					
1	Balyali Visit	Representatives from IC Team, Engg & HK visited Balyali WTF on 15.1.2019. Observations from the visit were shared with the group. Our waste is not being weighed when entering the facility which is a	NT/ICNs	31 <sup>st</sup> Jan 2019	Engg will share information on scheduled holidays with HK & IC Team

		concern. Written intimation of scheduled holidays should be provided to FHM. Mr Bhullar at the facility suggested that PPCB has recommended usage of blue boxes instead of cardboard boxes.			Need to re-visit BMW Standards and ask PPCB for vendors list if applicable. ✓
2.	Shortage of hubcutters	It was highlighted that shortage of hub cutters is frequently reported from Nursing stations. There is no prior information from our stores on impending shortage. Bigger hub cutters to be mounted in DU for usage when there are supplies issues with the smaller ones.	Nursing Teams/ Purchase/Ms Jaspreet Kaur	31 <sup>st</sup> March 2019	
3.	Guidewires & trochars – Disposal	Guidewires and trochars will be discarded in cardboard box as they are metallic in nature. They are a mis-fit for sharp boxes. The House agreed on the same.	IC/Nursing Teams	With immediate effect	
4.	TT & HBV Status	Vaccination Registers in the areas to be updated with new joiners and doctors. Chicken pox status to be added.	IC Team/ Nursing Incharges	Ongoing	
5.	Green waste bins in MICU	Additional green bins can be removed from the	ICN/ Unit leadership	31 <sup>st</sup> Jan 19	This has to be agreed with MICU-Incharge.



		patient's bedside in MICU. Only 1 big green bin could be placed next to the HW sink.			
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Date and Time of Next Meeting: To be arranged in the month of June 2019

Signature of Chairman and Secretary

Dr Anita Sharma

*Anita Sharma*  
20-12-2018

(Chairman)

Kiranpreet Kaur

*Kiranpreet Kaur*  
2-12-2018

(Secretary)

