



KERALA STATE POLLUTION CONTROL BOARD

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

Pattom P.O., Thiruvananthapuram – 695 004

പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004

PCB/HO/EE-1/BMW/AR-2017/10/2018

Date: 26 /12/2018

From,
The Member Secretary

To,
Member Secretary
Central Pollution Control Board
Parivesh Bhawan, East Arjun Nagar,
Delhi-110032

Sub: Submission of Annual Report on Bio-Medical Waste Management for the
year 2017

Ref: Letter no:B-31011/BMW(2.22)/2018/WMD-I dated 11.09.2018

Sir,

Kind attention is invited to the letter under reference wherein the Annual Report for Bio Medical Waste Management for the year 2017 was sought. The annual report for Bio Medical Waste Management for the year 2017 is submitted herewith in Form IV A.

Encl: As above

Yours faithfully,

MEMBER SECRETARY(I/C)

(See rule 13(2))

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

(1) Name of the Organisation : Kerala State Pollution Control Board

(2) Name of the Nodal Officer with contact telephone number and e-mail : @gmail.com

(3) Total no. of Health Care Facilities / Occupiers : 9628

(i) Bedded Hospitals and Nursing Homes (bedded) : 2130

(ii) Clinics, dispensaries : 5280

(iii) Veterinary Institutions : 150

(iv) Animal houses : 1

(v) Pathological Laboratories : 882

(vi) Blood banks : 14

(vii) Clinical establishment : 955

(viii) Research Institutions : Nil

(ix) AYUSH : 216

(4) Total no. of beds : 102086

(5) Status of authorisation :

(i) Total number of Occupiers applied for authorisation : 4845

(ii) Total number of Occupiers granted authorisation : 4763

(iii) Total number of application under consideration : 79

(iv) Total number of applications rejected : 2

(v) Total number of Occupiers in operation without applying for authorisation : 704

(6) Quantity of Bio-medical Waste Generation (in 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) : 127442

(ii) Bio-medical waste generation by non-bedded hospitals (in kg/day) : 27826.3

(iii) Any other : Nil Total : 40,990 Kg/day

(7) Bio-medical waste treatment and disposal :

(a) By Captive bio-medical waste treatment and disposal by Health Care Facilities (please enclosed details as per (Part – 3)

(i) Number of Health Care Facilities having captive treatment and Disposal facilities : 20

(ii) Total Bio-medical waste treated and disposed by captive treatment facilities in kg/day : 3368.38

(b) Bio-medical waste treatment and disposal by Common Bio-medical waste Treatment Facilities (please enclose details as per Part 4)

(i) Number of Common Bio Medical Waste Treatment Facilities in Operation : 1

(ii) Number of Common Bio Medical Waste Treatment Facilities under construction :

(iii) Total bio-medical waste treated in kg/day : 35.5 tonne/day

(iv) Total treated bio-medical waste disposed through authorised recyclers (in kg/day) : 4109752 kg/annum

(8) Total no. of violation by :

(i) Health Care Facilities (bedded and non-bedded) : Nil

(ii) Common Bio Medical Waste Treatment Facilities : Nil

(iii) Others (please specify) :

(9) Show cause notice / direction issued to defaulter :

(i) Common Bio Medical Waste Treatment Facilities : Nil

(ii) Others : 31

(10) Any other relevant information

(i) Number of workshops/trainings conducted during the year :

(ii) Number of occupiers installed liquid waste treatment facility : 3144

(iii) Number of captive incinerators complying to the norms : 14

(iv) Number of occupiers organised trainings : 5890 by IMAGE

(v) Number of occupiers constituted Bio-medical Waste Management Committees :

(vi) Number of occupiers submitted Annual Report for the previous calendar year : 1874

(vii) Number of occupiers practising pre-treatment of lab microbiology and Bio-technology waste : 949

(viii) Number of Common Bio Medical Waste Treatment Facilities that have installed Continuous Online Emission Monitoring Systems : 1

Part 2: District – wise Bio-medical Waste Generation (for the previous calendar year 2017)

Sl. No	Name of the district	Name of the State/Union Territory	Bio-medical Waste Generation (in Kg/day)	Existing Total bio-medical Waste Treatment capacity both captive and CBMWTF) kg/day	
1.	Trivandrum	Kerala	4278		
2.	Kollam	Kerala	3448		
3.	Pathanamthitta	Kerala	2244.9		
4.	Alappuzha	Kerala	2060		
5	Kottayam	Kerala	3418		
6	Idukki	Kerala	1469		
7	DO-1 Ernakulam	Kerala	6341		
8	DO-2 Ernakulam	Kerala	1183		
9	ESC Eloor	Kerala	273		
10	Thrissur	Kerala	3646		
11	Palakkad	Kerala	1185		
12	Malappuram	Kerala	2678		
13	Kozhikode	Kerala	3190		
14	Wayanad	Kerala	728		
15	Kannur	Kerala	1441		
16	Kazargode	Kerala	568.11		

Quantity of Bio-medical Waste Generation (in kg/day)	Total installed Treatment Capacity in kg/day
Part 3: Information on Health Care Facilities having captive treatment facilities (for the previous calendar Year 2017)	

Part 3: Information on Health Care Facilities having captive treatment facilities (for the previous calendar Year 2017)											
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 bio-medical treated and disposed by Health Care Facilities in Kg/day
		Yellow	Red	Blue	White	Total Bio-medical waste generated (in Kg/day)	Incinerator	Autoclave	Deep burial	Any other	
	Trivandrum					302	100				Incinerator Autoclave
	1 Gokulam MC, Venjaramood										Deep Burial Any other Total
	Idukki										Incinerator
	1 Holi Family Hospital, Muthalakodam		62.81	174.24		0.395	237.445				Autoclave Deep Burial Any other Total
											Incinerator
	Morning star Hospital,										Autoclave
	2 Adimali		14.42	0.65		5.59	20.66				Deep Burial Any other Total
	Malapuram						32				Incinerator
1	MES Medical College & Hospital Perinthalmanna										

[illegible]

Jubilee Mission medical College, Bishop Alappat Road, Jubilee Mission P.O., Thrissur	227.78	45	105.56	85	463.34	25	1 No.	1No.
St. James Hospital, Chalakkudy	74.9	4	6.5	3	88.4	150	1 No.	1No.
Maria Theresa Hospital, Kuzhikattusse	20	50		1	36	25	1 No.	1No.
St. Joseph's Hospital, Choondal	3	3.2	0.5	0.5	7.2	75	1 No.	1No.
Mary Immaculate Mission Hospital, Engandiyur	22.22	4.17	9.7	6.9	42.99	100	2No.	1No.
Sanjose Parish Hospital,Pava	69			20	2	91	20	1 No.
rtty								

Bishop Alappat Mission Hospital, Karanchira, Kattoor	1.9	1.33	0.33	0.4	3.96	50	1 No.	1No.	Incinerator	
Ernakulam DO 1									Sheddett-1020	Autoclave
Amrita Institute of Medical	676		273.49	26	975.49	100 kg/hr (1000L	Contract with KEIL	kg/hr.	Deep Burial	
Little Flower hospital and Research Centre	138		10	34	182	810 L(2	shedder-100m3		Any other	
2 Angamaly	814		283.49	60		1.5 nos.)			Total	
Ernakulam DO-2										
St. Joseph Hospital, Kothamangalam	6	6	9	0.8	21.8	6 kg/day	10 kg/cycle	.8 kg/day		
Nirmala Medical Centre, Muvattupuzh	10	3.5		1.5	15	30kg/cycle	1 kg/Annum	nil		
Samaritan Hospital	11	12	1	1.25	25.25	100 kg/hr	20			

Sanjose Hospital, Peru	4	5	6	5.5	20.5	50 kg/hr	102 kg/Annum			
MOSE Hospital, Kolenchery	167	85	21	9.05	273	150 kg/hr	600 ltr/hr.			
	198	111.5	37		355.55					Total

Part 4: Information on Common Bio-Medical Waste Treatment and Disposal Facilities (for the previous calendar Year)

Sl No	Name and Address of the Common Bio Medical Waste Treatment Facilities with contact person name and telephone number	GPS Coordinators	Coverage Area in KMS	Name of the cites/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/Plastic)
1.	IMAGE,CBWT F,Manthuruthi,Kanjikode West,Palakkad,678623	Latitude-10°48'54"N Longitude 76°43'34" E		Alappuzha, Ernakulam, Idukki,Kannur,Kazargode,Kollam, Kottayam,Kozhikode,Malappuram, Palakkad,Pathanamthitta,Thrissur ,Trivandrum,Wayana d	8725	86851	12976875 kg/annum	Equipment	Numbers	Total installed capacity (kg/day)		
								Incinerator	5	33 tonne/day		Incineration Ash : Quantity : Disposed By
								Plasma Pyrolysis	nil			Sharps Quantity Disposed by
								Autoclave	5	15 ton/day		Plastics Quantity Disposed By
								Hydroclave	nil			ETP sludge quantity Disposed by
								Micro wave	nil			
								Shredder	3	15 tonne/day		
								Sharps Encapsulation or concrete pit	1	300 kg/day		
								Deep burial pits				
								Any Other equipment				
								Effluent Treatment plant				
								Sub-total	14			

- Total number of transportation vehicles used for collection of Bio-medical Waste on daily basis by the Common Bio-Medical Waste Treatment Facilities :50
- List of Health Care Facilities not having membership with the Common Bio-Medical Waste Treatment Facilities and neither having captive treatment facilities :
- Number of training organized by the Common Bio-Medical Waste Treatment Facility operators :5890
- Number of Accidents reported by the Common Bio Medical Waste Treatment Facilities :nil