

### TAMIL NADU POLLUTION CONTROL BOARD

#### **Bio Medical Waste Management**

#### Annual Report - January to December 2021

#### FORMAT - IV A

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 31<sup>st</sup> July of every year for the period from January to December of the preceding calendar year 2021)

#### Part -I (summary of Information)

1	Name of the organization	:	TAMILNADU POLLUTION CONTROL BOARD
2	Name of the Nodal Officer with contact telephone number and e-mail		Er. R. Sarasavani, Joint Chief Environmental Engineer, 8056042464 jceewmtnpcb@gmail.com
3	Total No. of health care facilities/occupiers		26597
1	Bedded hospitals and nursing homes (bedded)		7601
ii	Clinics dispensaries		10537
iii	Veterinary institutions	156	1625
iv	Animal beds	0.00	24
V	Pathological laboratories	JI.	2046
vi	Blood banks		46
/ii	Clinical establishment	9.1	4636
/iii	Research Institutions		13
X	AYUSH	:	69
4	Total No.of beds	:	145848
5	Status of authorization	:	
i	Total number of occupiers applied for authorization		26480
ii	Total number of occupiers granted authorization		26393
iii	Total number of application under consideration		53
٧	Total number of applications rejected		34
V	Total number of occupiers in operation without applying for authorisation	:	117

6	Quantity of Bio Medical Waste generation (in kg/day)	1	45215.93 (including COVID 19 BMW - 9716.76)
i	Bio-medical waste generation by bedded hospitals (in kg/day)		37627.43
ii	Bio-medical waste generation by non-bedded hospitals (in kg/day)	1	7588.5
iii	Any other	:	Nil
	Total		
7	Bio-medical waste treatment		Control of the second second
	and disposal		The state of the s
а	By captive bio-medical waste treatment and disposal by Health Care Facilities	:	NIL
1.7	Number of Health care facilities having captive treatment and disposal facilities		NIL
li	Total bio medical waste treated and disposed by captive treatment facilities in kg/day	•	NIL
(b)	Bio Medical Waste treatment & disposed by CBMW facility as per Part-4)		
i	No.of CBMW treatment facilities in operation		10 are in operation (Out of 12 CBMWTFs, two facilities were issued with closure direction for not compliance provisons of BMWM Rules, 2016) However, the BMW generated from the HCFs in the Nilgiris district are collected and handed over to the M/s. Kovai Biowaste Management (P) Ltd Coimbatore and from Ramanathapuram district are collected and handed over to the M/s. Ramky Energy and Environment Ltd., Virudhunagar for treatment and disposal)
ii	No.of CBMW treatment facilities under construction	•	3
iii	Total bio-medical waste treated in kg/day		
iv	Total treated bio-medical waste disposed through authorized recyclers (in kg/day)	•	45215.93
8	Total No.of violation by		Total las
i	Health Care facilities (bedded and non-bedded)	•	21
ii	CBMW Treatment facilities	:	Nil
iii	Others (Please specify)		Nil
9	Show cause notice/direction issued to defaulter	•	
i	CBMW treatment facilities	100	Nil
ii	Others		Non-bedded (19) and Bedded (2)
10	Any other relevant information		
1	No.of workshop/trainings	:	47
4.0	conducted during the year	10.	
ii	No.of occupiers installed liquid waste treatment facility		6952 Nos. and Other occupiers  1. Discharge the effluent into public sewer after disinfection with Sodium Hypochlorite.

			solution/ UV sterilizer  2. Discharge the effluent into combined STP after disinfection with Sodium Hypochlorite solution/UV sterilizer  3. Discharge the effluent onland for gardening after disinfection with Sodium Hypochlorite solution/UVsteriliser
iii	No.of captive incinerators complying to the norms		Nil
iv	No.of occupiers organized trainings	:	2392
٧	No.of occupiers constituted BMWM Committees	:	7356
νi	No.of occupiers submitted Annual Report for the previous calendar year		2044 Nos. Further, the occupiers are uploading the BMW annual report in their website as per the BMWM Rules, 2016
vii	No.of occupiers practicing pre- treatment of lab microbiology and Bio-technology waste	·	All the bedded hospitals, pathological laboratories, blood banks and Research Institutions are practicing pre-treatment of lab microbiology and biotechnology waste by disinfection before handing it over to the CBMWTFs
viii	No. of CBMW Treatment Facilities that have installed Continuous Online Emission Monitoring Systems	•	10

# Part 2 District – wise Bio Medical Waste Generation (for the previous calendar year 2021)

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				
	Tamil Nadu	Chapter State (1, 1) and the state of the st		Equipment	Total			
1.		Chengalpattu	2935	Incinerator	26200 kg/day			
2.		Chennai & Ambattur	10944	Autoclave	13800 kg/day			
3.		Cuddalore	594.5	Deep	Nil			
4.		Kancheepuram	861	Burial				
5.		Tiruvallur & Gummidipoondi	1357.93	Any other				
6.		Villupuram	785.5					
				Equipment	Total			
7.		Coimbatore	7130	Incinerator	11000 kg/day			
8.		Tiruppur	1294	Autoclave	8400 kg/day			
9.		Nilgiris	410	Deep Burial	Nil			

			Any other	
			Equipment	Total
10.	Dharmapuri	335	Incinerator	3300 kg/Day
11.	Krishnagiri	294	Autoclave	2600 kg/Day
12.	Karur	287	Deep	
13.	Erode & Perundurai	514	Burial	Nil
14.	Namakkal	190	Any other	
15.	Salem & Kumarapalayam	660		
			Equipment	Total
16.	Kanyakumari	1502	Incinerator	4400 kg/Day
	Ranyakuman	1502	Autoclave	2400 kg/Day
17.	Thoothukudi	687	Deep Burial	Nil
18.	Tirunelveli	1430	Any other	<u> </u>
The state			Equipment	Total
19.	Madurai	2306.5	Incinerator	3300 kg/day
20.	Dindigul	506.5	Autoclave	1600 kg/day
21.	Theni	418	Deep	Nil
22.	Ramanathapuram	378	Burial	
23.	Virudhunagar	390	Any other	1 -
The few			Equipment	Total
24.	Nagapatinam & Tiruvarur	515	Incinerator	3300 kg/day
25.	Thanjavur	630	Autoclave	2000 kg/day
26.	Trichy	1040	Deep	Nil
27.	Ariyalur & Perambalur	390	Burial	
28.	Pudukottai	215	Any other	
29.	Sivagangai	322		
		HH.	Equipment	Total
	Vollera Deninet 9		Incinerator	5500 kg/day
30.	Vellore, Ranipet & Vaniyambadi	5299	Autoclave	3600 kg/day
	varnyanibadi		Deep Burial	Nil
31.	Tiruvannamalai	595	Any other	

• The entire quantity of Biomedical wastes generated is treated and disposed through 10 CBMWTFs presently in operation.

# Part 3 information on Health care facilities having captive treatment (for the previous calendar year 2021)

No Health Care Facilities in Tamil Nadu have Captive treatment facility.

S,No.	Name and address of the Health care facility	Yellow	Red	Blue	White	Total bio- medical waste generated (in kg/day	Incinerator	Autoclave	Deep Burial	Any	Total bio medical Waste treated and disposed by Health care facilities in kg/day			
NII														
						Miles and the second of the se		1			any other			

### Part 4 information on Common Bio medical waste treatment and disposal facilities (for the previous calendar year 2021)

S	Name and Address of the	GPS	covera	Name of the	Total	Total	Total quantity of	Capacity of treatr	ment anuma	nte inetallad hv	Total bio	Method of disposal of treated
No	common bio Medical Waste treatment facilities with contact person name	coordinat	ge Area in KMs	coveredby CBMWTFs	number of Health care	number of beds covered	waste Collected from member Health care facilities (in kg/day)	common bio medical waste treatment facilities			medical waste treated in Kg/day	wastes (incineration ash/sharps /plastics)
	and telephone number				facilities Being covered			Equipment	Numbers	Total installed capacity (kg/day)		
1	M/s. G.J Multiclave (India) Pvt Ltd, Thenmelpakkam,	12 74449 0° 80 03324	80	Chengalpattu District, Parts of Chennai District.	3954	21888	12194	Incinerator	2	10800 Kg/day	12194	Incineration Ash disposed through TSDF      Share disposed in Share size.
	Chengalpattu Taluk, Chengalpattu District.	5°		Parts of Kancheepuram				Plasma Pyrolysis	=		à=E-	
	Mr. Siva Kumar Mobile No: 98409196971			District				Autoclave	2	8000 Kg/day		Sharps disposed in Sharp pits
								Hydroclave				3. Plastics disposed through
						_		Microwave			, =	Authorised rcycler
			7.8					Shredder	2	6000 kg/day	2	
				=				Sharps encapsulation or concrete pit	552	-		
								Deep burial pits		1.00		
						-		Any other equipment	ACCOUNT CONTACTOR OF THE PROPERTY OF THE PROPE	-		
								Effluent treatment plant	, 1	25 KLD		
_								Sub-total				
2	M/s.Tamilnadu waste management ltd, Servey	12.52998 7°	105 kms	Parts of Kancheepuram	2348	8591	4481.93	Incinerator	1	4400 Kg/day	4481.93	1. Incineration ash - disposed
	No.29/2, 3, K.K.Pudur Road, Kinar village, Chengalpattu Dist.	79 95400 9°	-	District, Thiruvallur District,				Plasma Pyrolysis	()	_	•	through TSDF
	No. of the second			Maduranthagam				Autoclave	1	3240 Kg/day		2. Waste sharps – Sharp pits
	Mr.Sridhar Reddy Mobile No:9047011161			Taluk of Chengalpattu				Hydroclave				
	4			District,				Microwave	572/	877		3. Plastics - Disposed through
				Parts of Cuddalor District and Villupuram				Shredder	2	1760 kg/day & 1760 kg/day		recyclers
				and Villupuram Districts				Sharps encapsulation or concrete pit	2			

						ļ	I	Deep burial pits				
								Any other equipment				
	45							Effluent treatment plant	1	10 KLD		
								Sub-total				
3	M/s. Ken Biolinks Pvt Ltd,	13 00168 1 N°	75 kms	Vellore Tiruvannamalai.	1710	10128	5895	Incinerator	1	5500 kg/day	5895	Incineration ash - disposed through TSDF
	1/150, SLRS Hospital Road,	79 19436 3 E°		Ranipet. Tirupathur				Plasma				
	Kandipedu Village, Katpadi Taluk,			Districts				Pyrolysis Autoclave	1	3600 Kg/day		2 Waste sharps – Sharp pits
	Vellore District.							Hydroclave	<u> </u>	3000 Rg/day		
	Mr. SHIVA							Microwave				3 Plastics – Disposed through
	SUBRAMANIAN +91-99623-11011							Shredder	2	2200-3300 kg/day		recyclers
								Sharps encapsulation or concrete pit	8	Kg/day		
								Deep burial pits				
								Any other	1-Needle	60 Needles /		
						` =		equipment	tip cutter or destroyer	Hour		
									1-Chemical disinfection	Hypo Dosing System - 100 Its	*	
								Effluent treatment plant	1	15 KLD		1:1 14
								Sub-total				
4	M/s. Medicare Enviro	10.7141°	140	Thanjavur,	4035	23560	3100	Incinerator	1	3300 Kg/day	3100	1. Incineration ash - disposed
	System,	N 78.9557°	Kms	Trichy, Pudukottai,				Plasma	-			through TSDF
	Sengipatti Village, Thanjavur Taluk,	E		Sivagangai,				Pyrolysis				
	Thanjavur Dt.			Nagapatinam, Tiruvarur,				Autoclave	1	2000 Kg/day	-	2 Waste sharps – Sharp pits
	Mr. K.Velmurugan,			Ariyalur &				Hydroclave				
	9600288998			Perambalur				Microwave			Y	3 Plastics - Disposed through
								Shredder	1	1100 kg/day		recyclers
						-		Sharps encapsulation or concrete pit	8			
								Deep burial pits		1		

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								Any other equipment	HR.				
							85)	Effluent treatment plant	1	1 5 KLD			
								Sub-total					
5	M/s. Ramky Energy &	9 69 N	250 KM	Madurai Dt	2646	11802	3831	Incinerator	1	3300 Kg/day	3831 + 180	1 Incineration ash - dispose	
	Emvironment Ltd., Undrimikidikulam, Aruppukottai Taluk,	79 24 E		Virudhunagar Dt Dindigul Dt Theni Dt & Govt				Plasma Pyrolysis	-	1	handed over by the	through TSDF  2. Waste sharps – Sharp pits  3. Plastics – Disposed through	
	Virudhunagar District.			Hospitals in Ramnad				Autoclave	1	1600 Kg/day	CBMWTF M/s Neat and		
	Mr. Mohan							Hydroclave			Clean Service		
	9677122723							Microwave	940		Squad Keelakottai		
								Shredder	2	2200 & 1650 kg/day	Village, Paramakudi Taluk,	recyclers	
				*				Sharps encapsulation or	2	-	Ramanathapu ram District for the		
							*	concrete pit			treatment and		
					7			Deep burial pits	755		disposal)		
-		4						Any other equipment		-			
								Effluent	1	5 KLD			
				_				treatment plant					
		1			= 1.5			Sub-total					
6	M/s. Aseptic System Bio Medical Waste	77.73575	100 KM	Tirunelveli Dt.	2530	22766	3619	Incinerator	1	4400 Kg/day	3619	1. Incineration ash - dispose	
	Management Co.,	° N 8 47752°		Tuticorin Dt Kanyakumari				Plasma				through TSDF	
	Pappankulam Village,	E		Dt. & Tenkasi				Pyrolysis					
	Nanguneri Taluk, Tirunelveli District.		-	Dt.				Autoclave	1	2400 Kg/day		2. Waste sharps – Sharp pits	
	Thunciven District.			-				Hydroclave					
	Mr. Murugan			= 1				Microwave				3. Plastics - Disposed throug	
	7373715160							Shredder	1	4400 kg/day		recyclers	
	,	7373715180							Sharps encapsulation or concrete pit	42			
	,												
	7			· m				Deep burial pits	1				
				v v			-	Deep burial pits  Any other equipment	( <del>)                                     </del>			4 - T	
				Y .	-			Any other		15 KLD			

7	W/s.Teknotherm		75 Kms	Coimbatore, &	969	14000	7354	Incinerator	1	5500 Kg/day	7354	1 Incineration ash - disposed
	ndustries, 183/1A,			Tiruppur				Plasma				through TSDF
	Orattukupai Village.,			Districts				Pyrolysis				
1	Chettipalayam Village.,						*	Autoclave	1	4000 Kg/day		2 Waste sharps – Sharp pits
	Podanur, Coimbatore.							Hydroclave	3,50			
								Microwave				3 Plastics - Disposed through
	Mr. Sudhakar							Shredder	1	2200 kg/day		recyclers
	9626822000							Sharps	1	1		
								encapsulation or concrete pit				
								Deep burial pits				
								Any other equipment	**			
								Effluent	1	25 KLD		
								treatment plant				
								Sub-total		1		
8	M/s.Ramky Energy And	11.55293	100	Salem	4844	21143	2280	Incinerator	1	3300 Kg/day	2280	Incineration ash - disposed
	Environment Ltd,	7,	kms	Dharmapuri				Plasma			through  2 Wast  3 Plast	through TSDF
		77.85079 4		Krishnagiri Namakkal Karur Erode				Pyrolysis				Waste sharps – Sharp pits     Restreet Proceed through
							-	Autoclave	1	2600 Kg/day		
	M.D.Selvapandian,							Hydroclave	-			
	Ph:9840939811,							Microwave				Plastics – Disposed through recyclers
								Shredder	2	1100 Kg/ day and 2200 Kg/day		recyclers
								Sharps	2	-	1	
								encapsulation or concrete pit				
								Deep burial pits		-		
						-		Any other		-	1	
								equipment				
								Effluent	1	1.8 KLD	-	
								treatment plant				
								Sub-total			1	
9	Society for Bio Medical		-		292	1007	30	Incinerator			The CBMWTF	now under closure. All the waste
	Waste Management					1000000		Plasma		+	collected were handed over to M/s. Ko	
	Ottupattarai Village, Coonoor.	-						Pyrolysis		3		gement P Ltd., Coimbatore for
	(IMA Nilgiris)							Autoclave	==	:==	treatment and o	disposal
								Hydroclave				

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	Dr. Muralidharan	T	1				T	Microwave		T		
	9443475946							Shredder		<u> </u>		
								Sharps				
								encapsulation or				
		la V						concrete pit				
				-				Deep burial pits				
								Any other				
								equipment				
1								Effluent	771			
								treatment plant				
								Sub-total		<u> </u>		
10	M/s Neat and Clean	9°26'08.5	75 Km	Ramanathapura	322	1339	180	Incinerator	7.5	<del> </del>	The CBMWTF now und	er closure All the waste
	Service Squad, Keelakottai Village,	"N		m (Private				Plasma	55:		collected were handed over to M/s Ramky E	ver to M/s Ramky Energy
	Paramakudi Taluk,	78°40'37 8"E		Hospitals), Sivagangai (Manamadurai				Pyrolysis			and Environment Lim treatment and disposal	ited, Virudhunagar for
	Ramanathapuram							Autoclave		1	treatment and disposal	
	District			Town Panchayat alone)				Hydroclave		+		
	Mr. Pathy							Microwave		+		
- ,	8220013008							Shredder		-		
								Sharps				
								encapsulation or	***			
								1 22				
								concrete pit				
								Deep burial pits	* '			
								Any other				
								equipment				
								Effluent				
							*	treatment plant	nt			
								Sub-total				54
11	M/s.Kovai Bio Waste	Lat 10.93	1075	Tiruppur,	2227	410	1540	Incinerator	1	5500 Kg/day	1540 + 30 (collected	1. Incineration ash -
	Management P Ltd.,	6115 Long	sq.km	Coimbatore &				Plasma			and handed over by	disposed through
	SF No.87/2, Orattukupai Village., Chettipalayam	77.04663		Nilgris Districts				Pyrolysis			the CBMWTF M/s	TSDF
	Village., Podanur,	5		= }				Autoclave	1	4400 Kg/day	Society for Bio Medical Waste Management	72.0
	Coimbatore.							Hydroclave	· ·	4400 Rgraay	Ottupattarai Village	2 Waste sharps -
	<u>== 10.020</u>										Coonoor for the	Sharp pits
	Tmt. Bhuvaneswari 9894012222						1	Microwave			treatment and disposal)	Silary pits
	3034012222							Shredder	1	2200 kg/day		2 01
								Sharps	1			Plastics – Disposed through recyclers
								encapsulation or				
3.7								concrete pit				
								Deep burial pits		1		
- 1		1				I		A THE RESERVE TO BE A STATE OF THE PARTY OF				

												* *
								equipment				0
								Effluent treatment plant	1			
								Sub-total				
12	M/s. Pondicherry Solid Waste Management Company Private Limited, S.F.NO.275/2, T. Pudaiyur village, Virudhachalam Taluk, Cuddalore District  Latit 11 5 75 17155. Long 79 1 96589	17155	75	Cuddalore Villupuram Kallakurichi,	720	2694	787	Incinerator	1	10000 Kg/day	787	1 Incineration ash - disposed through
		Arıyalur, Perambalur				Plasma Pyrolysis	200			TSDF		
			15		×		İ	Autoclave	1	2560 Kg/day		Waste sharps – Sharp pits
								Hydroclave				
								Microwave				
					12			Shredder	1 5500 Kg/day	= 0	3. Plastics – Disposed	
					Sharps encapsulation or concrete pit	1	1x1x0.85 m		through recyclers			
								Deep burial pits		-		
						Any other equipment		-	-			
								Effluent treatment plant	1	10 KLD	, , , , , , , , , , , , , , , , , , ,	
								Sub-total				

a.	Total number of transportation vehicle used for collection of bio-medical waste on daily basis by the common bio-medical waste treatment facilities	105
b.	List of health care facilities not having membership with the common bio-medical waste treatment facilities and neither having captive treatment facilities	Nil
C.	Number of trainings organized by the common bio –medical waste treatment facility operators	383
d.	Number of Accidents reported by the common bio medical waste treatment facilities	Nil
	For Member S	a f s love 2 ecretary