

To

Date 22.01.2021

The Environmental Engineer,
Punjab Pollution Control Board,
Plot No. 55, Phase 2,
S. A. S. Nagar (Mohali).



Sub: Submission of Annual Bio-Medical Waste Report FY 2020 (1st Jan 2020 to 31st Dec 2020)

Dear Sir,

Please find enclosed the Annual Bio-Medical Report for the year 2020 with below mentioned enclosures.

1. Annual Report Form IV
2. Accident Reporting Form 1
3. Annexure -1 for Biomedical waste details month wise for the year 2020

With Best Regards

Authorized Signatory

For Fortis healthcare Ltd., Mohali



A UNIT OF FORTIS HEALTHCARE LIMITED

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

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)	:	Abhijit Singh.
	(ii) Name of HCF or CBMWTF	:	Fortis Healthcare Ltd
	(iii) Address for Correspondence	:	C/o Fortis Hospital, Sector 62
	(iv) Address of Facility	:	Phase-8, SAS Nagar, Mohali
	(v) Tel. No, Fax. No	:	0172-469222, NIL
	(vi) E-mail ID	:	abhijit.singh@fortishealthcare.com
	(vii) URL of Website	:	www.FortisHealthcare.com
	(viii) GPS coordinates of HCF or CBMWTF	:	NL-30413832, EL76.434924
	(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/2019/ 9276.266 valid up to 31/03/2024
	(xi). Status of Consents under Water Act and Air Act	:	Valid up to: Water & Air 31/03/2021
2.	Type of Health Care Facility	:	
	(i) Bedded Hospital	:	No. of Beds: 360
	(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

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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 83664.695/Annum Red Category 100572.148/Annum White: 2505.352/Annum Blue Category: 18382.063/Annum General Solid waste: 47197/Annum 3913/m																																									
5	Details of the Storage, treatment, transportation, processing and Disposal Facility (Kit/Chart/CLW)																																											
	(i) Details of the on-site storage facility	:	Size : 450-550 SQF Capacity : 750 Kgs/Day Approx. 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 of waste 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></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> <td></td> </tr> </tbody> </table>			Type of treatment equipment	No of units	Capacity Kg/day	Quantity of waste 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:			
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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	:	Quantity generated NA Where disposed																																									

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	during the treatment of wastes in Kg per annum	Incineration Ash ——— NIL 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. Unit - Balyalikalau, Tech. (Sharan) Dist - Mehal, (PB)
	(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.	40 nos
	(ii) number of personnel trained	474
	(iii) number of personnel trained at the time of induction	76
	(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	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?	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 as per norms and standards.
11	Is the disinfection method or sterilization meeting the log 4	Yes, Disinfection method as per norms are followed.

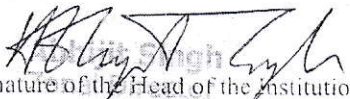
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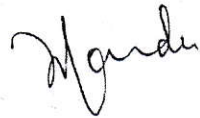
	standards? How many times you have not met the standards in a year?		NIL
12	Any other relevant information	:	(Air Pollution Control Devices attached with the Incinerator)

Certified that the above report is for the period from

1st January 2020 to 31st December 2020

Date: 22/01/2021
Place: Mehadi


Name and Signature of the Head of the Institution
Fortis Hospital
Sector-62, Phase VIII, Mohali



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

ACCIDENT REPORTING

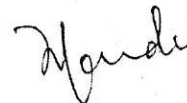
1. Date and time of accident : Needle stick injury (As per Annexure II)
2. Type of Accident : Needle stick injury
3. Sequence of events leading to accident : During Segregation procedural.
4. Has the Authority of been informed immediately: NIL
5. The type of waste involved in accident : NIL
6. Assessment of the effects of the accidents on human health and the environment : For Safety Vaccinations done
7. Emergency measures taken : Training provided with test to all the health workers.
8. Steps taken to alleviate the effects of accidents : Procedural Trainings/ Trainings with PPE on Segregation
9. Steps taken to prevent the recurrence of such an accident : Continues Trainings.
10. Does your facility has Emergency Control policy? Hospital has ERT/ Hazmat Team to deal.
If yes, give details any kind of emergency with safety and security As per norms.

Date : 22/01/2021

Place : Mohali

Signature : 

Designation : Abhinav Singh
Zonal Director
Fortis Hospital
Sector-62, Phase-VIII, Mohali



NEEDLE STICK INJURY 2020

S.No	Month	No. of Injury	Area Distribution of Needle Stick Injury (2020)																Categories of Needle Stick Injury					Incidence Needle Stick Injury															
			Ward A1	Ward A2	Ward A3	Ward A4	Ward A6	BMT	TRICU	CCU	SPICU	MICU	NICU	NISCU	GICU	MSOT	ORTHO OT	CATH LAB	PATH LAB	RADIOLOGY	Kitchen	Triage	STP	Doctor	Nurse	GDA	Technician	Trainee	HK	Wrong segregation	Re-Capping	Splash	After use before disposal	Procedural					
1	January	11	1	1				1	1		1												3	5	2								1	6			5		
2	February	8		1	1					1	1			2	1	1							2	3	2												3		
3	March	4								1	1				1								1	1	1												1		
4	April	4		1							1				1							1															2		
5	May	5						1	1	1	2												2	3													2		
6	June	4		1			1			1				1											4														
7	July	2															2							1	1														
8	August	4										1	1		1		1						1	3														3	
9	September	2		1																				2														2	
10	October	6					1				1							1					1	2	2	1												1	2
11	November	1	1																																				
12	December	7									3											1	5																3
	Total	58	2	5	1	1	1	1	1	1	8	2	8	1	5	8	1	1	2	1	1	1	1	12	32	7	1	1	5	25	7	2	1	23					

[Handwritten Signature]

ANNEXURE - 1

Name of the Hospital : Fortis Hospital Limited (Fortis Healthcare Limited)
Address of the Hospital : Mohali- Phase-8, Sector 62, SAS Nagar, Mohali.
Year : 2020

Details of Category wise, Biomedical Waste. (Kgs.)

Month	YELLOW	Bag	RED	Bag	BLUE	Bag	WHITE	Bag	OTHER/ CYTO	Bag
JANUARY	6385.530	1509	9814.975	1810	1913.385	214	267.520	171	192.280	30
FEBRUARY	6601.935	1512	8951.495	1634	2493.755	258	275.070	185	153.565	26
MARCH	5882.170	1259	8476.190	1503	1643.825	193	248.170	161	200.880	44
MARCH (COVID 19)	175.465	50	19.930	8	7.695	1	0.475	1	0.000	0
APRIL	3185.865	876	4557.465	901	718.770	96	103.775	67	103.465	24
April (COVID 19)	948.101	354	240.845	107	47.598	11	17.901	12	0	0
May	3996.828	1244	5607.268	1173	1011.608	121	153.876	89	140.159	28
MAY (COVID 19)	939.029	357	379.838	143	59.705	11	16.393	10	0	0
JUNE	5547.55	1481	7231.604	1407	1276.808	156	207.057	120	144.69	26
JUNE (Covid 19)	535.984	180	269.446	84	61.010	11	8.952	8	0	0
JULY	5441.492	1584	7592.594	1585	1471.808	187	171.994	128	162.306	32
JULY (Covid19)	1192.619	430	592.306	205	63.921	14	15.498	13	0	0
AUGUST	4624.594	1350	6314.200	1438	1193.107	161	144.887	100	157.946	27
August (Covid 19)	2498.757	870	1495.775	484	119.010	17	44.571	29	0	0
SEPTEMBER	4617.710	1354	5966.109	1316	1055.029	133	122.336	82	184.482	28
September (Covid 19)	3993.756	1495	2508.518	875	189.904	28	49.552	28	0	0
OCTOBER	5777.486	1579	7578.694	1481	1452.849	168	193.301	110	200.285	36
OCTOBER (COVID 19)	4525.867	1706	2577.187	902	269.625	37	61.5461	38	0	0
NOVEMBER	5252.356	1522	6833.955	1442	1447.707	171	114.037	78	168.939	26
NOVEMBER (COVID 19)	3222.455	1280	3109.032	1028	189.169	29	74.943	33	0	0
DECEMBER	5344.367	1755	7835.446	1652	1566.55	194	171.012	115	168.322	27
DECEMBER (COVID 19)	2979.779	1233	2619.276	928	129.225	18	42.486	25	0	0
TOTAL	83669.695	24980	100572.148	22106	18382.063	2229	2505.352	1603	1977.319	354
Average waste per Month	3803.168	1135	4571.461	1005	835.548	101	113.880	73	89.878	16
Average waste per day	229.232	68	275.540	61	50.362	6	6.864	4	5.417	1

After generation, Segregation, Collection & Storage of Bio-Medical Waste, handed over to Authorized outsourced Agency M/s Rainbow Environment Pvt. Ltd., Village Balyali, Mohali for treatment & disposal as per PPCB norms.

A UNIT OF FORTIS HEALTHCARE LIMITED

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

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MINUTES OF MEETING

FHM-BMW COMMITTEE (23 Jan 2020)

NAME OF UNIT – Fortis Hospital Mohali

Venue- Meeting Room 3rd Floor

NAME OF COMMITTEE: Bio-Medical Waste Committee

1. Date & Time: 23.1.2020 (3pm – 4pm)
2. Total no. of Members present in the meeting: 7
3. Agenda circulated prior to meeting (Yes/No): Yes

List of Attendees:

1. Dr Anita Sharma-Infection Control Officer, Lab Head –BMW Chairperson
2. Rajbir Kaur - DCNO
3. Rajesh Sharma- Housekeeping Head
4. Neeraj Tandon – Engineering Head
5. Brigit Bosco -ICN
6. Kiranpreet Kaur-ICN

AGENDA

1. Update on the progress made from the last minutes of meeting.

New Additions /Concerns

- Waste segregation –a matter of concern especially sharp waste disposal.
- Sharp etiquette –not being followed by staff.
- Any statutory compliances to be followed in the coming months-Mr. Neeraj to apprise.
- Vaccination status-Ongoing
- Mandatory training on BMW –Compliance
- Bilyali visit.
- Medication tray-not being followed by staff in ICU and ward
- Hub cutter-Training on how to mutilate needles

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

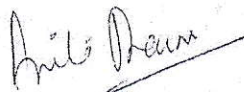
S.No.	Issues	Discussion	Responsibility	Expected Closure Date	Remarks
Issues from previous meeting					
1	Status on Non-chlorinated bags	All bags are now non-chlorinated apart from the ones used in blood bank and Path Lab. This is because non-chlorinated bags are unable to withstand autoclaving. Need further clarification from PPCB on the same. Would need list of vendors from where autoclave friendly non-chlorinated bags can be procured.	NT	31st Jan 2019	Closed
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 st March 2019	Completed/Closed

3	Status of ETP	ETP is fully functional. All hazardous chemical is being treated via ETP	NT	March 2019	Completed
4	Mutilation of gloves/IV tubings /bottles etc.	Education, Re-enforcement and continuous monitoring Scissors to be procured	Nursing Team/ICNs	Continuous	Ongoing. Scissors are in place.
5	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	Communicated to nursing teams. Closed
6.	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	Chicken Pox vaccination/previous history added to nursing vaccination registers.
7.	Training on Hub Cutters	Re-enforcement/on hands training on Hub cutters	IC Team/ Nursing Incharges	Ongoing	
New Additions/ Concerns					
1	Bilyali Visit	Representatives from IC Team, Engg earlier this morning. Observations from the visit were shared with the group. Glass waste was being received in puncture proof	NT/ICNs	June 2019	CLOSED

		containers contrary to PPCB guidelines.			
2	Waste Handling	BMW committee recommended heavy duty gloves to be worn for handling of waste. However latex gloves can be used in transit	HK/IC	With immediate effect	Closed
3.	Treatment of hazardous chemicals	All hazardous waste is being treated via ETP. Concerns were raised for Cidex. The committee was assured that this being neutralised using glycine at the point of generation e.g. Endoscopy.	Engg/IC Team	Ongoing	Closed

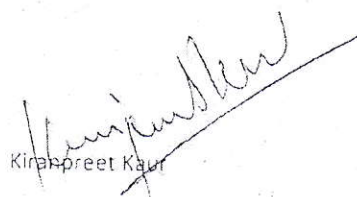
Date and Time of Next Meeting: To be arranged in the month of JULY 2020

Signature of Chairman and Secretary



Dr Anita Sharma

(Chairman)



Kiranpreet Kaur

(Secretary)



MINUTES OF MEETING

FHM-BMW COMMITTEE (16th August 2019)

NAME OF UNIT – Fortis Hospital Mohali

Venue- Meeting Room 3rd Floor

NAME OF COMMITTEE: Bio-Medical Waste Committee

1. Date & Time: 16.8.2019 (3pm – 4pm)
2. Total no. of Members present in the meeting: 7
3. Agenda circulated prior to meeting (Yes/No): Yes

List of Attendees:

1. Dr Anita Sharma-Infection Control Officer, Lab Head –BMW Chairperson
2. Rajbir Kaur - DCNO
3. Rajesh Sharma- Housekeeping Head
4. Neeraj Tandon – Engineering Head
5. Jyoti Sharma-ICN
6. Kiranpreet Kaur-ICN
7. Sonam- ICN

AGENDA

1. Update on the progress made from the last minutes of meeting.
2. ETP -Progress

New Additions /Concerns

- Streamlined BMW Audit Process.
- Bilyali Visit
- New Hub cutters –Shortage and Quality of hub cutters
- Implementation of medication tray for improvement of BMW Segregation at the bedside-
In progress
- Sharps Management-Improvement in disposal of guide-wires and torcher

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
Issues from previous meeting					
1	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 non-chlorinated bags can be procured.	NT	31st Jan 2019	Closed
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		mounted in DU for usage when there are supplies issues with the smaller ones.			
3	Status of ETP	ETP is fully functional. All hazardous chemical is being treated via ETP	NT	March 2019	Completed
4	Mutilation of gloves/IV tubings /bottles etc.	Education, Re-enforcement and continuous monitoring Scissors to be procured	Nursing Team/ICNs	Continuous	Ongoing. Scissors are in place.
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New Additions/ Concerns					
1	Bilyali Visit	Representatives from IC Team, Engg earlier this morning. Observations from the visit were shared with the group. Glass waste was being	NT/ICNs	June 2019	Next Visit due in Dec 2019

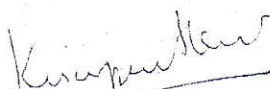
		received in puncture proof containers contrary to PPCB guidelines.			
2	Waste Handling	BMW committee recommended heavy duty gloves to be worn for handling of waste. However latex gloves can be used in transit	HK/IC	With immediate effect	Review Sept 2019
3.	Treatment of hazardous chemicals	All hazardous waste is being treated via ETP. Concerns were raised for Cidex. The committee was assured that this being neutralised using glycine at the point of generation e.g. Endoscopy.	Engg/IC Team	Ongoing	Closed

Date and Time of Next Meeting: To be arranged in the month of Dec 2019

Signature of Chairman and Secretary


Dr Anita Sharma

(Chairman)


Kiranpreet Kaur

(Secretary)

