

ANNUAL REPORT ON BMW MANAGEMENT FOR THE YEAR 2018-2019, STATE POLLUTION CONTROL BOARD-SIKKIM

“Form IVA

[See rule 13(2)]

Format for Submission of updated Annual Report Information on Bio-medical Waste Management (to be submitted by the State Pollution Control Boards or Pollution Control Committees and Director General Armed Forces Medical Services to Central Pollution Control Board on or before 31st July of every year for the period from January to December of the preceding calendar year)

Part-1 (Summary of Information)

- (1) Name of the Organisation: **State Pollution Control Board-Sikkim**
- (2) Name of the Nodal Officer with contact telephone number and e-mail: **Mr. Ranjan Rai, EEE, spcbsikkim@gmail.com**
- (3) Total no. of Health Care Facilities / Occupiers: **284 Nos.**
 - (i) Bedded Hospitals and Nursing Homes (bedded): **35 Nos. bedded hospitals.**
 - (ii) Clinics and Dispensaries : **12 Nos. clinics and 147 Nos. non-bedded dispensaries i.e. Primary Health Sub Centre (PHSC).**
 - (iii) Veterinary institutions: **22 Nos.**
 - (iv) Animal houses: **Not Available**
 - (v) Pathological laboratories: **20 Nos. of Diagnostic Centres**
 - (vi) Blood banks: **Not Available**
 - (vii) Clinical establishment: **Not Available**
 - (viii) Research Institutions: **Not Available**
 - (ix) AYUSH: **Not Available**
 - (x) Pharmaceuticals (Occupational Health Care) within industrial unit: **48 Nos.**
- (4) Total no. of beds: **1568 Nos.**
- (5) Status of authorisation: **232 Nos. of Health Care Facilities have applied for authorization and SPCB has not received any application for authorization from remaining 52 Nos. of Health Care Facilities till date. One time authorisation has been granted to 3 Nos. of non-bedded HCF.**
 - (i) Total number of Occupiers applied for authorisation: **232Nos.**

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- (ii) Total number of Occupiers granted authorisation: **232**
- (iii) Total number of application under consideration: **Nil**
- (iv) Total number of applications rejected: **Nil**
- (v) Total number of Occupiers in operation without applying for authorisation: **52Nos.**
- (6) Quantity of Bio-medical Waste Generation (in kg/day): **396.7 kg/day**
 - (Please enclose District Wise Bio-medical Waste Generation as per Part-2)
 - (i) Bio-medical waste generation by bedded hospitals (in kg/day): **363.5 kg/day**
 - (ii) Bio-medical waste generation by non-bedded hospitals (in kg/day): **33.2 kg/day**
 - (iii) Any other:
- (7) Bio-medical waste treatment and disposal
 - (a) By Captive bio-medical waste treatment and disposal by Health Care Facilities (please enclose details as per Part-3)
 - (i) Number of Health Care Facilities having captive treatment and Disposal facilities: **102 Nos. (Part-3)**
 - (ii) Total bio-medical waste treated and disposed by captive treatment facilities in kg/day: **315.1 kg/day**
 - (b) Bio-medical waste treatment and disposal by Common Bio Medical Waste Treatment Facilities (please enclose details as per Part 4): **Common Bio-medical Waste Treatment Facilities does not exist in the state of Sikkim.**
 - (i) Number of Common Bio Medical Waste Treatment Facilities in Operation: **Not Applicable**
 - (ii) Number of Common Bio Medical Waste Treatment Facilities under construction: **Not Applicable**
 - (iii) Total bio-medical waste treated in kg/day: **Not Applicable**

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(iv) Total treated bio-medical waste disposed through authorised recyclers (in Kg/day): **Not Applicable**

(8) Total no. of violation by:

(i) Health Care Facilities (bedded and non-bedded): **9 Nos.**

(ii) Common Bio Medical Waste Treatment Facilities: **Nil**

(iii) Others (please specify): **Nil**

(9) Show cause notices/directions issued to defaulters:

(i) Health Care Facilities (bedded and non-bedded): **9 Nos.**

(ii) Common Bio Medical Waste Treatment Facilities: **Does not exist**

(iii) Others: **Nil**

(10) Any other relevant information:

(i) Number of workshops / trainings conducted during the year: **76 Nos. by occupier and 1 No. by SPCB-Sikkim.**

(ii) Number of occupiers installed liquid waste treatment facility: **Nil**

(iii) Number of captive incinerators complying to the norms: **7 Nos.**

(iv) Number of occupiers organised trainings: **32 Nos.**

(v) Number of occupiers constituted Bio-medical Waste Management Committees: **28 Nos.**

(vi) Number of occupiers submitted Annual Report for the previous calendar year: **102 Nos.**

(vii) Number of occupiers practising pre-treatment of lab microbiology and Bio-technology waste: **38 Nos. (As per Annual Report received in 2018-19)**

(viii) Number of Common Bio Medical Waste Treatment Facilities that have installed Continuous Online Emission Monitoring Systems: **CBWTF does not exist.**

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Part 2: District-wise Bio-medical Waste Generation (for the previous calendar year 2018-2019)

S. No.	Name of the State / Union Territory	Name of the District	Bio-medical Waste Generation (in Kg/day)	Existing Total bio-medical waste treatment capacity (both captive and CBMWTF)in kg/day					
				Equipment					
1.	Sikkim	East	302.8 (As per Annual Report received from 57 Nos. HCFs)	Incinerator 07 nos.	Autoclave: 25 nos.	Deep Burial: 67 nos.	Microwave: 02 nos.	Shredder: 06 nos.	Needle Destroyer: 121 nos.
		West	50.1 (As per Annual Report received from 22 Nos. HCFs)						
		North	43.2 (As per Annual Report received from 20 Nos. HCFs)						
		South	0.6 (As per Annual Report received from 3 Nos. HCFs)						
		Total	-						

Note: Out of 284 Health Care Facilities (HCFs) only 102 HCFs has submitted Annual report till date which are listed at Part 3 and the report for 2018-19 is prepared accordingly.

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Part 3: Information on Health Care Facilities having captive treatment facilities (for the previous calendar Year 2018-2019)

Sl. No.	Name and address of the Health Care Facility	Quantity of Bio-medical Waste Generation (in kg/day)					Total biomedical waste generated (in kg/day)	Total Installed Treatment Capacity in kg/day				Total biomedical waste treated and disposed by Health Care Facilities in kg/day
		Yellow	Red	Blue	White	Incinerator		Autoclave	Deep Burial	Any other		
1.	STNM Hospital	20.83	18.83	-	0.83	40.49	50	1 no.	-	Shredder 1 no. Concrete pit 1 no.	Incinerator:21.37 Autoclave:17.33 Deep Burial: Not Available Any Other Not Available Treated-38.7 kg/d	
2.	Singtam District Hospital	4.60	23.67	19.73	3.12	51.12	7.5 kg	-	-	Shredder, concrete pit	Incinerator:4.60 Autoclave: Not Available Deep Burial: Not Available Any Other Shredder:23.67	
3.	Sang PHC	1.08	1.42	1.42	-	3.92	-	5 kg	-	Concrete pit	Not available	
4.	Samdong PHC	0.95	-	0.03	0.77	1.75	-	01 no.	01 no.	Concrete pit	Treated- 1.75 kg/d	
5.	Rongli PHC	0.07	0.47	-	0.47	1.01	-	-	1 no.	Concrete pit 1 no.	Treated-1kg/d	
6.	Pakyong PHC	0.52	-	1.52	-	2.04	-	-	1 no.	-	Treated 0.53	
7.	Machong PHC	0.003	0.003	0.003	-	0.009	-	-	1no.	-	Treated- 0.003 kg/d	
8.	Rhenock PHC	2	0.67	0.33	0.17	3.17	-	01	01	Shredder	Treated- 2 kg/d	
9.	Rangpo PHC	0.007	-	0.007	-	0.014	-	01	01	-	Treated- 0.014 kg/d	
10.	Rumtek PHSC	0.008	0.005	0.005	0.003	0.021	-	-	-	-	Not available	

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Sl. No.	Name and address of the Health Care Facility	Quantity of Bio-medical Waste Generation (in kg/day)					Total Installed Treatment Capacity in kg/day				Total biomedical waste treated and disposed by Health Care Facilities in kg/day
		Yellow	Red	Blue	White	Total biomedical waste generated (in kg/day)	Incinerator	Autoclave	Deep Burial	Any other	
11	Ranka PHSC	0.008	0.005	0.008	0.005	0.026	-	-	-	-	Not available
12	Ranipool PHSC	0.014	-	0.008	-	0.022	-	-	-	-	Not available
13	SumikLinzey PHSC	0.004	0.001	-	-	0.005	-	-	01	-	Not available
14	Khamdong PHSC	0.23	-	0.13	-	0.36	-	-	-	-	Not Available
15	Ray Mindu PHSC	0.1	-	0.007	-	0.107	-	-	01	-	Not available
16	Middle Camp PHSC	0.17	-	0.17	-	0.34	-	-	-	-	Treated- 0.34
17	Dongey Thang PHSC	0.003	0.001			0.004	-	-	01	-	Not available
18	Martam PHSC	0.03	0.1	0.03		0.16	-	-	01	-	Not available
19	Tumlabung PHSC	0.03	0.07	0.03		0.13	-	-	01	-	Not available
20	Duga PHSC	-	-	-	-	0.12	-	-	-	-	Not available
21	Bhasmey PHSC	-	-	-	-	0.5	-	-	01	-	Treated-0.4
22	West Pandam PHSC	-	-	-	-	-	-	-	01	-	Not available
23	Central Pandam PHSC	-	-	-	-	-	-	-	01	-	Not available
24	Sumin PHSC	0.1	-	0.2	2	2.3	-	-	01	-	1kg/d
25	Pachak PHSC	-	-	-	-	0.04	-	-	-	-	0.001kg/d

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Sl. No	Name and address of the Health Care Facility	Quantity of Bio-medical Waste Generation (in kg/day)					Total biomedical waste generated (in kg/day)	Total Installed Treatment Capacity in kg/day				Total biomedical waste treated and disposed by Health Care Facilities in kg/day
		Yellow	Red	Blue	White	Incinerator		Autoclave	Deep Burial	Any other		
26	Majhitar PHSC	-	-	-	0.04	0.04	-	01	01	-	Not available	
27	North Regu PHSC	-	-	-	-	-	-	-	-	-	Not available	
28	Subaneydara PHSC	-	-	-	-	-	-	-	-	-	Not available	
29	South Regu PHSC	-	-	-	-	-	-	-	-	-	Not available	
30	Rolep PHSC	-	-	-	-	-	-	-	-	-	Not available	
31	Lingtam PHSC	-	-	-	--	-	-	-	01	-	Not available	
32	Lamaten PHSC	-	-	-	-	-	-	-	01	-	Not available	
33	Phadamchen PHSC	-	-	-	-	-	-	-	01	-	Not available	
34	Gnathang PHSC	-	-	-	-	-	-	-	01	-	Not available	
35	Aritar PHSC	0.07	0.07	0.07	-	0.21	-	-	01	-	Not available	
36	Sudunglakha PHSC	0.07	0.07	0.07	-	0.21	-	-	01	-	Not available	
37	Rorathang PHSC	0.07	0.07	0.07	-	0.21	-	-	01	-	Not available	
38	Mamring PHSC	0.001	0.001	0.001	-	0.003	-	-	01	-	0.003	
39	Bering PHSC	0.5	0.5	-	-	1	-	-	01	-	Treated- 1	
40	Linkey PHSC	0.5	0.5	0.5	-	1.5	-	-	01	-	Treated-1	
41	Barapathing PHSC	0.5	0.5	0.5	-	1.5	-	-	01	-	Treated-1	
42	Tarathang PHSC	0.5	0.5	0.5	-	1.5	-	-	01	-	Treated-1	
43	Sukhim Diagnostic centre	0.07	0.003	0.003	0.003	0.079	-	1 no. 5kg	-	-	Treated-0.02	
44	CRH Manipal	86	77.52	7.59	3.95	175.06	50	1 no. 80 ltrs	-	Shredder 1 no. 50 kg Concrete pit 2 no.	Incinerator: 86 Autoclave:85.11 Any Other Shredder:3.95	
45	Ruchi Diagnostic centre	0.89	0.03	0.08	0.06	1.06	-	01	-	-	Not available	

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46	Thea Aesthetic Clinic	0.5	-	0.2	-	0.7	-	-	-	-	Treated-0.2
47	Sister and Sister's, Singtam	0.02	0.28	0.009	0.18	0.489	-	-	-	-	Treated-0.28
48	City Diagnostic Centre	0.001	0.002	0.004	0.004	0.011	-	01	-	-	Treated-0.004
49	State Veterinary Polyclinic Tadong, Gangtok East Sikkim	0.5	-	0.25	0.07	0.82	-	01	01	-Sharp pit-01	Treated- 0.82
50	Torrent Pharma Ltd. (Occupational Health Centre within industrial unit)	7.68	0.05	0.01	-	7.74	-	01	-	-	Treated- 7.68
51	Torrent Pharma Unit-II (Occupational Health Centre within industrial unit)	0.05	-	-	-	0.05	-	02	-	-	Treated-0.05
52	Torrent Pharma Unit-III (Occupational Health Centre within industrial unit)	0.13	-	-	-	0.13	-	01	-	-	Treated-0.13
53	Cipla Ltd. Rorathang (Occupational Health Centre within industrial unit)	0.001	-	-	-	0.001	-	01	01	-	Treated-0.001
54	PTS Packers(Occupational Health Centre within industrial unit)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
55	STP Pharmaceuticals (Occupational Health Centre within industrial unit)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
56	Sun Pharma Laboratories Ltd. Setipool (Occupational Health Centre within industrial unit)	2.44	-	-	0.10	2.54	-	-	-	-	2.54
57	NHPC Balutar, Stage-V	-	0.2	0.07	-	0.27	10kg/hr	01 5kg/hr	-	Shredder 1 no.	Treated 0.27

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Sl. No5	Name and address of the Health Care Facility	Quantity of Bio-medical Waste Generation (in kg/day)					Total biomedical waste generated (in kg/day)	Total Installed Treatment Capacity in kg/day				Total biomedical waste treated and disposed by Health Care Facilities in kg/day
		Yell ow	Red	Blue	White	Incinerator		Autoclave	Deep Burial	Any other		
58	Mangan District hospital	14.04	4.38	12.33	-	30.75	18	3 nos. 10 ltrs	-	Microwave 2 no. Shredder 1 no. Concrete pit 1no.	Incinerator:17.75 Shredder-6.57 Treated-24.33	
59	HeeGyathang	0.41	-	0.11	-	0.52	-	-	1 no.	-	Not available	
60	Phodong PHC	0.82	0.19	0.74	-	1.75	-	1 no.	1 no.	-	Not available	
61	Chungthang PHC	0.29	-	0.23	-	0.52	-	-	1 no.	-	Treated-0.06	
62	Dikchu PHC	0.77	0.19	0.71	-	1.67	-	-	1 no.	-	Not available	
63	Passingdong PHC	0.04	0.6	0.04	0.1	0.78	-	01 no.	01 no.	-	Not available	
64	Lum PHSC	1.5	-	1	-	2.5			01 no.		Not available	
65	Thingchim PHSC	0.5	-	0.5	0.05	1.05	-	-	01 no.	-	Not available	
66	Phamtam PHSC	0.05	-	0.05	-	0.1	-	-	-	-	Treated-0.1	
67	Namok PHSC	0.003	-	0.003	-	0.006	-	-	01 no.	-	Not available	
68	Phensong PHSC	0.003	-	0.003	-	0.006	-	-	-	-	Not available	
69	Kabi PHSC	0.5	-	0.25	-	0.75	-	-	01 no.	-	Treated- 0.25	
70	Tingvong PHSC	0.45	-	-	0.06	0.51	-	-	01 no.	-	Not available	
71	Lingdem PHSC	0.25	-	-	0.05	0.3	-	-	01 no.	-	Not available	
72	Sakyong- Pentong PHSC	0.15	-	-	0.02	0.17	-	-	01 no.	-	Not available	

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Sl. No	Name and address of the Health Care Facility	Quantity of Bio-medical Waste Generation (in kg/day)					Total biomedical waste generated (in kg/day)	Total Installed Treatment Capacity in kg/day				Total biomedical waste treated and disposed by Health Care Facilities in kg/day
		Yellow	Red	Blue	White	Incinerator		Autoclave	Deep Burial	Any other		
73	Lingthem PHSC	0.2	-	-	0.05	0.25	-	-	01 no.	-	Not available	
74	Lingdong PHSC	0.11	-	0.05	-	0.16	-	-	-	-	Not available	
75	Gor PHSC	0.10	-	0.05	-	0.15	-	-	-	-	Not available	
76	Lachen PHSC	0.5	-	0.5	0.05	1.05	-	-	01 no.	-	Not available	
77	Ramthang PHSC	-	-	0.2	-	0.2	-	-	01 no.	-	Not available	
78	Gyalshing District Hospital	12.5	7	9	6	34.5	1 no.	-	01 no.	-	Treated 19.06	
79	Ringchenpong PHC	0.82	0.66	0.30	0.01	1.79	-	-	1 no.	Sharp pit 1 no.	Treated 0.15	
80	Sombaria PHC	0.09	0.08	0.21	0.09	0.47	-	2 no.	01 no.	-	Treated 0.18	
81	Mangalbaria PHC	2.43	2.33	0.57	0.46	5.79	-	1 no.	01 no.	Concrete pit 1no.	Treated-3.5	
82	Soreng PHC	0.39	0.53	0.09	0.03	1.04	-	-	01 no.	-	Treated-1	
83	Yuksom PHC	0.3	0.3	-	-	0.6	-	-	01 no.	Sharp pit 1 no.	Not available	
84	Dentam PHC	0.91	1.08	0.75	1.50	4.24	-	-	01 no.	-	-	
85	Yangsum PHSC	0.03	0.03	0.02	0.002	0.082	-	-	01 no.	-	Treated- 0.038	
86	Deythang PHSC	0.03	0.03	0.03	0.002	0.092	-	-	01 no.	-	Treated -0.02	
87	Khandu PHSC	0.005	0.01	-	-	0.015	-	-	01 no.	-	Not available	

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88	Uttarey PHSC	0.02	-	0.02	0.02	0.06	-	-	01 no.	Sharp pit 1 no.	Not available
89	Karmatar PHSC	0.01	-	0.01	0.002	0.022	-	-	01 no.	Sharp pit 1 no.	Treated- 0.05
90	Hee PHSC	0.02	-	0.025	0.022	0.067	-	-	01 no.	-	Not available
91	Bongten PHSC	0.07	-	0.03	0.04	0.14	-	-	01 no.	-	Not available
92	Samdong PHSC	0.09	0.005	0.02	0.004	0.119	-	-	01 no.	-	Treated-0.12
93	Boom Reshi PHSC	0.03	0.03	0.02	0.003	0.083	-	-	01 no.	Sharp pit 1 no.	Treated waste-0.08
94	Hathidunga PHSC	0.03	0.03	0.02	0.003	0.083	-	-	01 no.	-	Treated waste-0.08
95	Bermiok PHSC	0.09	0.06	0.03	0.003	0.183	-	-	01 no.	-	Treated waste-0.18
96	Tikpur PHSC	0.03	0.03	0.05	0.03	0.14	-	-	01 no.	-	Treated waste-0.06
97	Daramdin PHSC	0.05	0.03	0.04	0.04	0.16	-	-	01 no.	-	Treated waste-0.08
98	Ribdi PHSC	0.03	0.02	0.04	0.04	0.13	-	-	01 no.	-	Treated waste-0.05
99	Okhrey PHSC	0.08	0.03	0.08	0.03	0.22	-	-	01 no.	-	Treated waste-0.3
100	Rangit Power Station	0.09	0.03	0.06	0.005	0.185	01 5kg/hr.	-	-	Sharp pit	Treated-0.10
101	Sister and Sister Namchi	0.02	0.25	0.15	0.02	0.44	-	-	-	-	Treated-0.24
102	Mankind Pharma Ltd. (Occupational Health Centre within industrial unit)	Nil	Nil	Nil	Nil	-	-	-	-	-	Not available
	Total	170.1	143.5	61.9	20.5	396.7 kg/d					315.1kg/d

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Sl. No.	Name and Address of the Common Bio Medical Waste Treatment Facilities	GPS Coordinates	Coverage Area in KMS	Name of the cities/ areas covered by Common Bio Medical Waste Treatment Facilities	Total number of Health Care Facilities being covered	Total number of beds covered	Total Quantity of Bio Medical Waste collected from member Health Care Facilities (in Kg/day)	Capacity of Treatment equipments installed by Common Bio Medical Waste Treatment Facilities			Total Bio Medical waste treated in kg/day	Method of Disposal of treated wastes (Incineration Ash/Sharps/Plastics)
	Does not exist in the state of Sikkim							Equipment	Numbers	Total installed capacity (kg/day)		
								Incinerator				Incineration Ash: Quantity Disposed by:
								Plasma Pyrolysis				
								Autoclave				Sharps: Quantity Disposed by:
								Hydroclave				
								Microwave				Plastics: Quantity Disposed by:
								Shredder				
								Sharps encapsulation or concrete pit				ETP Sludge Quantity Disposed by:
								Deep burial pits				
								Any other equipment				
								Effluent treatment Plant				
								Sub-total				

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- (a) Total Number of transportation vehicles used for collection of Bio-medical Waste on daily basis by the Common Bio-Medical Waste Treatment Facilities: **Not applicable**
- (b) List of Health Care Facilities not having membership with the Common Bio-Medical Waste Treatment Facilities and neither having captive treatment facilities:**Not applicable**
- (c) Number of trainings organised by the Common Bio-Medical Waste Treatment Facility operators: **Not applicable**
- (d) Number of Accidents reported by the Common Bio Medical Waste Treatment Facilities:**Not applicable**