

4/2/2016

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 199 of 2014

IN THE MATTER OF:

Almitra H. Patel & Anr

... Petitioners

Versus

Union of India & Ors.

.. Respondents

INDEX

S. No.	Particulars	Pages
1.	Reply affidavit filed on behalf of the Tamil Nadu Pollution Control Board	

Filed by

M. YOGESH KANNA

Advocate for the State of Tamil Nadu
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Place: New Delhi

Filed on:

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI.

O. A. No. 199 OF 2014

Almitra H. Patel & another

....Applicants

Vs

1. The Union of India & others

.... Respondents

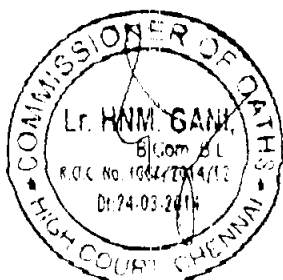
AFFIDAVIT FILED ON BEHALF OF THE TAMIL NADU


POLLUTION CONTROL BOARD

I, S. Charles Rodriquez, son of A.S.Stanislaus Rodriquez, Christian, aged about 56 years, having office at No.76, Mount Salai, Chennai – 32, do hereby solemnly affirm and sincerely state as follows:-

2). I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am filing this Affidavit on behalf of the Tamil Nadu Pollution Control Board and as such I am well acquainted with the facts of the case as per records.

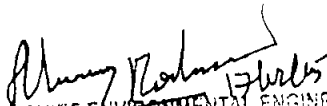
3) It is respectfully submitted that the Tamil Nadu Pollution Control Board has already sent the Annual Report on the implementation of Municipal Solid Wastes (M&H) Rules, 2000 for the year 2014-2015 to the Central Pollution Control Board vide Board's letter 10.12.2015.




JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
76, MOUNT SALAI, GUINDY,
CHENNAI - 600 032.

4). It is respectfully submitted that the said Annual Report of the Tamil Nadu Pollution Control Board is submitted herewith in Annexure.


Under the above circumstances, it is humbly prayed that this Hon'ble National Green Tribunal (Principal Bench) New Delhi may be pleased to pass such further or other orders as this Hon'ble Tribunal may deem fit and proper in this case and thus render justice.

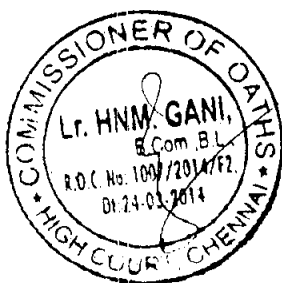

 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMILNADU POLLUTION CONTROL BOARD
 76, MOUNT SALAI, GUINDY,
 CHENNAI - 600 032.
BEFORE ME

VERIFICATION

I, Charles Rodriguez, son of A.S.Stanislaus Rodriguez, working as Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, do hereby submit that the contents of above report are true to the best of my knowledge through records.

Verified at Chennai on this day of December, 2015.


 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMILNADU POLLUTION CONTROL BOARD
 76, MOUNT SALAI, GUINDY,
 CHENNAI - 600 032.




 Lr. HNM. GANI, B.Com., B.L.
 Advocate & Commissioner of OATHS
 Office Law Association,
 Saidapet Court, Little Mount,
 Chennai-600 015. Cell: 9380903886



TAMILNADU POLLUTION CONTROL BOARD

From Dr. K. Karthikeyan, M.Tech. Ph.D, Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai – 600 032.	To The Member Secretary, Central Pollution Control Board, (Ministry of Environment and Forests) Government of India, 'Parivesh Bhawan', C.B.D. Cum-Office Complex, East Arjun Nagar, Shahdara Delhi – 110 032
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Letter No : TNPCB / SWM /32363/ 04 Dated: 10.12.2015


Sir,

Sub : TNPCB – SWM – Implementation of Municipal Solid Wastes (Management & Handling) Rules, 2000 – Annual report furnished for the year 2014-15 – Regarding.

- Ref :
1. CPCB Lr. No. F. No. B-11011/1/PCP/2014-15 dated 15.09.2015
 2. CPCB Lr. No. Tech/24/MSW/SZO/2015-16 dated 13.11.2015
 3. CPCB Lr. No. F. No. B-11011/1/PCP/2014-15 dated 20.11.2015

I am to invite kind attention to the references cited and to enclose herewith the annual report on implementation of Municipal solid Wastes (M&H) Rules, 2000 in the prescribed Form IV for the year 2014-15 for favour of necessary information please.

Encl : As above


for Member Secretary
S. S. S. S.
Secretary



TAMILNADU POLLUTION CONTROL BOARD

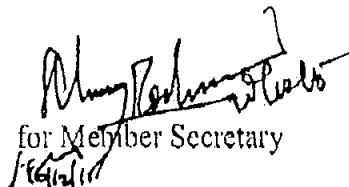
Form - IV

Format of Annual Review Report to be submitted by the State Pollution Control Board/Committees to the Central Pollution Control Board

To

The Chairman,
Central Pollution Control Board,
(Ministry of Environment and Forests)
Government of India,
'Parivesh Bhawan', East Arjun Nagar,
Delhi - 110 032

1. Name of the State : Tamil Nadu
2. Name & address of the State Pollution Control Board/
Pollution Control Committee : Tamil Nadu Pollution Control Board,
76, Mount Road, Guindy,
Chennai - 600 032
3. Number of municipal authorities responsible for
management of municipal solid wastes in the
State/Union territory under these rules : Corporations - 12
Municipalities - 124
Town Panchayats - 528
4. A summary statement on progress made by municipal
authorities in respect of implementation of Schedule I
[rule 4(3)] : Annexure I
5. A summary statement on progress made by municipal
authorities in respect of implementation of Schedule
II [rules 6(1) and (3), 7(1)] : Annexure II
6. A summary statement on progress made by municipal
authorities in respect of implementation of Schedule
III [rules 6(1) and (3), 7(2)] : Annexure III
7. A summary statement on progress made by municipal
authorities in respect of implementation of Schedule
IV [rules 6(1) and (3), 7(2)] : Annexure IV


for Member Secretary

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpccb@md3.vsnl.net.in Web. : www.tnpccb.gov.in

ANNEXURE I

**SUMMARY STATEMENT ON PROGRESS MADE BY MUNICIPAL
AUTHORITIES IN RESPECT OF IMPLEMENTATION OF SCHEDULE-1 OF MSW
(M&H) RULES 2000 [RULE 4 (3)]**

Tamilnadu State Government administers 12 Corporations, 124 Municipalities and 528 Town Panchayats. The total generation of municipal solid waste from the urban local bodies is around 14500 Tonnes per day (TPD) in which, the total waste generation from Corporations is around 9000 TPD, Municipalities is around 3700 TPD and Town Panchayats is around 1900 TPD. The districtwise details of urban local bodies responsible for implementation of Municipal Solid Waste (M&H) Rules 2000 is given in Annexure IA.

In compliance of the MSW Rules, TNPCB has issued authorisation for setting up of municipal solid waste processing facilities to 5 Corporations, 48 Municipalities and 73 Town Panchayats in the State of Tamil Nadu. During 2014-15, 15 Town Panchayats have applied for Authorisation, out of which 11 have been issued. The details of the authorization issued to the Urban Local Bodies in Tamilnadu is provided in Annexure-IB.

Collection, Storage and disposal of MSW in Tamil Nadu:

The urban local bodies at several places have organized collection of MSW by house to house collection, by using collection bins, compactor bins, lorries using dust bins, etc. All the urban local bodies have partly started the source segregation of municipal solid wastes generated in their limits and are partly composting the biodegradable waste. Transport facilities such as dumper placer, tipper lorry, tipper tractor, trucks, etc. have been used by the Corporations for transportation of wastes and in some cases the vehicle are closed or pneumatic compactors are used in few corporation areas. Similarly, Municipalities and Town Panchayats utilize the transport facilities such as tractor trailer, dumper placer, tipper, tricycle, push carts etc. In most urban local bodies the biodegradable wastes are partly composted, segregated plastic waste is used for road laying and remaining waste is dumped in dump yard.

TNPCB collects samples of ground water in the vicinity of the dumpsites and samples of leachate from the dumpsites, as one of responsibilities of monitoring the compliance of standards regarding ground water, ambient air, leachate quality, TNPCB also conducts Ambient Air Quality survey at the landfill site and at the vicinity.

The monitoring reports revealed that the ground water quality with respect to the parameters viz., total dissolved solid, chlorides in the vicinity of the landfill sites pertains to Chennai Corporation, Coimbatore Corporation and Madurai Corporation marginally exceeded the drinking water standards. However, it is submitted that the habitations in the vicinity are provided water supply through the respective ULBs. The Ambient Air Quality survey conducted in the vicinity of the landfill sites reveals that the parameter particulate matter PM₁₀ is marginally exceeded the standards in some of the stations in the above said corporations at particular times. This is being constantly monitored for external factors such as movement of vehicles, wind speed etc.

As per the directions of the CPCB, TNPCB had issued Directions under Section 5 of Environment (Protection) Act, 1986 as amended vide Board Proceeding dated 25.01.2015 to all the Corporations and Municipalities for effective implementation of Municipal Solid Waste (Management & Handling) Rules, 2000.

Waste to Energy Initiatives by ULBs

Koyambedu Biomethanation plant in Chennai Corporation

A demonstration biomethanation plant of capacity 30 tonnes per day was established for biomethanation of vegetable market waste at Koyambedu, Chennai with the contract of collection, segregation, transport, processing and disposal of solid wastes generated from the Koyambedu Market Complex.

Vengadamangalam MSW to Power Project in Kancheepuram District

Integrated Municipal Solid Waste Management for Pallavaram & Tambaram Municipalities project has been proposed in order to generate power from the municipal solid waste. The processing facility was issued with Consent to Establish for processing of

municipal solid waste and to generate Electric Power of 2.9 MW, Refuse Derived Fuel – 3.5 TPH and compost 1.5 TPH by the TNPCB Proc. dated 28.03.2013. During the process, 300 tons per day of unsegregated MSW will be fed into the gasifier plant consisting of pyrolyser which is at 800 °C and in the process, majority of organic portion gets volatized and the inorganic portion along with some organic portion gets converted into char of high calorific value and is delivered out of the system at the bottom. The volatiles generated from organic portion of the municipal solid waste get transferred into Reformer in which Steam is fed to reform the organic volatile gases and degrade them into hydrogen, carbon monoxide and balance methane, carbon dioxide and water vapour. The gaseous mixture is called Syn Gas which is used as fuel to run the gas engines to generate electricity. The unit had been issued with Consent to Operate (Phase-I) for processing of municipal solid waste and to produce Refuse Derived Fuel – 2100 T/M and compost 900 T/M vide Board Proc. No. T13/TNPCB/F.0259MMN/RL/MMN/W/2015 dated 29/05/2015.

Biomethanation plant at Coimbatore Corporation:

The Coimbatore Corporation has installed a bio gas plant to generate energy out of kitchen and market waste at amma unavagam at Saravanampatty. As and when it becomes operative, there will be considerable energy savings, thereby reducing the maintenance cost.

In pursuance of the above project, the work for 5 MT capacity bio-methanation plant at Goundampalayam is under construction and will be commenced soon for producing electrical energy out of market waste. This electrical energy will be gainfully utilized for street lighting.

At Coimbatore the Biogas produced in 3 Biomethanation plants will be utilized for Gasifier Crematorium and School Kitchen & Slum Community kitchen.

Establishment of Regional Facilities:

The Director of Municipal Administration has reported that, detailed Project Reports have been prepared for establishing regional facilities in the 5 identified clusters Tiruchirappalli, Tiruppur, Thoothukudi, Vellore and Nagercoil covering 4 Corporations and 25 municipalities

and the Government has announced to implement the project with a total cost of Rs.631.39crore.

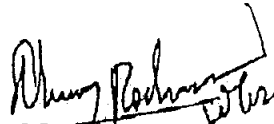
Name of the Cluster	Cluster area	Quantity of Waste in MT	Estimated Cost in L.Rs	Technology Involved
Trichy Corporation	Corporation area + 3 Municipalities Thoraiyur, Manapparai and Thoovakudi	247	123.05	Waste to energy and Scientific Land Fill, Compost Plant, Sorting Plant, Transfer Station & Shared Facilities
Thoothukudi Corporation	Corporation area + 2 Municipalities Kayalpattinam and Kovilpatti	237	94.88	
Tiruppur Corporation	Corporation area + 5 Municipalities Udmalpet, Dharapuram, Vellakoil, Palladam and Kangeyam	633	194.60	
Vellore Corporation	Corporation area + 11 Municipalities Melvisharam, Vaniyambadi, Arakonam, Arcot, Walajapet, Tiruppur, Jolarpet, Gudiyatham, Pernampet, Ranipet and Ambur	230	155.78	
Nagercoil Municipality	Nagercoil Municipality + 3 other Municipalities Kuzhithurai, Padmanabhapuram and Kolachal	127	63.08	

Good MSW initiatives

There are two model plant for sustainable waste management in village panchayats, namely Kurudampalayam village panchayat in Coimbatore District and Panapakkam village panchayat in Vellore District. They have adopted solid and liquid resource management system (SLRM) in which the fresh wastes from households and commercial firms in the village have been collected daily in the morning and evening in the form of biodegradable

and non biodegradable and manually segregated by trained self help group in an earmarked place. About 148 waste items are segregated and sold out to the recyclers thereby generating income from the waste. This model is an example for sustainable waste management system where one waste is used as raw material for another product. The wasted egg shells are dried, crushed into powder and sold out as manure for rose plants, because of its high calcium content. The vegetable peels are sent to cattle farm because of its freshness. Dry leaves and plants are sent for composting and generate manure. The cow dung and other food wastes are sent for biomethanation plant and the gas is used for cooking food for the persons involved in segregation. The project is operated by the ward council and the president of the Panchayat and initially funded by the Government through DRDA Department. This Panchayat is using battery operated vehicles and the batteries are charged by solar power inside the premises. Eventually no waste is ended up in landfill and the locally unemployed women got earning potential through a handful of salary through this project and not only their livelihoods increase, but also their environment has become hygienic and lovable place for them. This pilot project by an NGO needs to be evaluated for sustainability and is being visited by others.

Municipal solid waste management involves an integrated approach which require technical and financial support considering the numbers of low income group residents in the urban areas . It also requires public co-operation and education for effective implementation apart from strict regulatory measures as outlined above. Also, all the Municipal authorities as well as the District Collectors who are responsible for the implementation of the Municipal Solid Wastes (Management & Handling) Rules, 2000 are responsible to identify suitable site for management of municipal solid wastes. Board is co-ordinating in all respects to identify suitable lands, issue of Authorisation, creating awareness among the public for source segregation, establishment of Non-Biodegradable collection centres.

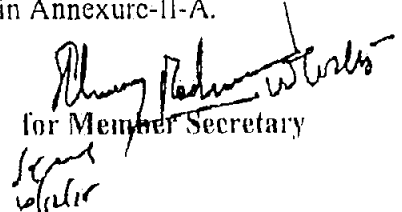

for Member Secretary
1-6-2011
10/11/11

ANNEXURE II
Progress made by municipal authorities in respect of implementation of Schedule II
[rules 6(1) and (3), 7(1)]

All the Municipal authorities have been instructed to take action to stop the disposal of unsegregated municipal solid wastes into low lying areas and water bodies in order to prevent water pollution. Municipal authorities have also been instructed to

- take action for segregating of municipal solid waste at source as wet compostable, dry recyclable, household hazardous, construction debris, inert wastes, etc.
- take action for house to house collection of the segregated municipal solid waste.
- take action for collection of garbage from hotels, office complexes, vegetable markets, fish and meat markets, fruit markets, slaughter houses, etc.
- take action for prohibition of littering and burning of garbage.
- identify a site for biocomposting of municipal solid waste and landfilling inorganic waste.

The urban local bodies at several places have organized collection of MSW by house to house collection, by using collection bins, compactor bins, lorries using dust bins, etc. All the urban local bodies have partly started the source segregation of municipal solid wastes generated in their limits and are partly composting the biodegradable waste. Transport facilities such as dumper placer, tipper lorry, tipper tractor, trucks, etc. have been used by the Corporations for transportation of wastes and in some cases the vehicle are closed or pneumatic compactors are used in few corporation areas. Similarly, Municipalities and Town Panchayats utilize the transport facilities such as tractor trailer, dumper placer, tipper, tricycle, push carts etc. In most urban local bodies the biodegradable wastes are partly composted, segregated plastic waste is used for road laying and remaining waste is dumped in dump yard. The efforts made by the urban local bodies for bringing improvement in waste collection, segregation, storage, transportation and disposal is given in Annexure-II-A.

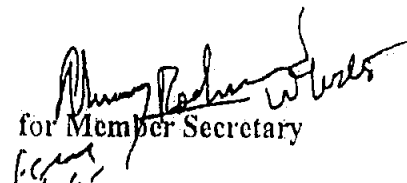

for Member Secretary

ANNEXURE - III

Progress made by municipal authorities in respect of implementation of Schedule III [rules 6(1) and (3), 7(2)]

Among Corporations of Tamilnadu, Coimbatore, Madurai and Salem Corporations have identified and maintaining the landfill facilities with suitable pollution prevention measures. Air and Water Quality monitoring are being monitored for the above three corporations and green belt is provided at the facility. Tirunelveli Corporation has identified the site for landfill and provided road and lighting facilities in the site along with green belt development.

Out of 125 Municipalities, 21 has identified site for landfill facilities and out of 529 Town Panchayats, 92 has identified site for landfill facilities and the local bodies are taking initiatives for setting up of landfill facilities. Other local bodies are identifying landfill site and the major difficulties in identification are availability of suitable land, nearness to water bodies, resistance of local people, etc. The details of landfill site provided at various districts is enclosed in Annexure III-A.


for Member Secretary

ANNEXURE IV

A SUMMARY STATEMENT ON PROGRESS MADE BY MUNICIPAL AUTHORITIES IN RESPECT OF IMPLEMENTATION OF SCHEDULE- IV [RULES 6(1) & 3, 7 (2)]

Out of 664 ULBs in the State of Tamilnadu, most of the local bodies have adopted composting methodologies such as composting and vermi-composting to part of waste & rest goes for dumping. The integrated municipal solid waste processing facility has been implemented for Salem, Coimbatore and Madurai Corporations which provides compost and Refuse Derived Fuel of commercial value. The list of urban local bodies provided with composting and vermin composting is given in Annexure IVA

A demonstration biomethanation plant of capacity 30 tonnes per day was established for biomethanation of vegetable market waste at Koyambedu, Chennai with the contract of collection, segregation, transport, processing and disposal of solid wastes generated from the Koyambedu Market Complex.

Integrated Municipal Solid Waste Management for Pallavaram & Tambaram Municipalities project has been proposed in order to generate power from the municipal solid waste.

The Coimbatore Corporation has installed a bio gas plant to generate energy out of kitchen and market waste at amma unavagam at Saravanampatty. As and when it becomes operative, there will be considerable energy savings, thereby reducing the maintenance cost. In pursuance of the above project, the work for 5 MT capacity bio-methanation plant at Goundampalayam is under construction and will be commenced soon for producing electrical energy out of market waste which will be gainfully utilized for street lighting.

At Coimbatore the Biogas produced in 3 Biomethanation plants will be utilized for Gasifier Crematorium and School Kitchen & Slum Community kitchen.

Salem Corporation processes 350 TPD of waste in an integrated municipal solid waste processing facility located Chettichavadi Village in which the wet organics are converted to

compost and dry organics are processed to produce 'Refused Derived Fuel' (RDF) which is despatched for use as fuel in boiler, cement kiln etc.

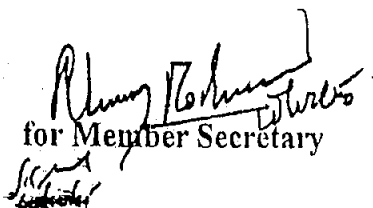
Madurai Corporation has proposed for the improvement of Municipal Solid Waste Management in view of the increasing quantity of non bio degradable waste generation from the city. All non biodegradable combustible waste materials like paper, wood, rexine, rubber, plastic etc will be collected separately and treat in active pyrolysis technology to generate 5.6 MW energy. The Corporation has also proposed to generate methane gas of 5 T by means of bio methanisation technology from organic waste from vegetable markets.

Thanjavur Corporation has proposed to install a bio- digester at a cost of Rs.90 Lakhs for the treatment and disposal of MSW.

Thoothukudi Corporation has proposed to segregate the bio degradable waste for composting, and to use the waste paper and card board for making Refused Derived Fuel. The corporation is also covered in the regional facilities on cluster based approach for Integrated Solid waste management (ISWM) Projects proposed by the Government.

Tirunelveli Corporation has reported that it has a proposal to improve the SWM practices by

- (i) A project of Waste to energy at an estimate of 55 Crores is under pipe line and it will be completed within one year.
- (ii) A project of scientific closure at an estimate cost of Rs.8.16 Crores is under tender processing.
- (iii) A project of Bio methanation at an estimate cost of Rs.90 Lakhs is under progress.


for Member Secretary

Annexure IA
Status of ULB's with respect to MSW Rules in the state of Tamilnadu (Districtwise
Abstract)

Sl. No.	Districts	Corporation		Municipalities		Town Panchayats		Total	
		Nos.	MSW generated (TPD)	Nos.	MSW generated (TPD)	Nos.	MSW generated (TPD)	No. of ULB	MSW generated (TPD)
1.	Chennai	1	5000					1	5000
2.	Coimbatore	1	890	3	107	37	210	41	1207
3.	Cuddalore			5	228	16	15	21	275
4.	Dindigul	1	110	3	74	23	68	27	252
5.	Erode	1	275	4	76	42	159	47	510
6.	Dharmapuri & Krishnagiri			3	158	17	40	20	198
7.	Karur			2	139	11	31	13	170
8.	Madurai	1	680	3	55	9	33	13	764
9.	Kanchipuram			9	442	15	363	24	805
10.	Nagapatinam			4	97	8	22	11	119
11.	Namakkal			5	146	19	65	24	211
12.	Thiruvaur			4	52	7	6.8	11	74
13.	Kanyakumari			4	134	56	59	60	193
14.	Ooty			4	68	11	15	15	75
15.	Pudukkottai			2	55	8	23	10	78
16.	Salem	1	350	4	73	33	120	38	543
17.	Ramnad			4	100	7	35	11	135
18.	Sivagangai			3	69	12	36	15	105
19.	Thanjavur	1	120	2	55	22	75	25	250
20.	Theni			6	77	22	72	28	226
21.	Thoothukudi	1	205	2	44	19	30	22	279
22.	Tirunelveli	1	180	7	121	36	38	44	339
23.	Tiruppur	1	508	5	117	16	53	22	678
24.	Tiruvallur			5	241	10	26	15	267
25.	Tiruvannamalai			4	131	10	32	14	330
26.	Tiruchirapalli	1	436	3	45	16	71	20	552
27.	Ariyalur			3	49	6	11	4	60
28.	Perambalur			1	24	4	10	5	34
29.	Vellore	1	230	11	291	16	41	28	562
30.	Virudhunagar			7	234	9	27	16	261
31.	Villupuram			3	123	15	68	18	159
	Total	12	8984	124	3703	528	1901	664	14588

**Generation of Municipal Solid Waste for the Corporations with respect to MSW Rules
in the state of Tamilnadu**

S. No.	Name of Corporation	Population in lakhs	MSW generated TPD	MSW collected TPD	MSW treated	MSW disposed TPD
1.	Chennai	62.5	5000	5000	--	5000
2.	Coimbatore	12.621	890	890	590	180
3.	Dindigul	2.07	110	110	10	100
4.	Erode	4.98	275	275	120	155
5.	Madurai	14.62	680	640	350	180
6.	Salem	8.31	350	320	320	2
7.	Thanjavur	7.43	120	114	--	114
8.	Thoothukudi	4.10	205	205	--	205
9.	Tirunelveli	4.99	180	170	--	150
10.	Tiruppur	8.77	508	508	--	508
11.	Trichy	7.966	436	416	100	316
12.	Vellore	4.234	230	210	--	207

Annexure IB

Status of Authorisation issued to the Urban Local Bodies in Tamilnadu

List of Authorisation issued to Corporations

Trichy, Madurai, Coimbatore, Thoothukudi, Salem

List of Authorisation issued to Municipalities and Town Panchayats

Sl. No.	Districts	Authorisation issued to Municipalities	Authorisation issued to Town Panchayats
1.	Chennai	-	-
2.	Coimbatore	Pollachi Valparai Mettupalayam	Kottur Madukkarai Odayakulam Periyannackalpalayam Gudalur Karamadai Veerapandi Annur
3.	Cuddalore	Chidambaram	-
4.	Dindigul	Palani Kodaikanal	Nilakottai Sithayankottai Vathalagundu
5.	Erode	Sathyamangalam	-
6.	Dharmapuri & Krishnagiri	Krishnagiri Dharmapuri Hosur	Palacode Nagojanahalli
7.	Karur	Karur Kulithalai	Punjai pugalur
8.	Madurai	Thirumangalam	A.Vellalapati Vadipatti Sholavandan T.Kallupatti Palamedu Alanganallur Paravai Peraiyur Elumalai
9.	Kanchipuram	--	--
10.	Nagapattinam	Nagapattinam Mayiladuthurai Sirkali	Kilvelur Kuthalam Tharangambadi Velankanni Manalmedu

11.	Namakkal	Namakkal Tiruchengode	
12.	Thiruvavarur	Koothanallur Thiruthuraiipoondi Mannargudi Thiruvavarur	Muthupetta
13.	Kanyakumari	Colachel Kulithurai Padmanabapuram Nagercoil	Agasteeswaram Kallukootam Kanniyakumari Therror
14.	Ooty	Coonoor	--
15.	Pudukkottai	--	Arimangalam Alangudi Karambakudi Ponnamaravati
16.	Salem	Attur Meltur	Attayampatty Kanankurichi Kolathur Konganapuram Thammampatty Valapadi Jalakandapuram Sendarapatty Veeraganur Yethapur Vanavasi
17.	Ramnad	--	--
18.	Sivagangai	Karaikudi	
19.	Thanjavur	--	Melattur Melathirupoonthuraithi Thirukkattupalli Swamimalai Cholapuram Thiruvaiyaru Ammappettai
20.	Theni	--	--
21.	Thoothukudi	--	--
22.	Tirunelveli	Ambasamudram Kadayanallur Puliyangudi Sankarankovil Shencottai Tenkasi	Alwarkurichi Aykudi Eruvadi Kalakad Kallidaikurichi Sankarnagar Vasudevanallur
23.	Tiruppur	Udumalaipet	
24.	Tiruvallur	--	--
25.	Tiruvannamalai	Vandavasi	

26.	Tiruchirapalli	Manapparai	Musiri Kattuputhur Balakrishnanpatty Mettupalayam Thathiyengarpettai
27.	Ariyalur	--	--
28.	Perambalur	Perambalur	--
29.	Vellore	Arakkonam Melvisharam Tirupathur Pernambut	Panapakkam
30.	Virudhunagar	Srivilliputhur Sivakasi Sattur	
31.	Villupuram	Kallakurichi	Ulundurpet Arakandanallur Manalurpet Gingee Vadakkanandal
	Total	48	73

Annexure II-A
Status of implementation of Schedule II [rules 6(1) and (3), 7(1)] by Corporations of Tamil Nadu

Name of Corporation	MSW Collection details	MSW Segregation details	MSW Storage details	Transportation details	Details on Processing of Municipal Solid Waste	
					Disposal of Municipal Solid Waste	
Chennai	The sanitary workers in general are collecting and segregating all recyclable wastes at household level.		No storage facility	Primary collection is carried out by conservancy workers between 6.30 am to 10.30 a.m. & 2.30 p.m to 5.00 p.m. Besides wastes are also collected using compactors and tricycles from 6.30 a.m to 1.30 p.m.	Nil	Dumped in Kodungaiyur and Perungudi Dump yard
Coimbatore	By lorries using dust bins	No segregation at source is carried out	Open Storage	By lorries	Bio Composting	Composting and Land Filling
Dindigul	Collection using Truck- Tipper, Dumper- Placers and Tricycles	No Segregation	Stored in the Dump Yard	Transported using Truck- Tipper and Dumper- Placers	Partially composted	Dumping Yard
Erode	Door to door collection	Manual	518 No. of dumper bins are available for storing Municipal Solid Waste	250MT/day is collected by 43 numbers of vehicles.	120MT/day is processed by composting at Vendipalayam composting yard.	Open dumping - 130MT/day
Madurai	Collection bins & Door-Door Collection system	No source segregation followed	'Dumper bins' have been placed in Residential, Commercial, Market area.	Dumper placer, Mobile compactor, Tipper lorry, Tipper Tractor.	Windrow - Aerobic method is adopted for bio-composting.	Demolition and construction waste is dumped on notified low laying area.
Salem	Bins, Push Cart	Segregated at the MSW processing facility	Collected solid waste is transported through trucks to the MSW Treatment facility	Trucks	Bio degradable waste is composted Non Recyclable wastes disposed into landfill facility.	Bio compost is sold as manure. Non Biodegradable waste such as plastics and metals are sold to recycler.

								Recyclable materials are sold to recyclers.
Thanjavur	Door to door collection	Segregation at source	Segregated wastes, vegetable market, flower market, utilized for manufacture of manure	Through tipper onto tipper lorry tractors, dumper placer	Compostable wastes are utilized to manufacture of manure			
Thoothukudi	Manual	Manual	Storage yard	Truck, Tiller				
Tirunelveli		1 M.T. of plastic waste are segregated daily and drive to shredding for Road laying	4.5 cum. containers of 220, and 1.1 cum bins of 410 are used.	Transportation done through 6 Dumper Placer Lorry, 4 compactor Lorry and 8 Tipper Lorries	Waste to Energy under progress		Waste to Energy under progress	
Tiruppur	Door to door collection is being implemented	No segregation of solid wastes are carried out.	No storage facility.	The MSW are transported in a closed vehicle to the dump site.	No MSW processing facility is provided.		The MSW are disposed to the dump site without segregation and processing.	
Trichy	Daily collected by sanitary workers	20 wards	open dumping	Truck TIPPER - 42 Trailer- 5 Refuse collector-9 Dumper placer 22	compost only 100T remaining as open dumping		manure/open dumping	
Vellore	House to house collection by sanitary worker & self help group	No segregation	HDPPE Bins-312	Push cart-167, Try Cycle-250, Mini Auto-4, Auto Tipper-6 Tipper Lorry-7 Refuse Collector-6 Tractors-9 Mini Lorry-1	No processing of Municipal Solid Waste		Open dumping	

Status of implementation of Schedule II [rules 6(1) and (3), 7(1)] by Town Panchayats of Tamil Nadu

Name of District	No of Town Panchayats	MSW Collection details	MSW Segregation details	MSW Storage details	Transportation details	Details on Processing of Municipal Solid Waste	Disposal of Municipal Solid Waste
Coimbatore	37	By lorries using dust bins Door to Door Collection with TP staff, SHG Groups in all wards	No segregation at source is carried out Partial segregation at source	Open Storage Dumped in the site	By lorries Push cart, Mini Tipper and lorry, Tricycle and Tractor Trailer	Bio composting alone is carried out Composting, Vermiculture and Pellets	Composting and storage 13 Nos. of Land filling site & 3 nos. dumping at site
Cuddalore	16	Manual Collection	Segregation not proper	No Storage	Using Trucks,	Partially Composted	Partially composted and partially dumped in Dumping Yard
Dindigul	23	Door to door collection through bins	Manual	No storage	Tractor trailer, power tiller & push carts	No processing	open dumping
Erode	42	Door to Door by SHG & T.P. Staff	Partial segregation at source	Collected in bins and no storage	Thro Tractor, tiller etc.	Partial composting, Degradable waste are composted	Dumping as it is
Dharmapuri / Krishnagiri	17	Through bins	Segregation done	No Storage	Trucks & Tractors	-	Landfill
Karur	11	House to House Collection by push carts and street sweeping.	No Segregation	Dust bins placed at appropriate places	Transported through tractor and Tipper without cover	Nil	Demolished construction waste is dumped separately.
Madurai	9	Door to door collection	The collected wastes are segregated and dumped in area	No permanent dumping yard	Tractor, Tata Ace, Power Tiller, Tri Cycle, Mini Lorry, Mini auto	Bio-Compost Vermi Compost at Kundrathur TP. Compost yard at Walajabad TP.	Landfill at Walajabad TP only
Kanchipuram	15						
Nagapattinam	8	through container and dumper	Partial segregation	stored in compost yard	truck tipper, tractor trailer, dumper	plastic waste are partially segregated	segregated plastic waste is used for road laying.

Sivagangai	12	Door to door	Source Segregation / Manual Segregation at composite yard	--	Through tractor with net covered	Composting	Open dump
Thanjavur	22	solid waste collected by tractors	Segregation at source	Segregated solid wastes are converted into compost	Power tiller, tractor, TATA ACE, mini auto, push cart	solid wastes are split for compost and plastic waste	Compost converted into fertilizer and going to sale for agricultural purpose
Thani	22	Door to Door Collection Method	Segregation at source	No intermittent storage system adopted	Transported by Mechanical system	Source segregation collection	Landfill
Thoothukudi	19	Manual	Manual	Storage yard	Truck	-	Composting / Dumping
Tirunelveli	36	Door by Door Collection for all wards	Collected wastes are segregated at compost yard only Four workers are segregating the workers	--	Tractor - 1 No, Power Tiller - 1 No, Mini auto-1 Push Card-5	Segregated bio degradable solid waste are used to preparing manure with E.M. Solution	The MSW are disposed to the dump site without segregation and processing.
Tiruppur	16	Door to door collection is being implemented.	No segregation of solid wastes are carried out.	No storage facility.	The MSW are transported in a closed vehicle to the dump site.	No MSW processing facility is provided.	MSW are being dumped in existing dumping yards
Tiruvallur	10	Bins	Nil	Nil	Lorry	Nil	Dumped
Tiruvannamalai	10	Door to door collection	Partial segregation at source	No intermediate storage	Through tractors	Partial Composting	Dumped
Arivalur	2	Daily collected by sanitary workers	Daily segregated by sanitary workers	stored in compost yard	TRACTOR With Trailer, One Mini Auto, Push cart	Manure compost	Manure sold out/ open dumping
Perambalur	4	Daily collected by sanitary workers	Daily segregated by sanitary workers	stored in compost yard	TRACTOR With Trailer, One Mini Auto, Push cart	Manure compost	Manure sold out/ open dumping

	16	House to house collection	Waste segregated at composite site only	RCC bin & plastic bin	Tractor Trailer, Power Tiller, Tricycle, push carts and Tipper autos	composting the part of the organic waste	Open dumping
Vellore		Door to Door collection	Door to Door collection is not effected due to lack of cooperation from public. However segregation is done at dumping yard.	S. Kodikulam Land site is under dispute	Through Vehicle Tractor Tricycle Pushcart	Partial composting	Stored in compost yard.
Virudhunagar	9						
Villupuram	15	Yes	Yes	Open dumping	--	Composting	Used as Manure

Status of implementation of Schedule II [rules 6(1) and (3), 7(1)] by Municipalities of Tamil Nadu

Name of District	Name of Municipality	MSW Collection details	MSW Segregation details	MSW Storage details	Transportation details	Details on Processing of Municipal Solid Waste	Disposal of Municipal Solid Waste
Coimbatore	Pollachi	By lorries using dust bins	No segregation at source is carried out	Open Storage	By lorries	Segregation using draw mill- windro composting- Pelletization is being carried out.	Composting and storage
	Valparai	By lorries using dust bins	No segregation at source is carried out	Open Storage	By lorries	Bio composting alone is carried out	Composting and storage
	Metupalayam	Collection is done by house to house			Tipper lorries, truck lorries, dumper placers & pushcarts	Bio composting & Vermi composting	Bio manure
Cuddalore	Cuddalore	Collection is one by house to house	Partial segregation at source	Dumped in the site	Tricycle, Push Cart and Tractor Trailer	Dumping	Dumping as it is at one site
	Chidambaram	Collection is done by house to house	Partial segregation at source	Dumped in the site	Tricycle and Tractor Trailer	Composting	2 No of landfill sites used
	Nellikuppam	Collection is done by house to house	Partial segregation at source	Dumped in the site	Dumper -Placer, Push cart, Mini auto, TATA ACE	Dumping	Dumping as it is at one site
	Pannuti	Collection is done by house to house	Partial segregation at source	Dumped in the site	Tricycle, Tractor Trailer and Dumper -Placer	Dumping	Dumping as it is at one site
	Virudhachalam	Collection is done by house to house	Partial segregation at source	Dumped in the site	Tricycle, Tractor Trailer and Dumper -Placer	Composting	1 No of landfill sites used
Dindigul	Oddanchauram	Collection using Compactor bins	No Segregation	Stored in the Dump Yard	Transported using Truck- Tipper and	Dumping	Dumping Yard

	Palani	Collection using Compactor bins	No Segregation	Stored in the Dump Yard	Dumper-Placers	Dumping	Dumping Yard
	Koddaikanal	Collection using Dumper placer	No Segregation	Stored in the Compost Yard	Transported using Truck-Tipper and Dumper-Placers	Certain quantity of waste is compost in composted yard.	Compost Yard
Erode	Sathyamangalam	27 wards door to door collection	7 wards segregation	Dumper Bins: 55	Dumper Placer	Composting by Windrows method	3 mt of Segreated waste compost by Windrows method
	P.Puliampatty	Door to door collection by municipality workers	Primary segregation	open dumping by compost yard	Transportation by tipper lorry 1 No & dumper placer lorry 1 No	-	Open dumping
	Bhavani	Door to door collection by municipality workers	-	open dumping by compost yard	Tipper lorry 2 Nos & dumper placer 3 Nos	Composting	Open dumping
	Gobichettipalayam	Door to door collection by municipality workers	-	Dumping	Tipper lorry 2 Nos & dumper placer 2 Nos	-	Dumping
Dharmapuri and Krishnagiri	Krishnagiri	Door to Door by Municipality & SHG	Partial segregation at source	No Storage	Trucks & Tippers	Steps taken for composting	At present dumping
	Hosur	Door to Door by Municipality & SHG	Partial segregation at source	No intermediate storage	Thro" Tractor & Lorry	Market waste alone composting	Dumping as it is
	Dharmapuri	Door to Door by Municipality Staff & SHG	Partial segregation at source	No intermediate storage	Thro" Tractor & Lorry	No Process	Dumping as it is
Karur	Kulithalai	Tricycles, dumper placers & Push Carts	Segregated	No storage	Trucks & Tippers	Composting & Landfill	Kulithalai

Madurai	Thirumangalam	House to House Collection by push carts. Dumper bins placed at appropriate places	No segregation	Dumper Bins have been placed in appropriate places	Transported through dumper placer vehicle and Tipper lorries	Nil	Demolished and construction waste is dumped on notified low laying area.
	Usilampatti	House to House Collection by push carts. Dumper bins placed at appropriate places	No segregation	Dumper Bins have been placed in appropriate places	Transported through dumper placer vehicle and Tipper lorries	Nil	Demolished and construction waste is dumped on notified low laying area.
	Melur	House to House Collection by push carts. Dumper bins placed at appropriate places	No segregation	Dumper Bins have been placed in appropriate places	Transported through dumper placer vehicle and Tipper lorries	Nil	Demolished and construction waste is dumped on notified low laying area.
Kanchipuram	Chengalpet	33 numbers	-	-	Auto-6 Tractor-4 Dumper-1 Tipper-2 Refuse collector-1	-	Dumping yard
	Maraimalai Nagar	42MT	-	-	-	-	Dumping
	Tambaram	39420	21 wards that are privatized are imparted to do segregation.	-	103,68T/day of MSW are carried in 39 vehicles(26-private 13-Municipality)	1T/day of biodegradable waste is utilized to do vermicomposting in ward no.32	103.68 T/day
	Pallavapuram	Door to door collection	Segregated waste are collected from the	Organic waste are dumped,	Closed covered vehicles like	Presently dumped, new project has	Dumping (presently)

	Pannmal	35T collected daily through municipality and NGO firm	source-60% achieved	recyclable waste are disposed.	compactors and dumper placers are used.	been commenced on waste to energy technology		After segregated the balance garbage and canal waste are dumped in compost yard.	
	Anakaputtur	21MT daily generated out of this 20MT are collected daily through Municipal workers and contract workers	0.305 MT plastic bags and materials, ie: Re-usable were collected at door to door/primary collection	Dumping at yard	2-Tipper lorry Mini lorry-2	-		Dumping	
	Kancheepuram	Municipal solid waste are collected directly by municipal administration in 26 wards and through private party in 25 wards	Plastic waste are processed through SHG's	Waste collected are stored with help of compactor bins, dumper placer bins & hook loader bins	Having 3 tipper lorry, 1 tractor, 2 dumper placer, 3 compactor, 1 hook loader & 4 tipper auto.	-		Presently dumped in open yard	
	Madhurandhagam	Initially collected door to door for 7 wards (1 to 7) through push carts and also 3 Autos being engaged for door to door collection for 6	Recently started segregation activity at compost yard separately engaged for 10 Daily wages labour for this activity	Land purchased under IUDM scheme 37 Compactor Bins with capacity of 1100 liters for storage of municipal solid waste at the community level.	Having three Dipper lorries for transportation of MSW to compost yard Daily two to three trips.	Planning to recycle MSW into manure through windrow composting and vermin composting.		--	

			wards (11 to 15 & 8)						
Nagapattinam	Nagapattinam		through dumper placer placed in streets	all the 36 wards	stored in compost yard	Truck - tipper - 4 nos dumper placers - 4 nos tricycle - 7 nos Auto tipper - 4 nos	plastic waste are partially segregated	segregated plastic waste is used for road laying and remaining dumped in the compost yard	
	Mayiladuthurai		through dumper placer placed in streets	all the 36 wards	stored in compost yard	Tractor trailer - 2 nos dumper placers - 3 nos tricycle - 39 nos tipper lorry - 3 nos	plastic waste are partially segregated	segregated plastic waste is used for road laying and remaining dumped in the compost yard	
	Sirkali		through dumper placer placed in streets	7 wards out of 24 wards	stored in compost yard	Truck tipper - 2 nos dumper placer - 1 nos Tricycle - 17 nos push cart - 18 nos	plastic waste are partially segregated	segregated plastic waste is used for road laying and remaining dumped in the compost yard	
	Vedaranyam		through dumper placer placed in streets	8 wards out of 20 wards	stored in compost yard	Tractor trailer - 1 no dumper placers - 1 nos tipper lorry - 3 nos	plastic waste are partially segregated	segregated plastic waste is used for road laying and remaining dumped in the compost yard	
Namakkal	Rasipuram		Collection is done by house to house	Partial segregation at source	Dumped in the site	By lorries	Composting 10 Tons of organic waste by Windrow processing and also vermi	Segregated plastic waste is used for road laying and remaining dumped in the compost yard.	

							composting	
	Pallipalayam	Collection is done by house to house	Partial segregation at source	Dumped in the site	By lorries	Manure are prepared from Biodegradable waste by SHG workers through sever machine daily in good manner		Segregated plastic waste is used for road laying and remaining dumped in the compost yard.
	Komarapalayam	Collection is done by house to house	Partial segregation at source	Dumped in the site	By lorries	Partial		Segregated plastic waste is used for road laying and remaining dumped in the compost yard.
	Namakkal	Collection is done by house to house	Partial segregation at source	Dumped in the site	By lorries	Partial Bio Mining		Segregated plastic waste is used for road laying and remaining dumped in the dump site.
	Thiruchengode	Collection is done by house to house	Partial segregation at source	Dumped in the site	By lorries	Partial		Segregated plastic waste is used for road laying and remaining dumped in the dump site.
Thiruvarur	Thiruvarur	through compactor bins placed in streets	10 wards out of 30 wards	stored in compost yard	Mini lorry - 1 no tipper mini lorry - 1 no tractor trailer - 1 no tricycle - 10 Refuse-collector - 2 nos	plastic waste are partially segregated		segregated plastic waste is used for road laying and remaining dumped in the compost yard

	Mannargudi	through dumper placer and compactor bins placed in streets	4 wards out of 33 wards	stored in compost yard	tipper lorry - 2 nos truck tipper - 1 no tractor trailer - 1 no refuse - collector - 1 dumper placer - 2 nos tricycle - 20 nos	plastic waste are partially segregated	segregated plastic waste is used for road laying and remaining dumped in the compost yard
	Thiruthurai	through bins placed in streets	10 wards out of 24 wards	stored in compost yard	truck tipper - 2 nos tractor trailer - 1 no tricycle - 4 nos	plastic waste are partially segregated	segregated plastic waste is used for road laying and remaining dumped in the compost yard
	Koottanallur	through dumper placer placed in streets	-	stored in compost yard	mini lorry - 2 nos dumper placer - 1 mini van - 1	plastic waste are partially segregated	segregated plastic waste is used for road laying and remaining dumped in the compost yard
	Kanyakumari	Door to door collection	Partially done	Storage yard	Through Trucks	No processing	Stored in dumping yard
	Nagercoil	Door to door collection	Partially done	Storage yard	Through Trucks	No processing	Stored in dumping yard
	Padmanabhapuram	Door to door collection	Partially done	Storage yard	Through Trucks	No processing	Stored in dumping yard
	Colachel	Door to door collection	Partially done	Storage yard	Through Trucks	No processing	Stored in dumping yard
	Nilgiris	Street collection and partially door to door collection	Segregated into Bio-degradable & Non-Bio-degradable	Bins	By Lorry	Nil	Dumped in open yard
	Udhagamandalam	Street collection and partially door to door	Segregated into Bio-degradable & Non-Bio-degradable	Bins	By Lorry	Nil	Dumped in open yard

		collection	Partially done	Storage yard	Through Trucks	No processing	Stored in dumping yard
	Gudalur	Door to door collection		Bins	By Lorry	Windrow Composting yard	1. Bio degradable convert into manure 2. Non Bio degradable is dumped in open yard
	Nelliyalam	Street collection and partially door to door collection	Segregated into Bio-degradable & Non-Bio-degradable				
	Pudukkottai	Manual Collection & dumper placer bins-60 Nos	Door to door segregation in 15 wards out of 42	Stored in Dumping yard	Tipper Lorry, Dumper placer lorry	Composting is being carried out partially and the remaining is dumped	Partly disposed as manure and the remaining is dumped in the yard
	Aranthangi	Manual Collection & dumper placer bins-48 Nos	Door to door segregation in all 27 wards.	Stored in Dumping yard	Tipper Lorry, Dumper placer lorry, Tipper Tractor etc.,	Composting is being carried out partially and the remaining is dumped	Partly disposed as manure and the remaining is dumped in the yard
Salem	Attur	Bins, Push Cart	Plastic and other recyclable waste is segregated from MSW.	Collected solid waste is transported through trucks to the compost yard	Trucks	Segregated waste is composted in the compost yard and recyclable waste is sold	Bio compost is sold out. Recyclable materials are sold to recyclers.
	Narashingapuram	Bins, Push Cart	Plastic and other recyclable waste is segregated from MSW.	Collected solid waste is transported through trucks to the compost yard	Trucks	Segregated waste is composted in the compost yard and recyclable waste is sold	Bio compost is sold out. Recyclable materials are sold to recyclers.
	Edappadi	Bins, Push Cart	Plastic and other recyclable waste is segregated from MSW.	Collected solid waste is transported through trucks to the compost yard	Trucks	Segregated waste is composted in the compost yard and recyclable waste is sold	Bio compost is sold out. Recyclable materials are sold to recyclers.
	Mettur	Bins, Push Cart	Plastic and other recyclable waste is	Collected solid waste is	Trucks	Segregated waste is composted in the	Bio compost is sold out.

				segregated from MSW.	transported through trucks to the compost yard		compost yard and recyclable waste is sold	Recyclable materials are sold to recyclers.
Ramnad	Ramanathapuram	Door to door	Manual Segregation at composite Yard	--	Through municipal vehicals with net covered	Composting	Open dump	
	Rameswaram	Door to door	Manual Segregation at composite Yard	--	Through municipal vehicals with net covered	Composting	Open dump	
	Paramakudi	Door to door	Manual Segregation at composite Yard	--	Through municipal vehicals with net covered	Composting	Open dump	
	Keelakarai	Door to door	Manual Segregation at composite Yard	--	Through municipal vehicals with net covered	Composting	Open dump	
Sivagangai	Devakkottai	--	--	--	--	--	--	
	Sivagangai	Door to door	Manual Segregation at compost yard	--	Through municipal vehicals net covered	Composting	Open dump	
	Karaikkudi	Door to door	Manual Segregation at compost yard	--	Through municipal vehicals net covered	Composting	Open dump	
Thanjavur	Kumbakonam	MSW collected through push cart, tricycle and the collected garbage stored in	Segregated waste are disposed at STP site Thepperaumallur	MSW stored in dumper placer bins	Dumper placer lorries	--	Dumping at STP site Thepperaumallur. STPD Biomethanation power generation	

		plastic containers						plant under erection at kumbakonam
	Patukkottai	Door to door collection through cycle rickshaw	Only 11 wards segregation	Dumper placer bins - 57 nos.	Dumper placer - 2 Tractor - 3	--	Dumping at municipal compost yard	
Theni	Theni-Allinagaram	Door to Door Collection Method	Segregation at source	No intermittent storage system adopted	Transported by Dumper Placer vehicle	Source segregation collection	Dumping at compost yard	
	Periyakulam	Door to Door Collection Method	Segregation at source	No intermittent storage system adopted	Transported by Dumper Placer vehicle	Source segregation collection	Dumping at compost yard	
	Bodinaikanur	Door to Door Collection Method	Segregation at source	No intermittent storage system adopted	Transported by Dumper Placer vehicle	Source segregation collection	Dumping at compost yard	
	Cumbum	Door to Door Collection Method	Segregation at source	No intermittent storage system adopted	Transported by Dumper Placer vehicle	Source segregation collection	Dumping at compost yard	
	Chinnamanur	Door to Door Collection Method	Segregation at source	No intermittent storage system adopted	Transported by Dumper Placer vehicle	Source segregation collection	Dumping at compost yard	
	Gudalur	Door to Door Collection Method	Segregation at source	No intermittent storage system adopted	Transported by Dumper Placer vehicle	Source segregation collection	Dumping at compost yard	
Thoothukudi	Kayalpatinam	Manual	Manual	Dumper bin Storage Yard	Lorry, Tipper	Composting		
	Kovilpatti	Manual	Manual		Lorry, Tipper	Composting		
Tirunelveli	Ambasamudram	Bio-Degradable Plastic - 53.5% Plastic - 3.00%	Segregation at Source Level for 7 Wards	Compost yard at 5.00 Acres	Mini Lorry Dumper Places Auto.	--	Dumping	

			Paper - 4 % Metal, Glass & Rubber - 1.5% Inert - 38 %				Tractor		
	Kadayanallur		Bio-Degradable - 46.59% Plastic - 9% Paper - 3.15% Metal, Glass & Rubber - 1.40% Inert - -	Segregation at Source Level for 8 Wards	Compost yard at 10.25 Acres	Mini Lorry Dumper Places Auto. Tractor	Windrows	Windrows & Dumping	
	Puliyangudi		Bio-Degradable - 54% Plastic - 2.5% Paper - 2 % Metal, Glass & Rubber - 2.5% Inert - 39 %	Segregation at Source Level for 11 Wards	Compost yard at 5.06 Acres	Mini Lorry Dumper Places Auto.	Windrows	Windrows & Dumping	
	Sankarankovil								
	Shenkottai		Bio-Degradable - 42.29% Plastic - 4% Paper - 2.10% Metal, Glass & Rubber - 1.10% Inert - -		Compost yard at 5.10 Acres	Mini Lorry Dumper Places Auto.	Windrows	Dumping	
	Tenkasi		Bio-Degradable - 54% Plastic - 2% Paper - 2.5% Metal, Glass & Rubber - -	Segregation at Source Level for 12 Wards	Compost yard at Mathalamparai-3.03 acres Boganallur-8.25 acres	Dumper - Placers, Push carts Mini Lorry	Dumping	Dumping	

			Rubber - 2.5% Inert - 39%					
	V.K. Puram	Bio-Degradable - 48.83% Plastic - 3% Paper - 2.91% Metal, Glass & Rubber - 1.67% Inert - 43.59%		Compost yard at 6.84 Acres	Mini Lorry - 2 Nos. Dumper Placer - 1 Nos. 4 Wheeler Auto - 2 Nos. 3 Wheeler auto - 4 Nos	Open dumping	Open dumping	
Tiruppur	Palladam Municipality	Door to door collection is being implemented.	No segregation of solid wastes are carried out.	No storage facility.	The MSW are transported in a closed vehicle to the dump site.	No MSW processing facility is provided.	The MSW are disposed to the dump site without segregation and processing.	
	Udumalpet Municipality	Door to door collection is being implemented.	The MSW are segregated mechanically and manually in the MSW processing facility at SF.No.130/4, 130/5, Ganapathipalayam Village, Udumalpet Taluk, Tiruppur District. But, the segregation is not properly carried out.	Storage facility is provided at the MSW processing facility.	The MSW are transported in a closed vehicle to the MSW processing facility.	The MSW processing (bio composting) facility is provided at SF.No.130/4, 130/5, Ganapathipalayam Village, Udumalpet Taluk, Tiruppur District.	The uncomposted MSW are stored in the processing facility	
	Dharapuram Municipality	Door to door collection is being implemented.	No segregation of solid wastes are carried out.	No storage facility.	The MSW are transported in a closed vehicle to the dump site.	No MSW processing facility is provided.	The MSW are disposed to the dump site without segregation and processing.	
	Kangayam Municipality	Door to door collection is being implemented.	No segregation of solid wastes are carried out.	No storage facility.	The MSW are transported in a closed vehicle to the dump site.	No MSW processing facility is provided.	The MSW are disposed to the dump site without segregation and processing.	

	Vellakoil Municipality	Door to door collection is being implemented.	No segregation of solid wastes are carried out.	No storage facility.	The MSW are transported in a closed vehicle to the dump site.	No MSW processing facility is provided.	The MSW are disposed to the dump site without segregation and processing.
Tiruvallur	Avadi	Bins	Nil	Nil	Tipper	Nil	MSW are being dumped in existing dumping yards
	Poonamallee	Bins	Nil	Nil	Tipper	Nil	MSW are being dumped in existing dumping yards
	Tiruvallur	Bins	Nil	Nil	Tipper	Nil	MSW are being dumped in existing dumping yards
	Tiruverkadu	Bins	Nil	Nil	Tipper	Nil	MSW are being dumped in existing dumping yards
	Tiruttani	Bins	Nil	Nil	Tipper	Nil	MSW are being dumped in existing dumping yards
Tiruvannamalai	Arani	Door to door collection	Partial Segregation at source	No intermediate storage	Through lorry, tractors	Nil	Dumped
	Tiruvannamalai	Door to door collection	Partial Segregation at source	No intermediate storage	Through lorry, tractors	Nil	Dumped
	Thiruvathipuram	Door to door collection	Partial Segregation at source	No intermediate storage	Through lorry, tractors	Nil	Dumped
	Vandavasi	Door to door collection	Partial Segregation at source	No intermediate storage	Through lorry, tractors	Nil	Dumped
Trichy, Ariyalur & Perambalur	Manapparai	Daily collected by sanitary	No segregation	open dumping	Truck TIPPER - 2 tri cycle 22	NIL	open dumping

			workers				Dumper placer 1		
	Thuraiyur	Daily collected by sanitary workers	18 wards	open dumping	Truck TIPPER - 2 Push cart 32 Dumper placer 1		Vermi compost	manure/open dumping	
	Thuvakudi	Daily collected by sanitary workers	6 wards	open dumping	Truck TIPPER - 1 Truck Trailer- 1 mini auto - 2 Dumper placer 1		NIL	manure/open dumping	
	Perambalur	Daily collected by sanitary workers	No segregation	open dumping	Truck TIPPER - 2 tri cycle 34 ata ace- 9 compactor 2 Dumper placer 1		NIL	open dumping	
	Ariyalur	Daily collected by sanitary workers	No segregation	open dumping	Truck TIPPER - 1 Truck Trailer- 1 mini auto - 2 Dumper placer 1		NIL	open dumping	
	Jeyankondam	Daily collected by sanitary workers	No segregation	open dumping	Truck TIPPER - 1 Truck Trailer- 1 Dumper placer 1		NIL	open dumping	
	Vaniyambadi	The solid waste collected in the street bins are transferred to the open dumping yard through trucks.	The local body has carried out source segregation of solid waste by door to door collection in 24 wards	No transfer stations provided/ The solid waste collected in street bins are directly disposed through trucks and dumped in open dumping yard.	The solid waste collected in street bins are transported to the open dumping yard through 4 No. of trucks		No waste processing facility provided.	The solid waste collected are dumped in the open dumping yard	
	Vellore	The solid waste collected in the	The local body has carried out source	No transfer stations provided/	The solid waste collected in street bins are transported to the open dumping yard through 4 No. of trucks		No waste processing facility provided.	The solid waste collected are dumped	
	Gudiyatham	The solid waste collected in the	The local body has carried out source	No transfer stations provided/	The solid waste collected in street		No waste processing facility	The solid waste collected are dumped	

		street bins are transferred to the open dumping yard through trucks.	segregation of solid waste by door to door collection in 18 wards	The solid waste collected in street bins are directly disposed through trucks and dumped in open dumping yard.	bins are transported to the open dumping yard through 3 No. of trucks	provided.	in the open dumping yard
	Pernambut	The solid waste collected in the street bins are transferred to the open dumping yard through trucks.	The local body has carried out source segregation of solid waste by door to door collection in 8 wards	No transfer stations provided/ The solid waste collected in street bins are directly disposed through trucks and dumped in open dumping yard.	The solid waste collected in street bins are transported to the open dumping yard through 5 No. of trucks	No waste processing facility provided.	The solid waste collected are dumped in the open dumping yard
	Tirupathur	The solid waste collected in the street bins are transferred to the open dumping yard through trucks.	The local body has carried out source segregation of solid waste by door to door collection in 13 wards	No transfer stations provided/ The solid waste collected in street bins are directly disposed through trucks and dumped in open dumping yard.	The solid waste collected in street bins are transported to the open dumping yard through 6 No. of trucks	No waste processing facility provided.	The solid waste collected are dumped in the open dumping yard
	Arnur	The solid waste collected in the street bins are transferred to the open dumping yard through trucks.	The local body has carried out source segregation of solid waste by door to door collection in 6 wards	No transfer stations provided/ The solid waste collected in street bins are directly disposed through trucks and dumped in open dumping yard.	The solid waste collected in street bins are transported to the open dumping yard through 5 No. of trucks	No waste processing facility provided.	The solid waste collected are dumped in the open dumping yard
	Jolarpet	The solid waste collected in the	The local body has carried out source	No transfer stations provided/	The solid waste collected in street	No waste processing facility	The solid waste collected are dumped

		street bins are transferred to the open dumping yard through trucks.	segregation of solid waste by door to door collection in 4 wards	The solid waste collected in street bins are directly disposed through trucks and dumped in open dumping yard.	bins are transported to the open dumping yard through 2 No. of trucks	provided.	in the open dumpings yard
	Ranipet Municipality	10 Wards-11282 house to house collection by sanitary worker& self help group	No segregation	Dumper-10	Tractor Trailer-2, Dumper placers - 2,Tricycle-17,Push Cart-30,Tipper Autos-6 and Mini Lorry-1	No processing of Municipal Solid Waste	Open dumping
	Walajapet Municipality	8 Wards-7860 house to house collection by sanitary worker& self help group	Plastic waste segregated from the Municipal Solid Waste	Dumper-45	Tractor Trailer-2, Dumper placers - 2,Tricycle-24,Push Cart-32,	No processing of Municipal Solid Waste	Open dumping
	Arcoi Municipality	13071 house to house collection by sanitary worker	No segregation	Dumper placers-68	Tipper lorry-1, Tipper Auto-3, Tractor Trailer-1, Dumper placer lorry-1,Mini Lorry-4,	No processing of Municipal Solid Waste	Open dumping
	Melvissharam Municipality	21 Ward-8893 house to house collection by sanitary worker& Self help group	No segregation	Dumper placers-26	Tractor Trailer-2, Dumper placer lorry-1,Power Tiller-3,Mini Auto-2,	No processing of Municipal Solid Waste	Open dumping
	Arakkonam Municipality	36 Ward-21398 house to house collection by sanitary	No segregation	Dumper bins-78	Truck Tipper-3, Dumper placer lorry-2,Push cart-72	No processing of Municipal Solid Waste	Open dumping

		worker & Self help group						
Villupuram	Villupuram	Yes	Yes	Open dumping	--	Composting	Used as Manure	
	Tindivanam	Yes	Yes	Open dumping	--	Composting	Used as Manure	
	Kallakurichi	Yes	Yes	Open dumping	--	Composting	Used as Manure	
Virudhunagar	Rajapalayam	In all 42 wards covering 44460 House Holds Municipal Solid Waste Collections is done regularly	Only 10 Wards segregation of Solid Waste is done regularly	In 55 Dumber Placer Bins	3 Dumber placer lorry and 2 tipper lorry enhanced for transportation	--	--	
	Satur	In all 24 wards covering 8136 House Holds Municipal Solid Waste Collections is done regularly	In 8 Wards segregation of Solid Waste is done regularly	In 24 Dumber Placer Bins and in 20 (200lit) bins solid waste is stored	Daily through Dumber Placer and Tipper Lorries Municipal Solid Waste is being transported.	--	--	
	Thiruthangal Municipality	House Holds Municipal Solid Waste Collections is done regularly	Metal 0.4 Plastic -waste 0.7 mt Paper waste 1.2mt	Plastic -waste	Mini lorry -3 Tractor -1 Dumber placer -1	Dumping	Dumping	
	Sivakasi Municipality	House Holds Municipal Solid Waste Collections is done regularly	Metal 1.4 Plastic -waste 2mt Paper waste 3.6mt	Plastic -waste	Mini lorry -2 Tractor -4 Dumber placer -3	Dumping	Dumping	
	Srivilliputhur	House Holds Municipal Solid Waste Collections is	In 3 Wards segregation of Solid Waste is done regularly	In 32 Dumber Placer Bins	Daily through Dumber Placer and Tipper Lorries Municipal	--	--	

		done regularly				Solid Waste is being transported.		
	Vindhunagar	House Holds Municipal Solid Waste Collections is done regularly	In 10 Wards segregation of Solid Waste is done regularly	In 40 Dumber Placer Bins	Tractor - 2 Dumper placers - 2 Tricycle - 30 Pushcart - 45 Compactor-1	-		
	Aruppukottai Municipality	House Holds Municipal Solid Waste Collections is done regularly	Plastic -waste	Plastic -waste	Dumper Placer-5 Tipper Lorry-3	Dumping		Dumping

Annexure IIIA

Landfill details provided by the Corporations

Name of the Corporation	Site Selection	Facilities at the site	Specifications for land filling	Pollution Prevention	Water Quality Monitoring	Ambient Air Quality Monitoring	Plantation at Landfill Site	Closure of Landfill Site and Post-care
Coimbatore	Site Selected	Corporation is generating 850 T/d of MSW. It is carrying out the following. Windrow Composting -757 TPD Vermicomposting -50TPD.	Land fill provided as per the specification.	Scientific closure of existing dump is made.	Being done	To be done	Green belt is being developed	Yet to be closed
Erode	Dumping at three locations of 28.87 acres. 1. Vendipalayam 2. Vairapalayam 3. Kasipalayam Landfill site yet to be identified.							
Madurai	Site Selected	Approach Road and Weigh bridge provided	Vegetative layer provided	Storm Waste drains provided. Non-Permeable lining system provided.	Ground Water quality Monitored.	AAQ survey conducted	Vegetative Cover provided.	Maintaining the effectiveness of final cover, and preventing run off from eroding.
Salem	Landfill facility in operation	Facility construction is in operation		1) Diversion of storm water drains 2) Provision for Management of leachate collection & treatment 3) Prevention of run-off from landfill area.	Piezometric wells are provided	Ambient Air Quality survey is being conducted	Green belt being developed at the facility	Closure of Landfill site and post care has been included in the solid waste management design details
Tirunelveli Corporation		Road and lighting facility available		Green belt				

List of Landfill sites identified for Municipalities & Town Panchayats

District	Municipalities	Town Panchayats
Cuddalore	Chidambaram Virudhachalam	Mangalampettai Pennadam Tittakudi Srimushnam Melpattampakkam Thorappadi Vadalur Kurinchipadi Lalpettai Kattumannarkoil Killai Parangipettai Bhuvanagiri
Kanchipuram	Chengalpet Maraimalai Nagar	Thirupporur Edaikazhinadu Madambakkam Chitlapakkam Thiruneermalai Mamallapuram Uthiramerur Acharapakkam Karunkuzhi
Erode	Sathyamangalam P.Puliampatty	Ariyappampalayam Bhavanisagar Chennimalai Jambai Kanjikoil Kasipalayam (G) Kolappalur Kuhalur Lakkampatti Nambiyur Olagadam P.Mettupalayam Pallapalayam Periyakodiveri Perundurair Pethampalayam Salangapalayam Vaniputhur
Pudukkottai	Pudukkottai Aranthangi	Illuppur Arimalam Ponnamaravathy Karambakudi Keeranur
Thanjavur		Orathanadu Darasuram Thiruvaiyaru Cholapuram Ammappettai Perumagalur

Theni	Theni-Allinagaram Periyakulam Bodinaickanur Cumbum Chinnamanur Gudalur	Andipatti Vadugapatti Thamaraikulam Thenkarai Palanichetty Patti Veerapandi Uthamapalayam Ka.Puthu patti Combai Thevaram Kamaya Gounden Patti Hiveyvis Devathana patti Kenguvar Patti Odai Patti Kuchanur Hanumanthan Patti Pannai puram Mela Chokkanatha Puram Markkaiyan Kottai Bo.Meenatchi Puram Boothipuram
Tirunelveli		Achampudur Alangulam Alwarkurichi Eruvadi Gopalamudram Kalakad Kallidaikurichi Keezhapavoor Manimuthar Melacheval Melagaram Mukkudal Nanguneri Panagudi Panboli Thirukurangudi Thiruvengadam Thisayanvilai Veeravanallur
Tiruppur	Udumalaipet	
Vellore	Vaniyambadi Gudiyatham Pernambut Tirupathur Ambur Jolarpet	

Annexure IVA

List of Municipalities and Town Panchayats provided with treatment facilities

S. No	District	Composting		Vermi-Composting	
		Municipalities	Town Panchayat	Municipalities	Town Panchayat
1.	Coimbatore	Pollachi		Valparai	
2.	Cuddalore	Cuddalore Chidambaram Virudhachalam Panruti Nellikuppam	Killai Parangipettai Lalpettai Kurinchipadi Vadalur Thorappadi Melpattampakkam Pennadam Mangalampettai Tittakudi Srimushnam Sethiyathope Kattumannarkoil Annamalai Nagar Bhuvanagiri		Killai Parangipettai Lalpettai Kurinchipadi Vadalur Thorappadi Melpattampakkam Pennadam
3.	Hosur	Hosur	Kadathur Pappireddipatti Harur Palacode Pennagaram Karimangalam Bargur Pappaparatti Uthangarai Nagojanahalli Denkanikotta Marandahalli Kambainallur B. Mallapuram		
4.	Karur	Karur Kulithalai			
5.	Nagapatinam	Velankanni Thalainayar Tharangambadi		Tharangambadi	
6.	Namakkal (Partial)	Namakkal Tiruchengode Rasipuram Pallipalayam Komarapalayam	Alampalayam Mallasamudram Mohanur Namagiripe Padaveedu Paramathi Pandamangalam Pothanur Sendamangalam Velur Athanur Erumpatti Kallapanaickenpatti Pattanam		

			Pillanalur Seerapalli Venandur Venkari R. Pudupatti		
7.	Thiruvavur	Needamangalam Peralam Koradacherry			
8.	Kanyakumari		Anjugramam Arumanai Asaripallam Azhagiapandipuram Boothapandy Edaicode Eraniel Ezhuthesam Ganapathipuram Kaliyakkavilai Kallukootam Kappiarai Keezhkulam Killiyur Kollancode Kothanallur Kumarapuram Manavalakurichi Mandaikadu Mulagumudu Mylady Nallur Neyyoor Pacode Palapallam Pazhugal Puthukkadai Reethapuram Suchidrum Thengampudur Therror Thiruvattar Thiruvithamcodu Unnamalaikadai Valvatchagostam Vellimalai Verkilambi Vilukuri Thingalnagar		Aloor Aralvoimozhy Attoor Azhagappapuram Kadayal Kanniyakumari Karungal Kottaram Marungur Puthalam Thazhakudy Thenthamaraiikulam Villavoor Ponmanai
9.	Ooty	Coonoor	Kothagiri, Ketti Devarshola		
10.	Perundurai	Sathyamangalam	Anthiyur Appakudal Athani Jambai		

			Karumandi Chellipalayam P.Mettupalayam Perundurair		
11.	Sivagangai	Ramanathapuram Rameswaram Paramakudi Keelakarai	Muthukulatur R.S. Mangalam Kamuthi Abiramam Thondi Sayalgudi Mandapam		
12.	Tirunelveli		Veeravanallur		
13.	Tiruvannamalai		Chengam Chetpet Desur Kalambur Kannamangalam Kilpennathur Pernamallur Polur Pudupalayam Vettavalam		
14.	Vellore		<u>Ammoor</u> Thiruvalam Kaveripakkam Thimiri Villapakkam Kalavai Panapakkam Nemili Thokkolam Pennathur Sholinghur		
15.	Virudhunagar	Rajapalayam	W. Puthupatti, Sundarapandiam, mamsapuram, Seithur and Watrap		