

Form IV A

[See rule 13(12)]

Annual Report Information on Bio- Medical Waste Management Submitted By Mizoram Pollution Control Board, for a Period from January to December, 2018

1	Name of Organisation	Mizoram State Pollution Control Board
2	Name of nodal Officer with contact telephone number & e- mail	C. Lalduhawma, Member Secretary (0389) 2336173 / 91-9436142012 mpcb@mizoram.gov.in
3	Total no. of Health Care Facilities/ Occupiers:	116 Nos
i	Bedded Hospitals & nursing Homes (bedded)	102 Nos
ii	Clinics, dispensaries	NIL
iii	Veterinary Institutions	8 Nos
iv	Animal Houses	N/A
v	Pathological laboratories	6 Nos
vi	Blood blanks	NIL
vii	Clinical Establishments	NIL
viii	Research Institutions	NIL
ix	AYUSH	NIL
4	Total no. of beds	3295
5	Status of authorization:	
i	Total number of occupiers applied for authorization	23
ii	Total number of occupiers granted authorization	23
iii	Total number of application under consideration	Nil
iv	Total number of application rejected	Nil
v	Total number of Occupiers in operation without applying for authorization	1(one)
6	Quantity of Bio- Medical Waste Generation (kg/day) (District Wise Bio- Medical Waste Generation enclosed in Part- 2)	830.74 kg/ day
i	Bio- Medical waste Generation by bedded hospitals (kg/day)	820.92 kg/ day
ii	Bio- Medical waste Generation by non-bedded hospitals (kg/day)	9.39 kg/day
iii	Any other	0.43 (Veterinary hospital)
7	Bio- Medical Waste Treatment & Disposal:	
(a)	By Captive bio- medical treatment and disposal by Health care Facilities (Details enclosed as per part 3)	830.74 kg/ day
i	Number of HCF having captive treatment & Disposal facilities	106 (Based on the Annual Report received for 2018)
ii	Total bio- medical waste treated and disposed by captive treatment facilities in kg/day	829.8 kg/ day (0.95 kg/ day of cytotoxic vials have be

		sent to M/s Fresh Air, Guwahati by the Mizoram Cancer Institute for disposal)
(b)	Bio- Medical Waste treatment & disposal by Common Bio Medical Waste Treatment Facilities : (Details enclosed as per part 4)	NIL
i	Number of Common Bio Medical Waste Treatment Facilities in Operation	NIL
ii	Number of Common Bio Medical Waste Treatment Facilities under construction	NIL
iii	Total bio- medical waste treated in kg/day	NIL
iv	Total treated bio- medical waste disposed through authorized recyclers (kg/day)	NIL
8	Total no. of violations by:	
i	Health Care Facilities (bedded & non bedded)	1
ii	Common Bio Medical Waste Treatment Facilities	Not Applicable
iii	Others (please specify)	NIL
9	Show cause notice/ direction issued to defaulter	1
i	Common Bio Medical Waste Treatment Facilities	NIL
ii	Others	NIL
10	Any other relevant information	
i	Number of workshops/ trainings during the year	300(In- House training by Occupiers)
ii	Number of occupiers installed liquid treatment facility	
iii	Number of captive incinerators complying to the norms	4 Nos of incinerator not functioning at present.
iv	Number of occupiers conducted training	79
v	Number of occupiers constituted Bio- medical Waste Management Committees	65
vi	Number of occupiers submitted Annual Report for the previous calendar year	42
vii	Number of occupiers practicing pre- treatment of lab microbiology & bio- technology waste	106
viii	Number of Common Bio Medical Waste Treatment Facilities that have installed Continuous Online Emission Monitoring Systems	N/A, as there is no Common Bio- Medical Waste Treatment Facility in the State.

Part 2., DISTRICT WISE BIO MEDICAL WASTE GENERATION FOR 2018

Sl. No	Name of state	Name of District	Bio- Medical Waste Generation (kg/day)	Existing Total bio- medical treatment capacity (both captive & CBMWTF)		
				Equipment	Total	
1	Mizoram	Aizawl	579.84 kg/day	Incinerator	1(N/F)	
				autoclave	31	
				Deep burial	36	
				Anyother	30	
2		Mizoram	Kolasib	43.41 kg/day	Incinerator	1(N/F)
					autoclave	7
					Deep burial	8
					Anyother	8
3	Mizoram		Lunglei	51.06kg/day	Incinerator	1(N/F)
					autoclave	19
					Deep burial	15
					Anyother	14
4		Mizoram	Siaha	45.22 kg/day	Incinerator	1(N/F)
					autoclave	5
					Deep burial	10
					Anyother	9
5	Mizoram		Mamit	6.33 kg/day	Incinerator	Nil
					autoclave	8
					Deep burial	10
					Anyother	6
6		Mizoram	Lawngtlai	38.88 kg/day	Incinerator	Nil
					autoclave	2
					Deep burial	5
					Anyother	5
7	Mizoram		Champhai	43.04kg/day	Incinerator	Nil
					autoclave	10
					Deep burial	14
					Anyother	15
8		Mizoram	Serchhip	22.96 kg/day	Incinerator	Nil
					autoclave	2
					Deep burial	8
					Anyother	7

*Note: N/F- Not Functioning**

Part 3.: INFORMATION OF HEALTH CARE FACILITIES HAVING CAPTIVE TREATMENT FACILITY FOR 2018

Sl. No	Name & Address of HCF	No of beds	Quantity of BMW generation in kg/day				Total BMW generated /day	Total installed capacity / day			Any other			Total BMW treated& disposed by	
			Yellow	Red	Blue	White		Incinerator	Autoclave	Deep burial	Shredder	Needle destroyer	micro wave		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
A. Aizawl															
1	Synod Hospital, Durtlang	355	13.6	5.1		1	19.7	0	1	1	0	20	0	Incinerator	<u>Nil</u>
2	Civil Hospital Aizawl	300	45	67	30	7	149	1		1	0	42	0	Autoclave	256.67
3	State Referral Hospital	300									0		0	Deep burial	182.83
4	Aizawl Hospital & Research Centre	146	5.3	10.6	6	0.8	22.7	0	1	1	0	16	0	Any other	140.34
5	Greenwood Hospital	84	11	10	35.4	1	57.4	0	2	1	0	10	0	Total	579.84
6	Ebenezer Medical Centre	83	0.66	1.33	1		2.99	0	1	2		12	0		
7	BN Hospital & Research Centre	65	52.2	62	15.5	4.8	134.5	0	1	1	0	15	0		
8	Mizoram State Cancer Institute	50	0.33	5	2.6	0.33	8.26	0	1	1	0	10	0		
9	Kulikawn Hospital	50	1.01	0.18		0.11	1.3	0	0	1	0	10	0		

10	Adventist Hospital	50	36.1	56.23	46.4		138.73	0	0	1	0	7	0		
11	Nazareth Hospital	40	0.8	0.06	0.06	0.02	0.94	0	2	1	0	4	0		
12	Alpha Hospital	35	0.43	0.4		0.21	1.04	0	1	1	0	5	0		
13	Sub- District Hospital, Saitual	30	1.36	1.31	0	0	2.67	0		1	0	4	0		
14	CHC, Sakawrdai	30	0.86	0.86	0.25	0.33	2.3	0	1	1	0	5	0		
15	Vaivenga Hospital & Research centre	21	0.36	0.6		0.2	1.16	0	1	1	0	6	0		
16	PHC, Thingsulthliah	17	1	2.1	0.73	2.4	6.23	0	2	1	0	12	0		
17	PHC, Phuaibuang	10	0.24	0.16	0.21	0.08	0.69			1	0	5	0		
18	UPHC ITI	10	0.5	0.25	0.25		1		1	1		1	0		
19	PHC Sialsuk	10	0.32	0.16		0.02	0.5			1		3	0		
20	PHC Reiek	10	0.1	0.06	0.23	0.06	0.45		1	1		5	0		
21	PHC Aibawk	10	1	0.9	0.06	0.01	1.97			1		4	0		
22	PHC, Darlawn	10	0.21	0.41	0.04	0.04	0.7		1	1	0	3	0		
23	PHC Lengpui	10	0.21	0.41	0.04	0.04	0.7		1	1		3	0		
24	PHC Khawruhlian	10	0.13	0.1	0.05	0.05	0.33		1	1		2	0		
25	PHC Suangpuilawn	8	0.32	0.24	0.01	0.01	0.58		2	1		3	0		

26	UPHC Zemabawk	7	1	0.02	0.02	0.02	1.06			1			0		
27	UPHC Sihphir	6	0.08	0.008	0.016	8.3	8.404		1	1		6	0		
28	PHC Kanhmun	6	0.08	0.03	0.002	0.01	0.122		1	2		3	0		
29	PHC Sairang	6	0.53	0.33	0.31	0.3	1.47			1		1	0		
30	PHC Phullen	6	0.2	0.13	0.05	0.05	0.43		1	1		2	0		
31	UPHC Chawlhthum	4	0.96	0.31	0.43	0.12	1.82		1	1		1	0		
32	UPHC Hlimen	4	0.04	0.01	0.02	0.002	0.072		1			2	0		
33	UPHC Lawipu	2	0.5	0.3			0.8		1			2	0		
34	Eye Care Community Centre	NB	5.02		0.5	0.5	6.02		1	1		2	0		
35	J.C.Eye Hospital	NB	0.3	0.5	0.1		0.9		1	1		2	0		
36	Veterinary Polyclinic Hospital	NB	0.26	0.1	0.05	0.02	0.43			1	1	1			
37	Dr. Lal Path Labs	NB	0.82	1.64	0.008	0.002	2.47	0	2	1	0	1	0		
	TOTAL	1785	182.83	228.838	140.336	27.83	579.838 ~ 579.84	1	29	36	0	230	0		
B	KOLASIB														
1	District Hospital, Kolasib	60	23.3	6.2	0	2	31.5	1	1	1	0	8	0	Incinerator	<u>Nil</u>

2	CHC, Vairengte	13	1	0.36	0	0.1	1.46	0	2	1	0	6	0	Autoclave	12.27
3	PHC, Bilkhawthlir	10	0.5	0.1	0.08	0.03	0.71	0	0	1	0	5	0	Deep burial	25.97
4	PHC, Bairabi	10	0.27	0.41	0.21	0.27	1.16	0	2	1	0	3	0	Any other	5.17
5	PHC, Kawnpui	10	0.13	0.1	0.05	0.02	0.3	0	1	1	0	3	0	Total	43.41
6	PHC, Bukpui	10	0.05	0.01	0.01	0.01	0.08	0	0	1	0	4	0		
7	PHC, Lungdai	6	0.02	0.82	0.82	0.54	2.2	0	0	1	0	1	0		
8	Nazareth Nursing Home	20	0.7	1.2	4	0.1	6	0	1	1	0	2	0		
	TOTAL	139	25.97	9.2	5.17	3.07	43.41	1	7	8	0	32			
C	LUNGLEI														
1	Civil hospital, Lunglei	200	7.1	5.4	1.5	5.2	19.2	1 (N/F)	4	2	0	18	0	Incinerator	<u>Nil</u>
2	Tabung Sub-Division Hospital	30						0			0		0	Autoclave	25.99
3	Hnahtlial Sub-District Hospital	30	1.2	3	0.2	1.5	5.9	0	1	1	0	7	0	Deep burial	16.33
4	PHC Bunglei	30						0	1	1	0	10	0	Any other	8.74
5	PHC Buarpui	10	0.05	0.01	0.005	0.005	0.07	0		1	0	7	0	Total	51.06
6	PHC Cherhlun	10	0.26	0.14	0.13	0.08	0.61	0		1	0	1	0		
7	PHC Chhipphir	10	0.08	0.06	0.02	0.01	0.17	0	1	1	0	5	0		
8	PHC Lungsen	10	0.01	0.01	0.008	0.005	0.033	0	1	1	0	1	0		
9	PHC Pangzawl	10	0.21	0.13	0.05	0.05	0.44	0		1	0	1	0		

10	PHC S.Vanlaiphai	10	0.8	0.4	0.15	0.2	1.55	0	1	1	0	3	0		
11	PHC Tawipui S	10	0.3	0.16	0.08	0.16	0.7	0	1		0	1	0		
12	PHC Haulawng	6	0.16	0.65	0.008	0.01	0.828	0	2	1	0	5	0		
13	UPHC Sazaikawn	4	0.01	0.01	0.0008	0.001	0.0218	0			0		0		
14	Christian Hospital. Serkawn	100	5.16	4.3	6	3.5	18.96	0	3	1	0	13	0		
15	John Williams Hospital	29	0.65	0.32	0.16	0.16	1.29	0	1	1	0	5	0		
16	Hope Hospital	35	0.019	0.02	0.02	0.005	0.064	0	1	1	0	2	0		
17	Faith Hospital	30	0.32	0.49	0.41		1.22	0	2	1	0	3	0		
	Total	564	16.329~ 16.33	15.1	8.74	10.886 ~ 10.81	51.0568 ~ 51.06	1	19	15	0	82	0		
D	SIAHA														
1	District Hospital Siahaha	45	17.8	21.36			39.16	1(N/F)	2	1	0	10	0	Incinerator	<u>Nil</u>
2	CHC Chawngte	20	0.53	0.01	0.95	0.01	1.5	0	1		0	2	0	Autoclave	23.16
3	PHC Chhaolo	10	0.19	0.08	0.08	0.07	0.42	0		1	0	1	0	Deep burial	20.24
4	PHC Phura	10	0.21	0.1	0.08	0.08	0.47	0		1	0	2	0	Any other	1.82
5	PHC Tipa	10	0.27	0.13	0.08	0.06	0.54	0		1	0	1	0	Total	45.22
6	PHC Chakhei	10	0.19	0.08	0.08	0.06	0.41	0		1	0	1	0		

7	PHC Sangau	10	0.54	0.27	0.27	0.27	1.35	0		1	0	1	0		
8	PHC Bungtlang 'S'	10	0.43	0.27	0.27	0.24	1.21	0		1	0	1	0		
9	PHC Bualpui NG	6	0.08	0.06	0.01	0.01	0.16	0	2	3	0	4	0		
	Total	131	20.24	22.36	1.82	0.8	45.22	1	5	10		23			
E	MAMIT														
1	District Hospital, Mamit	30	0.41	0.34	0.86	0.19	1.8		1	1	0	5	0	Incinerator	<u>Nil</u>
2	PHC Kawrthah	30	0.95	0.98	0.19	0.04	2.16		1	1	0	1	0	Autoclave	2.34
3	PHC Marpara	11	0.1	0.06	0.13	0.03	0.32		1	1	0	1	0	Deep burial	2.29
4	PHC Rawpuichhip	10	0.21	0.05	0.08	0.02	0.36		1	1	0	1	0	Any other	1.7
5	PHC W.Phaileng	10	0.26	0.26	0.02	0.05	0.59		1	1	0	4	0	Total	6.33
6	PHC Phuldungsei	10	0.16	0.16	0.01	0.02	0.35		1	1	0	4	0		
7	PHC Kawrtethawven g	10	0.06	0.04	0.19	0.01	0.3		1	1	0	1	0		
8	PHC Zawlnuam	10	0.06	0.04	0.19	0.01	0.3		1	1	0	4	0		

9	PHC, kanghmun	6	0.08	0.03	0.03	0.01	0.15			2	0	3	0		
	Total	127	2.29	1.96	1.7	0.38	6.33		8	10		24			
F.	LAWNGTLAI														
1	District Hospital Lawngtlai	30	9.8	2.9	4.9	0.98	18.58	1(N/F)	1	1	0	14	0	Incinerator	<u>Nil</u>
2	CHC, Chawngte	20	0.53	0.01	0.9	0.01	1.45	0		1	0	2	0	Autoclave	12.73
3	PHC, S.Lungpher	10	0.68	0.41	0.54	0.54	2.17	0		1	0		0	Deep burial	14.91
4	Christian Hospital, Lawngtlai	35	2	2	2	2	8	0	1	1	0	4	0	Any other	11.24
5	Lairam Christian Medical Centre & hospital	70	1.9	2.9	2.9	0.98	8.68	0		1	0	5	0	Total	38.88
	Total	165	14.91	8.22	11.24	4.51	38.88	1	2	5		25			
G	CHAMPHAI														
1	District Hospital, Champhai	75	11.43	7.06	3.66	1.19	23.34	1(N/F)		1	0	11	0	Incinerator	<u>Nil</u>
2	CHC, Ngopa	30	0.54	0.35	0.32	0.27	1.48	0	1	1	0	4	0	Autoclave	15.4
3	CHC, Khawzawl	21	0.5	0.17	0.55	0.05	1.27	0		1	0	1	0	Deep burial	20.43
4	CHC, Biate	30	0.8	0.2	0.12	0.04	1.16	0		1	0	4	0	Any other	7.21

5	PHC, NE Khawdungsei	10	0.68	0.54	0.6	0.41	2.23	0	1	1	0	2	0	Total	43.04
6	PHC, Kawkulh	10	0.5	0.3	0.27	0.27	1.34	0		1	0	2	0		
7	PHC, Sialhawk	10	0.65	0.32	0.32	0.06	1.35	0	4	1	0	6	0		
8	PHC, Hnahlan	10	0.49	0.27	0.27	0.27	1.3	0		1	0	2	0		
9	PHC, Khawhai	10	0.32	0.19	0.24	0.24	0.99	0		1	0	6	0		
10	PHC, Farkawn	10	0.54	0.27	0.27	0.27	1.35	0		1	0	1	0		
11	PHC, Mimbung	10	0.16	0.1	0.01	0.005	0.275	0		1	0	1	0		
12	PHC, Rabung	6	0.49	0.19	0.32	0.27	1.27	0	1	1	0	1	0		
13	PHC, Khawbung	6			0.1	0.2	0.3	0	1	1	0	6	0		
14	PHC, Bungzung	6	3.33	1.83	0.16	0.06	5.38	0	2	1	0	3	0		
	Total	244	20.43	11.79	7.21	3.605 ~3.61	43.035 ~43.04	1	10	14		50			
H	SERCHHIP														
1	District Hospital Serchhip	60	0.27	3.7	3.3	0.3	7.57		1	1	0	11	0	Incinerator	<u>Nil</u>
2	CHC Thenzawl	30	0.8	0.6	0.6	0.3	2.3			1	0	4	0	Autoclave	12.79
3	PHC N.Vanlaiphai	10	0.16	0.8	0.01	0.008	0.978		1	1	0	5	0	Deep burial	5.22
4	PHC E.Lungdar	10	0.03	1		0.03	1.06			1	0	1	0	Any other	4.95
5	PHC Ngentiang	10	0.03	0.6	0.03	0.03	0.69			1	0	1	0	Total	22.96
6	PHC.Chhingchhip	10	3.9	3.9	0.98	0.49	9.27			2	0	2	0		
7	PHC Khawlailung	10	0.03	1	0.03	0.03	1.09			1	0	1	0		

	Total	140	5.22	11.6	4.95	1.188 ~ 1.19	22.958 ~22.96		2	8		25			
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Part 4 . INFORMATION ON COMMON BIO_ MEDICAL WASTE TREATMENT FACILITY FOR 2018

Sl. no	Name & add. Of the CBWTF with contact person name & telephone no	GPS coordi nation	Covered area by CMWTF's	Name of the cities/ areas covered by CBWTF	Total No of HCF being covered	Total No of beds covered	Total quantity of BMW collected & treated and disposed off (in kg/day)	Treatment equipment/ facility installed in CBWTF			Total BMW treated in kg/day	Method of disposal & treatment
								Equipment	Nos	total installed capacity in kg/day		
	NIL	N/A	N/A	N/A	N/A	N/A	N/A	Incinerator			N/A	Incinerator ash. NIL Quantity disposed by NIL
								Plasma Pyrolysis				
								Autoclave	NIL	NIL		
								Hydroclave	NIL	NIL		
								Microwave	NIL	NIL		
								shredder	NIL	NIL		
								Sharps /encapsulation or concrete pit	NIL	NIL		
								deep burial	NIL	NIL		
								Any other equipment	NIL	NIL		
								ETP	NIL	NIL		
								Sub- Total	N/A	N/A		

NOTE: As no CBMWTF is available in the state and since the Government incinerator is non- functional most of the time, cytotoxic vials @ 345kg/annum from Mizoram State Cancer Institute is transported to M/S Fresh Air, Guwahati for disposal.