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STATUS REPORT ON THE COMPLIANCE BY THE STATE OF TAMILNADU WITH THE DIRECTIONS OF THE HON'BLE NATIONAL GREEN TRBUNAL PRINCIPAL BENCH, NEW DELHI

IN

ORIGINAL APPLICATION NO. 606 / 2018

&

CONNECTED MATTERS

Submitted by

Chief Secretary, State of Tamilnadu

23rd April 2019

(16)

1) Introduction

1.1 Population

Tamil Nadu is a fast growing and the most urbanised state in India. The link between economic development and urbanisation is well established. According to the 2011 Census, Tamil Nadu ranks third in the level of urbanisation (48.45%) in the country among the larger States. The urban population of Tamil Nadu is 34.95 million (Census of India, 2011) out of a total state population of 72.14 million and constitutes 48.45% of the population. While the percentage of urban population in the country increased from 10.85% to 31.16% during 1901-2011, Tamil Nadu registered a much higher percentage increase i.e., from 14.15% to 48.45% during the above period. Extended areas of urban agglomerations (UAs) in Tamil Nadu have also been witnessing rapid growth, with nearly 58% of the urban population living in the top 25 UAs.

In Tamil Nadu, Municipal Administration and Water Supply Department has the administrative control over Greater Chennai Corporation, Commissionerate of Municipal Administration and Directorate of Town Panchayat. The Commissioner of Greater Chennai Corporation administers the Greater Chennai Corporation with a population of 6867184. The Commissioner of Municipal Administration manages 11 Corporations (Madurai, Coimbatore, Tiruchirappalli, Salem, Tirunelveli, Thoothukudi, Erode, Tiruppur, Vellore, Dindigul and Thanjavur) and 124 Municipalities with a Population of 18727049. Similarly 528 Town Panchayat with a Population of 9876996 is managed by the Director of Town Panchayat.

Administration Division and Urban population Details of state of Tamilnadu

Total Population in Tamilnadu (As per Year 2018)	Urban Population			Total Urban Population	Percentage
	Corporations (12)	Municipalities (124 ULBs)	Town Panchayats (528 TPs)		
80885600	16325487	9268746	9876996	35471229	43.85%

Source: Census of India & Population Projections for 2018

1.2 Waste Quantification

The total estimated quantity of solid waste generation from all the ULBs of Tamilnadu for the year 2018 from all the type of generators is **13,744 TPD**. The details of solid waste generated are provided below:

Details of the overall waste generation quantity in the State.

Particulars	Corporation	Municipalities	Town Panchayats	Total
No. of ULBs	12	124	528	**664**
Population (present)	16325487	9268746	9876996	**35471229**
Garbage generation (TPD)	8480	3164	2100	**13744**
Residential (TPD)	5514	2039	1481	**9034**
Non Residential – Commercial & Institutional (TPD)	2021	976	401	**3398**
Street sweeping including Silt &Inert	945	149	218	**1312**

1.3 Categories of waste

The Municipal Solid Waste (MSW) generated in the State has been broadly categorized into three types viz. Wet, Dry Domestic Hazardous Waste, E waste and Inert & Silt.

It is observed that out of the total waste ~13744 TPD; wet waste is estimated to be ~7011 TPD (51%), dry waste is estimated to be ~5088 TPD (37%), domestic hazardous waste is estimated to be ~292 TPD (2%) , E-Waste is estimated to be ~41 TPD (0.5%), Inert &Silt is estimated to be ~1312TPD (9.5%).

Particulars	Corporation	Municipalities	Town Panchayats	Total
No. of ULBs	12	124	528	**664**
Population (present)	16325487	9268746	9876996	**35471229**
Garbage generation (TPD)	8480	3164	2100	**13744**
Wet waste, Market & Food waste	4128	1851	1032	**7011**
Dry Waste including plastic waste	3234	1057	797	**5088**
Domestic hazardous waste	160	88	44	**292**
E Waste	13	19	9	**41**
Inert & Silt	945	149	218	**1312**
Total	**8480**	**3164**	**2100**	**13744**

16

1.4 Details about waste collection in the State

The total quantum of waste collected at door step by Urban Local bodies of Tamil Nadu is –11543 TPD out of which wet waste collected is ~6541 TPD, dry waste collected is ~4730 TPD and domestic hazardous waste collected is ~272 TPD. The table gives the details of overall was collected in the State.

Details of the overall waste collected in the state.

S.no	Department	Waste Generation TPD	Waste Collection in TPD				Total Waste Collection TPD	% of Collection
			Wet Waste (TPD)	Dry Waste (TPD)	Domestic Hazardous Waste (TPD)	Street Sweeping including Inert & Silt		
1	Corporations	8480	3863	2982	165	945	7955	94%
2	Municipalities	3164	1749	1031	67	149	2996	95%
3	Town Panchayat	2100	929	717	40	218	1904	91%
Total		**13744**	**6541**	**4730**	**272**	**1312**	**12855**	**93%**

1.5 Door to Door Collection and Source Segregation

Particulars	Corporations	Municipalities	Town Panchayat	Total	Remarks
No. Of ULBs	12	124	528	664	
Door to Door Collection					
ULBs achieved 100 % collection	6	67	274	347	100 % will be achieved before 30.09.19
ULBs achieved more than 75 % to 99 % collection	6	57	254	317	
Source Segregation					
ULBs achieved 60 % to 100 %	8	113	421	542	100 % will be achieved before 30.09.19 31.3.20
ULBs achieved less than 60 %	4	11	107	122	

2. Status of Compliance of Solid Waste Management Rules, 2016

In Tamil Nadu there are 12 Corporations, 124 Municipalities and 528 Town Panchayats. The total generation of municipal solid waste from the urban local bodies is 13,744 TPD Tonnes per day (TPD) in which, the total waste generation from Chennai Corporation is around 5250 TPD and other Corporations and Municipalities generates waste around 6394 TPD and Town Panchayats around 2100 TPD.

Rule	Duties / Responsibilities	Compliance status
12	Duties of District Magistrate or District Collector or Deputy Commissioner - to review performance of local bodies	Commissioner of Municipal Administration addressed all the District Collectors to conduct periodical review meeting with local bodies for successful implementation of SWM Rules. The Corporation Commissioners and all Regional Directors of Municipal Administration have been requested to coordinate the review meetings. Meetings have been conducted by the District Collectors and they will continue to review the performance of local bodies on compliance to SWM Rules 2016. The minutes of the meeting conducted by the District Collectors are annexed.
15	**Duties and responsibilities of local authorities**	
15(a)	Notification of Solid Waste Management Policy and Strategy	• State policy on Solid waste Management notified on 24.8.18. • ULB wise SWM Policy and Action plan on SWM prepared and approved by CMA. • Notification by ULBs after Election Model code of conduct.
15(b)	Door to Door Collection & Segregation	• 93 % Door to Door Collection achieved. • 80 %. Source Segregation practiced at door step. • 100% Door to Door collection & source segregation will be achieved by 30.9.2019 and 31.03.2020 respectively.
15(c)	Inclusion of Organisation of Waste pickers and	• Waste pickers operating organizations have been

	informal waste collectors in SWM	integrated in to the SWM system by engaging them through outsourcing agencies.
15(d)	Facilitate SHG Formation, Provide ID Cards & Integrate in SWM	• Collection process also outsourced to SHGs and integrated in the SWM System. • Day to day functioning of MCCs entrusted with SHGs . ID cards issued and biometric attendance maintained.
15(n), (o), (k)	Street sweeping and silt removal	• Street sweeping done **on daily basis** in all Main areas, Market areas & Bus stand areas. • Secondary storage bins maintained for temporary storage of drain silt and street sweepings. • Locations identified and earmarked to store them along with C&D waste for further transport and disposal.
15(h), (i), (j), (v), (zc)	Segregation, Material Recovery Facilities, Domestic hazardous wastes, Preference to Construct, Operate & Maintain Solid Waste Processing Facilities	**Segregation:** ✓ Wet wastes are collected on Daily Basis. ✓ Dry wastes collected on a designated day of the week **(every Wednesday) &** transported to Resource recovery centre (RRCs/MRFs) ✓ Workers educated to collect the waste in a segregated manner. ✓ Waste generators directed to deposit the domestic Hazardous waste directly at MRFs or RRCs ✓ **E waste collection on a monthly basis** and stored in Resource recovery centre for disposal to TNPCB periodically. **Material Recovery Facilities** ✓ 91 MRFs established & 24 MRFs are in progress in Corporations & Municipalities. ✓ In smaller Municipalities (63 nos) and Town Panchayats (501 nos) with waste generation less than 20 TPD - MRFs provided near the wet waste processing centers **Domestic Hazardous Waste** ✓ **Domestic hazardous waste** such as Napkins,

		Diapers and Paramedical wastes collected separately on a **daily basis** and are being incinerated in the MCCs. ✓ Other **domestic hazardous waste** such as Paint drums, Thermometers, expired medicines, Tube lights etc., are being collected separately on a **weekly basis** and transported to the Domestic hazardous waste deposition centre/MRFs and periodically disposed to the facilitator authorized by TNPCB. **Processing Facilities** ✓ Biodegradable waste collected at door step & processed in Micro Composting Centres (MCCs) in Corporations and Municipalities. ✓ Each MCC will cater to the waste generated from 3000-5000 HHs. ✓ 967 MCCs sanctioned, of which 628 MCC are functioning in 12 Corporations and 124 Municipalities ✓ 908 Windrow Composting plants are functioning in Municipalities and Town Panchayats ✓ 314 Vermi Composting plants are functioning in Municipalities and Town Panchayats ✓ 104 Biomethanation plants are functioning ✓ Waste to Energy plants are proposed in the Chennai Corporations.
15 (ze)	Building Bye law enforcement	Provision made in section 35(17) of Tamil Nadu Combined Development & Building Rules 2019.
15(e), (f), (zf)	Frame Bye Laws for Rules, user fee for waste generators, Levy of fines etc.	• All ULBs framed & notified the Bye law with provisions for user fee & spot fines.
15(m)	Setting up of Bio	• 104 Biomethanation plants established with a handling

	Methanation Plants	capacity of 254 TPD. • Biomethanation plants located near the poultry &fish market/vegetable market. • Wastes generated in the markets handled in the Biomethanation plants for the production of Biogas. • ULBs without Biomethanation plants dispose the fish / meat waste to piggeries.
15(t)	Self Help group Activities	• SHGs involved in primary collection of Municipal Solid Waste and day to day functioning of MCCs • SHGs are also promoting source segregation & home composting along with Animators
15(r), 15(w), 15(zh), 15(zi)	Transportation of Non-Biodegradable Waste Scientific Land fill-Desired Objective of Zero Waste Concept	• Non bio degradable wastes transported to the MRFs/MCCs & recyclables sold. • Non-recyclable wastes generated are sent to cement plants/ sugar mills/ power plants for usage as fuel. • 3720 MT of non saleable and non recyclable waste are used for laying 3100 Kms of Roads in the last 4 years. • 10537 Tonnes of non-saleable, non-recyclable wastes disposed to cement plants from 49 ULBs of CMA from the month of May 2018. • 4200 Tonnes of Non-saleable plastic waste are bailed and kept in Resource Recovery Centres. • 1,71,131 MT of recyclable waste were sold and Rs.43.19 Crore distributed to sanitary workers for the period from August 2017 to 10.3.19 in 11 Corporations &124 Municipalities of CMA. • Combustible waste and non – recyclable waste proposed to be processed in the pyrolysis plants. • In Greater Chennai Corporation disposing 100 TPD of plastic waste to Paterson Energy LTD., Sriperumbudur from 1.1.19 for usage as fuel. • Conversion of Plastic **Waste as Tiles and Bricks** using Extrusion with Hydraulics techniques from non-

		usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste proposed. • Marching towards "**Zero Residue Concept**".
15(p), 15(q)	Onsite Composting Centre in Parks and gardens	• To process the horticultural waste from parks, separate Onsite Composting Centers (OCCs) constructed in parks and gardens. • 876 OCCs are functioning in Corporations & Municipalities with a handling capacity of 416TPD. • Decentralized approach on onsite basis prioritized and followed.
15(s)	C & D Waste	• C & D waste processing plant proposed in Chennai, Madurai, Coimbatore and Tirunelveli corporations where the **C&D waste generation is more than 50 TPD** currently stored in earmarked location. • Action Plan prepared in the ULBs and separate store sites for C&D waste earmarked. Suitable Collection Mechanism will be formulated and will be followed effectively before the month of September 2019.
15(u)	Utilization of Manure	• **MCCs** provided with green belt and compost produced is utilized for producing organic greens & vegetables. • Compost usage promoted in coordination with the Madras Fertilizer Limited (MFL). • From 2016 to Feb 2019, 16254 tonnes of compost generated in 664 ULBs are sold at marginal cost /given at free of cost to farmers/is used in the parks & gardens maintained by ULBs.
15(x)	Budgetary Provision	• Adequate fund provision through Special Solid Waste Management scheme by the State Government and SBM by GOI and GOTN. • Operation and Maintenance by the ULBs from general fund
15(y) 15(z)	Authorization of Pollution Control Board	• ULB wise Solid Waste Management policy and Action plan prepared for 219 ULBs. Gazette Notification will

		be done after the election model code of conduct. • TNPCB has issued authorisation under SWM Rules 2016 to all the 219 ULBs.
15(za), 15(zb)	Submission of Annual Report by the local bodies	• Annual Report for the year 2017-18 as per Form IV submitted to PCB in the month of May 2018. • Will be followed in subsequent years also.
15(zc), 15(l), 15(g), 15(zg)	Information, Education, Communication	• Periodical and regular training programmes organized. • Capacity building programmes for the year 2018-19 organized in 35 Locations to train 33,000 Sanitary Workers. • Training Programme will be completed by August 2019. • Periodical RWA meetings conducted to enlighten the waste generators. • 2846 animators, 230 supervisors & 11 coordinators engaged exclusively for IEC under SBM. • **Special Task Force has been formulated vide G.O (Ms) No.58 Municipal Administration and Water Supply (MAIV) Department.**
15(zd)	Ensuring personal safety of waste handlers	• Safety equipments and uniform provided to sanitary workers. • Workers are using these Personal protection equipments during their routine collection works and processing activities.
15(zi), 15(zk)	Bio Mining, Bio Remediation or Bio capping of legacy waste in dumpsite	• Reclamation of dump yard filled with legacy waste through bio mining. • Bio remediation of old and abandoned dump site have been taken up in 116 ULBs to remove the 74 Lakhs Cu.m of Legacy waste through bio mining process at a total estimated cost of Rs.468.3 Crores. After the completion of these works about 765 acres of land

21

		valuable to Rs.500 Crore is expected to be reclaimed. • Bio Mining work completed in Kumbakonam, Pammal and Sembakkam Municipality -2,82,476 Cum of legacy waste cleared -20 Acres of land reclaimed. . • Works are in **various stages**. • **Centre for Environmental studies, Guindy Campus, Anna University Chennai** engaged as Third Party inspection Agency in 116 ULBs for guidance in Technical aspects of Bio-mining works. • The Bio mining work will be completed before 31.12.2021.
16	Duties of State Pollution Control Board or Committee	• Authorisation under SWM Rules, 2016 issued to all applied 219 ULBs. • TNPCB continuously monitors ground water, ambient air and leachate quality around the landfill sites of SWM facilities.
20	**Solid Waste Management in hilly areas**	
20(a), 20(b)	Avoiding Construction of Landfills on Hills	• All the ULBs disposing waste with a concept of Zero Residue and the Landfills are not established so far. • Wet waste converted to Bio manure through DMCCs. • Dry waste disposed to identified vendors. • Silt, C&D waste and inert stored and used for filling potholes. • Regional Sanitary Landfill will be developed based on the outcome of residues after completion of SWM Processing plants.
20(c)	Awareness on non-littering	• Hoardings displayed
20(d)	Awareness on Provisions of Bye-Law through Hoardings	
20(e)	Levy of SWM Charge from Tourists	• Framed & Notified the Bye law with provisions for user fee & spot fines from Tourists.

20(f)	Identification of land for SWM Processing facilities in hilly areas	• Decentralized Micro composting centre (DMCC)established in hilly area of Nilgiris, Dindigul and Theni Districts • Nilgiris District (5 ULBs)- 10 Nos of DMCC with a handling capacity of 32TPD and 14 Nos Onsite Composting Centre (OCCs) with a handling capacity of 5 TPD and windrows composting to handle 10 TPD. • 11 TPs in Nilgiris District handling their waste (44.33TPD) through windrow composting. • Kodaikanal Municipality 4 Nos of DMCC with a handling capacity of 8 TPD and 4 Nos Onsite Composting centre (OCCs) with a handling capacity of 2 TPD. • 12 TPS of Dindigul, Theni and Tirunelveli districts process their waste (46.155 TPD) through Windrow composting. • Recyclables sold to recyclers and Non-recyclables sent to Ultra tech & ACC cements.

25

2.1 Status of compliance with Rule 22 of the Solid Waste Management Rules, 2016, reg., time frame for implementation.

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Tamilnadu
1	Identification of suitable sites for setting up solid waste processing facilities	1 year	Sites are Identified. All the ULBs in Tamilnadu are processing the wet waste on Decentralized method by establishing Micro level composting centres by dividing the Town into No.of Zonation each comprising 2 to 3 Wards without exceeding garbage generation quantity more than 5 TPD. Material Recovery Facility/Resource Recovery Facility also proposed in 4 to 10 Locations covering maximum of 10 wards for each locations.
2	Identification of suitable sites for setting up common regional sanitary landfill facilities for suitable clusters of local authorities under 0.5 million population and for setting up common regional sanitary landfill facilities or standalone sanitary landfill facilities by all local authorities having a population of 0.5 million or more.	1 year	All the ULBs are in the Way Forward of Processing and Dispose the Waste collected on Day to Day basis with Zero Residue Concept.
3	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities.	2 years	Bio-degradables are processed in Decentralized Micro Compost Centres. Non-recyclable wastes generated are sent to cement plants/ sugar mills/ power

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Tamilnadu
			plants for usage as fuel. In GCC,100 TPD of plastic waste disposed to Paterson Energy LTD., Sriperumbudur from 1.1.19 for usage as fuel. Pyrolysis plants are proposed to scientifically process and dispose the non-recyclables. Conversion of Plastic Waste as Tiles and Bricks using Extrusion with Hydraulics techniques from non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste proposed. Marching towards "Zero Residue Concept". None of the ULBs have landfill since the State is successfully marching towards Zero – Residue Concept. Planned for comprehensive SWM processing facility on Zero residue concepts.
4	Enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source,	2 years	Waste Generators are properly educated and communicated to practice the segregation of waste by conducting various awareness program and enforcement initiated through notification of Bye-laws. So far segregation has been achieved 80% and expected to 100% before March 2020.

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Tamilnadu
5	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	2 years	93% door to door collection achieved and 100% Collection will be achieved before September 2019.
6	Ensure separate storage, collection and transportation of construction and demolition wastes	2 years	Action Plan prepared in the ULBs and separate store sites for C&D waste earmarked. Suitable Collection Mechanism will be formulated and will be followed effectively before the month of September 2019.
7	Setting up solid waste processing facilities by all local bodies having 100000 or more population	2 years	✓ Biodegradable waste collected at door step & processed in Micro Composting Centres (MCCs) in Corporations and Municipalities. ✓ Each MCC will cater to the waste generated from 3000-5000 HHs. ✓ 967 MCCs sanctioned, of which 628 MCC are functioning in 12 Corporations and 124 Municipalities ✓ 908 Windrow Composting plants are functioning in Municipalities and Town Panchayats ✓ 314 Vermi Composting plants are functioning in Municipalities and Town Panchayats ✓ 104 Biomethanation plants are functioning ✓ Waste to Energy plants are
8	Setting up solid waste processing facilities by local bodies and census towns below 100000 populations.	3 years	

28

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Tamilnadu
			proposed in the Chennai Corporations.
9	Setting up common or standalone sanitary landfills by or for all local bodies having 0.5 million or more population for the disposal of only such residual wastes from the processing facilities as well as untreatable inert wastes as permitted under the Rules	3 years	Reply as serial no. 2 & 3 above
10	Setting up common or regional sanitary landfills by all local bodies and census towns under 0.5 million population for the disposal of permitted waste under the rules	3 years	Reply as serial no. 2 & 3 above
11	Bio-remediation or capping of old and abandoned dump sites	5 years	Bio remediation of old and abandoned dump site have been taken up in 117 ULBs to remove the 74 Lakhs Cu.m of Legacy waste through bio mining process at a total estimated cost of Rs.468.3 Crores. After the completion of these works about 765 acres of valuable land is expected to be reclaimed. So far legacy waste has been removed in Kumbakonam, and Sembakkam. The Biomining work will be completed in the all the ULBs before 31.12.2021.
12	Legal Frame Work		1. SWM Policy for the State as per clause

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Tamilnadu
			11 (a) of the SWM Rules has been Notified in 24th August 2018 by the Government. 2. Bye laws as per clause 15 (e) of SWM Rules 2016 for all ULB's have been Notified and in force.
13	Annual Report		The annual report as per clause 24 of SWM Rule, 2016 has been submitted by the ULBs to the State PCB for the year 2018 and will be followed for the subsequent years.

Rule	Duties / Responsibilities	Compliance status
23	Formation of State Level Advisory Body	• State level Advisory Body formed as per G.O. (MS). No. 5 MA & WS (MA.IV) Department dated: 25.01.2017 under the chairmanship of Principal Secretary to Government, MA&WS Department. • Meetings have been conducted on 16.03.2017, 21.03.2018, 25.02.2019 ***& 5.4.2019.***
24	Annual Report	• TNPCB submitted Annual Report for the year 2017-2018 to the Central Pollution Control Board on 07.11.2018.

(31)

3. Status of Compliance of Plastic Waste Management Rules, 2016

3.1 Government Notification on Plastic Ban:

The Government of Tamil Nadu, in exercise of the powers conferred under Section 5 of the Environment (Protection) Act, 1986 notified ban on manufacture, store, supply, transport, sale or distribute of use and throwaway plastics plastic sheets used for food wrapping, spreading on dining table etc., plastic plates, plastic coated tea cups and plastic tumbler, water pouches and packets, plastic straw, plastic carry bag and plastic flags irrespective of thickness vide G.O. (Ms). No.84 dated 25.06.2018. The said ban came into effect from 01.01.2019.

For effective implementation of the ban, the following actions were taken:

- A ten-member Steering Committee under the chairmanship of Chief Secretary, Government of Tamil Nadu has been constituted and subsequently meetings were held on 12.07.2018, 07.09.2018 & 03.04.2019.
- Three Regional Coordinators have been appointed for monitoring and successful implementation of the plastic ban.

Further, TNPCB has carried out the following initiatives:

- Meetings were conducted with the representatives of IT Parks, Shopping Malls, Hotels and Marriage Halls, TASMAC and bar owner associations of all the districts for sensitizing on the changeover from banned throwaway plastic items to eco-friendly alternatives.
- Meeting conducted with representatives from Eco- Clubs, NGC Coordinators and District Coordinators of Tamil Nadu to create awareness among public on ban on one time use of "use and throwaway plastics" involving NGOs and school students.
- District Environmental Committee meetings and massive awareness rally under the chairmanship of District Collectors were conducted at all the districts of Tamilnadu and resolutions passed to create one time use and throwaway plastic free district.
- TNPCB had directed all the large industries throughout the state of Tamil Nadu to comply with the order of the Government on the ban on use of one time use and throwaway plastic items and to create awareness on ban on use and throwaway plastics in areas adjoining the industry and at 45 toll plazas, display boards showing banned items are placed.
- In order to create awareness and sensitize among public on the list of banned use and throwaway plastic items, wide publicity through newspaper dailies were published.

(12)

- An exhibit vehicle was launched towards creating awareness among public and school children around all the districts of Tamil Nadu.
- Regional Conferences for Plastic Pollution Free Tamil Nadu to create awareness among various stake holders was conducted at Coimbatore, Trichy, Madurai, Tirunelveli, Chennai & Salem.
- Plastic bye law is notified and enforced. As per the G.O (Ms) No. 84 enforcing ban on one time use plastic, so far, 635.64 MT of single use plastics had been seized and a fine of Rs.89.30 lakhs has been collected till 15.4.19.

3.2 Status of Compliance of Plastic Waste Management Rules, 2016

Rule	Duties / Responsibilities	Compliance status
6	**Duties of urban local bodies**	
6(1), 6(2a)	Segregation, collection, storage, transportation, processing and disposal of plastic waste	• To ensure segregated collection, dry waste collection practiced **on a designated day of the week** in ULBs. • Resource Recovery Centre / Material Recovery Facility -To store and periodically dispose the segregated plastic waste in ULBs. • 91 MRFs established & 24 MRFs in progress. • Sufficient space available in 967 MCCs to store the segregated dry waste. • 159 MCCs functioning in GCC also have MRF facility in the MCCs. • Town Panchayats (501 nos) with waste generation less than 20 TPD -MRFs provided near the wet waste processing centers. • Recyclables sold and remuneration disbursed among sanitary workers. • Non-recyclable/non-saleable fraction disposed to cement plants/paper mills and sugar factories.
6(2b), 6(3)	Ensuring environmental safety & EPR	• Ensured by providing impervious concrete platform and covered platform for Resource recover Centre. • Collect back system by the producer for safe disposal envisaged & practiced. • EPR will be ensured by conducting a meeting with all the Manufacturers in coordination with TNPCB.
6(2c)	Ensuring channelization of recyclables	• Well-organized mechanism being followed by the ULBs for the channelization of recyclables. • 1,71,131 MT of recyclable waste were sold and Rs.43.19 Crore distributed to sanitary workers for

		the period from August 2017 to 10.3.19 in 11 Corporations &124 Municipalities of CMA
6(2e)	Creation of awareness among stakeholders	• IEC activities to educate stakeholders and public to handover the dry waste (Both Recyclables and Non-recyclables) to the sanitary workers on a designated day in a week. • Animators involved in IEC activities.
6(2f)	Engaging civil societies	• Sanitary workers operating as organizations is integrated into the SWM system by engaging them through outsourcing agencies.. • Collection process also outsourced to SHGs and integrated in the SWM System. • SHGs are involved in day to day functioning of MCCs.
6(2d)	Processing and disposal on non-recyclables	• Non-recyclable/non-saleable fraction disposed to cement plants/paper mills and sugar factories. • About 49 ULBs of CMA disposing their non-recyclables & about 10537 Tonnes of non-recyclables disposed from May 2018 onwards. • In GCC,100 TPD of plastic waste disposed to Paterson Energy LTD., Sriperumbudur from 1.1.19 for usage as fuel. • Pyrolysis plants proposed for safe processing and disposal of plastic wastes generated. • Proposed to process both recyclable and Non-recyclable plastic wastes for conversion as tiles, pavers etc, using extrusion with hydraulic compression techniques. • During the last six years, 1632 MT of non-saleable waste has been utilized in laying 1036 km roads in Municipalities and Corporations of CMA. • All such facilities will be created in accordance with the guidelines issued by CPCB.

6(2g)	Prevention of Open Burning of Plastics	• Provisions imposing penalties for open burning of plastics incorporated in the plastic bye-law and notified.
6(4)	Framing bye laws	• Plastic byelaw notified and enforced. • Ban on one time use and throwaway plastics from 01.01.2019 vide G.O(MS) No:84 Environment and Forests(EC2) Department dated 25.06.18. • Penalties and fines for the manufacture, storage and use of single use plastics. • Effective and rigorous enforcement of the Government Order. About 635.64 tonnes of single use plastics seized & fine of Rs.89.30 lakhs collected till 15.4.19

12	State Pollution Control Board is the prescribed authority for enforcement of the provisions of these rules relating to registration, manufacture of plastic products and multilayered packaging, processing and disposal of plastic wastes	• TNPCB has issued Registration under PWM Rules, 2016
		  • 443 number plastic manufacturing / recycling units.
		  • 23 number multilayer plastic units.
		• TNPCB issued Directions under section 5 of Environment (Protection) Act, 1986.
		  • 2 numbers of CPCB certified Manufacturers / sellers of Compostable Plastics.
		  • 95 numbers of manufacturers of Multilayered plastics/products.
		  • To obtain Registration as per Rule 13 of Plastic Waste Management Rules, 201.6

	The concerned Secretary-in-charge of Urban Development of the State or a Union Territory shall be the authority for enforcement of the provisions of these rules	• Ban on one time use and throwaway plastics from 01.01.2019 vide G.O(MS) No:84 Environment and Forests(EC2) Department dated 25.06.18. • Enforcement done through Penalties and fines for the manufacture, storage and use of single use plastics. • Effective and rigorous enforcement of the

	relating to waste management by waste generator, use of plastic carry bags, plastic sheets or like, covers made of plastic sheets and multilayered packaging.	Government Order. About 635.64 tonnes of single use plast.ics seized & fine of Rs.89.30 lakhs collected till 15.4.19.
9 & 13	Role of Producers, Importers, Brand Owners in Extended Producer Responsibility	• Direction issued to 95 Multilayered Plastic units such as Britannia, Dabur, Pepsico, Amul, Cavin Kare, Nestle etc to work out EPR with the proposed integrated model for the state of Tamil Nadu. • Meetings conducted by the Principal Secretary, MAWS Department on 29.03.2019 & 12.04.2019 with various stake holders to propose EPR model for the state of Tamilnadu.
16	State Level Advisory Committee	• ***State Level Advisory Committee constituted vide G.O. (Ms). No. 148 dated 25.10.2016 of Municipal Administration & Water Supply Department*** • ***First Committee meeting - 05.04.2017*** • ***Second Committee meeting - 16.03.2018*** • ***Third Committee meeting - 25.02.2019*** • ***Fourth Committee meeting - 05.04.2019***
17(3)	Submission of Annual Report	Annual Report on the implementation of Plastic Waste Management Rules 2016 for the year 2017-18 was submitted to CPCB on 03.12.2018.

4. Status of Compliance of Bio-Medical Waste Management Rules 2016

In Tamilnadu there are 4192 Health Care Facilities which includes bedded hospitals, Nursing Homes, Clinics, Dispensaries, Pathological labs, Blood Banks, etc., from which around 46.8 Tons/ Day of Biomedical Waste is generated. This biomedical waste is treated in 11 Common Biomedical Waste Treatment and Disposal Facilities located in Tamilnadu. Out of 11 CBMWTFs, 8 are in operation and 3 facilities were issued with Closure direction by TNPCB. Further 3 CBMWTFs are under establishment.

Name of the State	No. of HCFs	Authorisation details of HCFs	Qnty of BMW generated in kg/day	Qnty of BMW generated in kg/day	No. of CBMWTFs	No. of captive facilities installed by HCFs	CBMWTFs installed OCEMS
Tamilnadu	Bedded – 3972 Non-bedded – 220 Total - 4192	Applied – 3956 granted – 3931	46818.8	46818.8	*8 **3 ***3	NIL	8

*- CBMWTF in operation, ** - under closure, *** - under establishment

Issues and action points

S.No.	Issues	Action points
i)	Inventory of non-bedded HCFs such as clinics, pathological laboratories, Research Institutes, etc., is incomplete.	Tamilnadu Pollution Control Board has so far issued consent of the Board for 4192 Health Care Facilities (Private and Government hospitals) which includes 3972 bedded and 220 non-bedded HCFs. Action is being taken to advise all the Health Care Facilities as defined in Biomedical Waste (Management & Handling) Rules, 2016 to apply and obtain consent under the Water (P&CP) Act, 1974 and the Air (P&CP) Act, 1981

		and Authorization under Biomedical Waste (Management & Handling) Rules, 2016 and dispose the biomedical waste through Common Biomedical Waste Treatment and Disposal Facilities in respect of Government & Private Hospitals, so as to comply with the BMW (M&H) Rules, 2016.
ii)	CBMWTFs are not upgraded to comply with new emission norms.	The CBMWTFs namely, M/s. Ramky Energy and Environment Ltd, Salem and M/s. Teknotherm Industries, Coimbatore have upgraded their incinerator of same existing capacity to achieve the standards for retention time in secondary chamber. The other Common Biomedical Waste Treatment and Disposal Facilities have been instructed to upgrade their incineration systems to comply with the new emission norms. However, the CBMWTFs are yet to comply with the same due to the following reasons. As per the MoEF, GOI clarification letter dated 27.10.2017, 1. In case CBMWTF desires to replace the existing incinerator and install new incinerator of same capacity, EC will be required, as there might be configuration changes that might impact the performance efficiency of the incinerator.

		2. If the CBMWTF desires to enhance the existing capacity, while upgrading the facility to comply with the stringent emission norms, EC is applicable. **In this regard, TNPCB has addressed MoEF & CC, New Delhi vide letter dated 14.11.2018 to consider the issue of the following amendments in Schedule 7 (da) of MoEF Notification dated 17.04.2015:** 1. Common Biomedical Waste Treatment and Disposal facilities in existence before EIA Notification, 2006 as amended, shall not obtain EC for modernization of its equipments including incinerator if there is no change in the capacity of the equipments which is being modernised. 2. For Expansion of existing facility and establishment of new facility, EC may be obtained under B2 category.
iii)	7 Nos. of CBMWTFs not installed OCEMS	Out of 11 CBMWTFs, 8 facilities have installed online monitoring system for the parameters PM, NOx, HCl, CO, CO2 & O2. Remaining three facilities namely, M/s. Kovai Biowaste Management Ltd, Coimbatore is under closure and M/s. Society for Biomedical Waste Management, Nilgris & M/s. Neat & Clean Service Squad, Ramnad have only

40

		deep burial system and no incinerator and hence, installation of online monitoring system is not required.
iv)	Deep burial pits are being used by CBMWTFs for disposal of biomedical waste which is not allowed as per BMWM Rules, 2016.	In Tamilnadu, two facilities namely, M/s. Society for Biomedical Waste Management, Nilgris & M/s. Neat & Clean Service Squad, Ramnad have Deep burial pits for disposal of biomedical waste which was permitted earlier. Whereas, M/s. Society for Biomedical Waste Management, Nilgris was issued with closure direction by TNPCB for non-compliance of BMWM Rules, 2016. The other facility, M/s. Neat & Clean Service Squad, Ramnad have been instructed to stop the deep burial activity and install treatment system as per Revised Guidelines issued by CPCB for CBMWTFs. It is informed by the operator that, only meagre quantity of biomedical waste generated from few of the Government hospitals is being collected and disposed through deep burial. The biomedical waste from the other HCFs (Private & Government) are being collected and disposed through another CBMWTF located at Virudhunagar.

Compliance of Rules

Rule (4)	Duties of the Occupier of HCF	Compliance to Rule (4) by the Occupier of HCF
(d)	Phase out use of chlorinated plastic bags (excluding blood bags) and gloves by 27th March, 2019.	*Complied.* Non-chlorinated plastic bags supplied to HCFs.
(i)	Establish a Bar- Code System for bags or containers containing bio-medical waste by 27th March, 2019.	All the CBMWTFs have provided Bar-Code System under trial basis and will be completed on or before 05.05.2019, except two facilities namely, M/s Society for Biomedical Waste Management, Nilgris which is under closure and M/s. Neat & Clean Service Squad, Ramnad which will be completed on or before 31.05.2019.
(p)	Make available the annual report on its web-site by 15th March 2020.	All the HCFs have been instructed to comply within the time frame.
(t)	Existing incinerators to achieve retention time in secondary chamber by 27th March 2019.	In Tamilnadu, no captive treatment facilities are available. The entire biomedical waste generated from the HCFs is disposed through 11 Common Biomedical Waste Treatment and Disposal Facilities located in Tamilnadu.
Rule (5)	**Duties of Operators of CBMWTFs**	**Compliance to Rule (5) by Operators of CBMWTFs**
(c)	Establish bar coding and global positioning system for handling of bio-medical waste by 27th March, 2019.	**Bar Coding System:** All the CBMWTFs have provided Bar-Code System under trial basis and will be completed on or before 05.05.2019, except two facilities namely, M/s Society for Biomedical Waste Management, Nilgris

		which is under closure and M/s. Neat & Clean Service Squad, Ramnad will complete on or before 31.05.2019. **GPS Tracking System:** All the vehicles used for the transportation of biomedical waste have been fitted with GPS tracking system.
(l)	Shall display details of authorisation, treatment, annual report etc on its web-site.	All the CBMWTFs have uploaded the daily report on the waste collected and treated. Instructions have been issued to M/s. Neat & Clean Service Squad, Ramnad to uploaded the daily report on the waste collected and treated.
(q)	Upgrade existing incinerators to achieve the standards for retention time in secondary chamber and Dioxin and Furans by 27th March, 2018.	The CBMWTFs namely, M/s. Ramky Energy and Environment Ltd, Salem and M/s. Teknotherm Industries, Coimbatore have upgraded their incinerator of same existing capacity to achieve the standards for retention time in secondary chamber. The other Common Biomedical Waste Treatment and Disposal Facilities have been instructed to upgrade their incineration systems to comply with the new emission norms. However, the remaining CBMWTFs are yet to comply with the same due to the following reasons. As per the MoEF, GOI clarification letter dated 27.10.2017, 1. In case CBMWTF desires to replace the existing incinerator and install new

		incinerator of same capacity, EC will be required, as there might be configuration changes that might impact the performance efficiency of the incinerator. 2. If the CBMWTF desires to enhance the existing capacity, while upgrading the facility to comply with the stringent emission norms, EC is applicable. **In this regard, TNPCB has addressed MoEF & CC, New Delhi vide letter dated 14.11.2018 to consider the issue of the following amendments in Schedule 7 (da) of MoEF Notification dated 17.04.2015:** 1. Common Biomedical Waste Treatment and Disposal facilities in existence before EIA Notification, 2006 as amended, shall not obtain EC for modernization of its equipments including incinerator if there is no change in the capacity of the equipments which is being modernised. 2. For Expansion of existing facility and establishment of new facility, EC may be obtained under B2 category.
Others	Status of installation of online emission monitoring system & connectivity to TNPCB server.	Out of 11 CBMWTFs, 8 facilities have installed online monitoring system for the parameters PM, NOx, HCl, CO, CO2 & O2. Remaining three facilities namely, M/s. Kovai Biowaste Management Ltd, Coimbatore is under closure and M/s.

		Society for Biomedical Waste Management, Nilgris & M/s. Neat & Clean Service Squad, Ramnad have only deep burial system and no incinerator, hence, installation of online monitoring system is not required.
Schedule III [Rule 6 and 9(3)]	**Duties of State Pollution Control Board**	**Compliance to Rule 6 and 9(3) as per Schedule III by Tamilnadu Pollution Control Board**
6 (i)	Inventorisation	Tamilnadu Pollution Control Board has so far issued consent of the Board for 4192 Health Care Facilities (Private and Government hospitals) which includes 3972 bedded and 220 non-bedded HCFs. The biomedical waste generated as per the Annual report submitted to CPCB for the ***year 2016 is 15982.987 T/Annum, 2017 is 17088.862 T/Annum & 2018 is 17226.58 T/ Annum.***
6 (ii)	Submission of annual report to Central Pollution Control Board.	As per Rule 13 (2), SPCB has to submit the Annual report to CPCB on or before the 31st July of every year. TNPCB has submitted Annual report to CPCB for the year 2017 vide T.O letter dated 26.07.2018.
6 (iii)	Grant and renewal, suspension, refusal or cancellation of authorisation	Out of 4192 Health Care Facilities, 3931 Health Care Facilities have valid Authorisation and the remaining 261 Health Care Facilities are under the process of obtaining renewal of Authorisation.

6 (iv)	Monitoring of compliance conditions of authorisation.	Authorisation is issued to the HCFs on verification of compliance of the previous Authorisation issued to the HCFs under BMWM Rules.
6 (v)	Action against health care facilities or common biomedical waste treatment facilities for violation.	***Out of 11 Common Biomedical Waste Treatment and Disposal Facilities, 3 facilities namely, M/s. Kovai Biowaste Management Ltd, Coimbatore, M/s Society for Biomedical Waste Management, Nilgris & M/s. Tamilnadu Waste Management Company Ltd, Kancheepuram District have been issued with closure direction and disconnection of power supply for non-compliance of BMWM Rules.*** Also 100 Health Care Facilities were issued with show cause notices & Directions for violation of BMWM Rules.
6 (vi)	Training programmes	HCFs and CBMWTFs have conducted 3607 trainings on the segregation, collection, storage, transportation, treatment and disposal of bio-medical wastes in co-ordination with TNPCB as per the Annual Report of 2018.
6 (vii)	Undertake research regarding bio-medical waste management.	TNPCB is under the process of carrying out inventory/ gap analysis of Health care Facilities generating biomedical waste, as per the Biomedical Waste Management Rules, 2016. Tender documents have been uploaded in PCB website as well as published in Newspaper with last date of 27.02.2019. No tender was received.

		Hence, the willingness from reputed Institutions has been called for to carry out the gap analysis.
6 (viii)	Undertake third party audits of the common bio-medical waste treatment facilities in their State.	TNPCB vide B.P. No.55 Dated 18.12.2018 has formed an Environmental Audit team for conducting Third Party Environmental Audit. The audit will be carried out during the year 2019.
6 (ix)	Any other function under these rules assigned by Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.	TNPCB is complying with the Notification & Guidelines issued by MoEF and CPCB from time to time.
6 (x)	Advisory Committee	The Health, Family & Welfare (H1) Department vide G.O.(Ms). No. 277 dated 29.11.2016 had constituted the State Level Advisory Committee under the chairmanship of Principal Secretary of Health & Family Welfare Department. First State Level Advisory Committee meeting was held on 10.05.2017 and Second State Level Advisory Committee meeting on 10.01.2018. Further, Third & Fourth State Level Advisory Committee meetings were held on 25.09.2018 & 10.04.2019. Also, the Health, Family & Welfare (H1) Department vide G.O.(Ms). No. 179 dated 06.07.2016 and G.O. (Ms) No. 192 Dated 19.05.2017 had issued orders to constitute the District Level Monitoring Committee

		under the chairmanship of respective District Collectors. In this regard, District Level Monitoring Committees had been formed in all 32 Districts. District Level Monitoring Committee meetings have been held in the Districts of Virudhunagar & Tiruvallur on 16.04.2017 & 18.07.2018.
6 (xi)	Publish the list of Registered or Authorised (or give consent) Recyclers	Contaminated Recyclable Waste are autoclaved and shredded and the treated waste are sent to registered recyclers. The list of the Registered/ consented Recyclers has been published in the TNPCB website.
	Others	Earlier, all the above 11 CBMWTFs have been earmarked with territorial boundary jurisdiction. Now it has decided that, Bio Medical Waste generated from HCFs situated anywhere in Tamil Nadu can be taken for treatment and disposal within 48 hrs by a CBWTF situated anywhere in Tamil Nadu and there is no restriction for establishment of another Common Biomedical Waste Treatment Facility within a radial distance of 75 Kms. It has been resolved vide B.P.No.46 dated 18.12.2018

5. Status of identification and development model cities and towns

Status of the identification and development of Model Cities and Towns in the State in the first phase which can be replicated later for other cities and towns of the State.

- The following cities are identified as Model Cities

S.No	Name of the Cities/Towns
1	**Corporations:** Vellore & Tiruchirapalli
2	**Municipalities** Kumbakonam & Sembakkam
3	**Town Panchayats** Uthiramerur & Ponnampatti

6. Status of Functioning of Committees constituted by the Orders passed by the NGT in a matter O. A. no. 606 of 2018

The State has constituted:

A. **State Level Advisory Body (SLAB)**

Under rule 23 of SWM Rules 2016, the State Government has constituted the SLAB on 25th January 2017.Meetings are being conducted regularly.

B. **State Level Advisory Committee (SLAC)**

Under rule 16 of PWMC Rules 2016, the State Government has constituted SLAC on 25th October 2016. Meetings are being conducted regularly.

C. **Regional Monitoring Committee of Southern States constituted vide NGT in a matter O. A. no. 606 of 2018.** Meetings are being conducted regularly.

D. **District Monitoring Committee has been formed in all Districts as per the Rule 12 of SWM Rule 2016.**

E. Special Task Force has been formulated vide **G.O (Ms) No.58** Municipal Administration and Water Supply (MAIV) Department.

F. Conversion of Regional Monitoring Committee into **State Monitoring Committee of NGT dated 29.01.2019.**

An Office accommodation has been provided in Building owned by Greater Chennai Corporation at Kilpauk, Chennai.

The State Level Monitoring Committee (SLMC) in Tamil Nadu was constituted on 29.01.2019 under the chairmanship of Dr. P. Jyothimani, Former Judge, Madras High Court Former Judicial Member, National Green Tribunal and the Member Secretary, TNPCB is the Member Secretary of the Committee. The other members of the Committee are as follows:

a) The Principal Secretary, Municipal Administration and Water Supply Department
b) The Additional Chief Secretary, Rural Development and Panchayat Raj Department
c) The Principal Secretary, Housing and Urban Development Department
d) The Principal Secretary, Environment & Forest Department
e) The Principal Secretary, Health & family Welfare Department
f) Representative of the Central Pollution Control Board

50

The SLMC meetings were conducted on 12.02.2019, 22.02.2019. Also, one site visit was conducted at Coimbatore on 22.3.2019.

A joint meeting was conducted chaired by the State Level Monitoring Committee Chairperson Justice Dr. P. Jyothimani with the Chief Secretary and the Committee Members on 29.3.2019

51

7. Status of Action Plan for River Rejuvenation Committee for identified polluted river stretches and compliance with directions of the NGT passed in O.A. 673 /2018

S. No.	River	Stretches			BOD in mg/l	Source	Priority
		From	To	Distance			
1	Sarabanga	Thathayampatti	T.Konagapadi	15	78	Domestic Sewage	I
2	Thirumanimutharu	Salem	Papparapatti	15	190	Domestic Sewage	I
3	Vasista	Manivilundhan	Thiyaganur	10	675	Domestic Sewage	I
4	Cauvery	Mettur	Mayiladuthurai	200	3.3 - 32	Domestic Sewage	I
5	Bhavani	Sirumugai to	Kalingarayan	60	3.3-6.6	Domestic Sewage	IV
6	Tamirabarani	Pappankulam	Arumuganeri	80	3.1 - 4	Domestic Sewage	V

- Based on the directions, data was collected along the Polluted river stretches and placed was placed before the meeting headed by the Principal Secretary, E&F Department with the line Department officials on 14.11.2018 and decided to evolve the detailed action plan similar to River Hindon action plan.
- As per the Hon'ble NGT orders River Rejuvenation Committee (RRC) was constituted in Tamil Nadu.
- Action Plan was prepared and submitted to CPCB for approval on 28.01.2019.
- Action plan was evaluated by CPCB on 11.2.2019 and requested to furnish the present status of the Sewage Treatment Plant available at the river stretches, proposed STPs by local bodies and the time limit for construction along with the funding details and along with details of solid waste management.
- Action plan for four priority I river stretches have been revised and approved by RRC, was sent to CPCB by 18.4.19 for final approval.
- After the approval by CPCB, the Special Environment Surveillance Task Force will be formed for monitoring as per Hon'ble NGT (PB) directions.
- The Task Force will also ensure that no illegal mining takes place in riverbeds of such polluted stretches and also monitor the execution of the action plan.

52

8. Status of functioning of committees constituted in respect of Air Quality in 102 cities

- In Tamil Nadu, Thoothukudi has been identified as non – attainment city based on the parameter PM_{10} which exceeds the NAAQ standards.
- As per the directions of Hon'ble NGT, Air Quality Monitoring committee was constituted.
- Action plan for improving the air quality for Thoothukudi city was prepared and sent to CPCB on 18.12.2018.
- The committee comprising of members from CPCB, IIT Delhi and IIT Kanpur examined the action plan submitted and informed on 12.2.2019 that action plan has to be revised including the additional details such as source identification, Source Apportionment (SA) and Emission Inventory (EI) etc.
- Anna University has been engaged to conduct survey and prepare action plan. Action plan has been sent to TNPCB.
- Discussions will be made with all the stakeholders and will approved by Air Quality Monitoring (AQC) Committee and will be submitted to CPCB before 30.4.19 for approval.

9. Status of Action plan for identification of polluted industrial Clusters

- Critically Polluted Area (CPA) Identified – 4 Nos.(Ranipet SIPCOT, Cuddalore SIPCOT, Manali Industrial Complex & Kuruchi Industrial Area, Coimbatore).
- Severely Polluted Areas (SPA) identified- – 4 Nos. (Mettur- Industrial Complex, Erode, Tiruppur & Thoothukudi).
- As per the directions, TNPCB has short listed the parameters which are relevant for calculating the CEPI Index and has communicated the same to CPCB vide TNPCB Letter dated: 06.10.2018.
- The CPCB has been requested to share the data so that TNPCB could prepare the action plan for the PIAs based on CPCB report for the year 2018-2019 vide Lr. dated 12.02.2019.
- Orders have been issued to AC Tech of Anna University to conduct the Pre Monsoon & Post Monsoon survey for the 8 Polluted Industrial Areas during April –May 2019 and September – October 2019 for certain specific parameters for analysis of Ambient Air Quality, Surface Water Quality & Ground Water Quality survey and to evaluate CEPI index for approval by CPCB.

54

10. Status of amount collected from erring industries on basis of Polluters Pay Principle

Status of amount collected from erring industries on basis of Polluters Pay Principle:

Introduction:

Pollution fine has been collected from the erring industrial units based on Polluters Pay Principle only based on the Directions of the Hon'ble Supreme Court of India, Hon'ble High Court of Madras and Hon'ble National Green Tribunal.

However, the guidelines for calculating Environmental Compensation based on the CPCB formula yet to be finalized by the CPCB and the same will be adopted after finalization.

Fine imposed to Textile Bleaching and Dyeing units:

Hon'ble High Court of Madras in W.P.No.29791 of 2003 has ordered the Bleaching and Dyeing units of Tiruppur to remit the amount in the following heads namely Fine Amount, Orathupalayam Dam Cleaning, Loss of Ecology Compensation award and Adhoc Compensation and are as follows:

S. No.	Fine details	Amount Remitted in Crores to Dt. Collector.	Remarks
1	Fine Amount from dyeing & bleaching units as per orders of Hon'ble High Court of Madras on 22.12.2006.	69.46	Rs.25 Crores available with Madras High Court. (Not Disbursed) Rs.44.46 Crores available with Tiruppur Collector as on 07.07.2012 (Not Disbursed).
2.	Orathupalayam Dam Cleaning charges	7.79	All the identified works have been completed and completion report

55

			submitted by EE, PWD, Erode
3.	Details of Compensation collected as per Loss of Ecology award of Dec 2004	20.02	Tiruppur Collector disbursed Rs.11.96 Crores to 17758 no. of affected Farmers and the remaining is with Tiruppur Collector .
4.	Adhoc Compensation Ordered by Hon'ble High Court of Madras on 22.12.2006.	8.04	Available with Tiruppur Collector. (Not Disbursed)

Hon'ble High Court of Madras in W.P.No.2790 of 2012 challenged by the affected farmers, not included in G.O.Ms.No.209 E&F Dept. dated 31.12.2011, in which released Rs. 75 Crores to Noyyal River Ayacutdars Protection Association, Karur (Litigant of W.P.No.29791 of 2003).The Court in its order dated 01.11.2012 has passed the following:

1. Already available amount (LOEA awarded) shall be disbursed to 28596 affected farmers.
2. Rs.15 Crores shall be kept in reserve to compensate the other affected farmers identified by LOEA as per the claim.
3. Apart from the amount allotted to cleaning of Orathupalayam Dam the remaining amount of Compensation shall be disbursed on pro rata basis to the affected farmers.

Fine imposed to Tannery units:

The Loss of Ecology (Prevention and Payment of Compensation) Authority has been constituted by the Ministry of Environment and Forests, Government of India as per directives of the Supreme Court of India in connection with W./P.(civil) No. 914/91 to assess the compensation payable to affected persons by the tanneries.

- ✓ Loss of Ecology Authority has stated that the affected agricultural land area in Vellore area is 15164.96 hectares and the total amount of compensation payable to the

affected individuals and reversal of ecology to be recovered from polluting industries as Rs.33.39 crores.

- ✓ The compensation amount disbursed to 29754 beneficiaries is Rs.30.51 crores.

Fine imposed to Construction Projects:

As per the Hon'ble NGT(P) order dated 7.7.2015 made in O.A.No.37 of 2015, the project proponents (12 Nos.) have to remit Rs.92,27,57,399/- Out of which remitted Rs. 72, 84, 57, 399/- and yet to remit the balance amount of Rs.19,43,00,000/- towards the environment compensation for the restoration and restitution of the environment and ecology as well as towards their liability arising from impacts of the illegal and unauthorized constructions carried out by the project proponents.

- ✓ Further as per the Hon' ble NGT (PB) order dated 07.02.2017, TNPCB remitted Rs. 18,21,14,350/- to CPCB, Delhi as 25% of the amount received from the project proponent.
- ✓ Meanwhile, as per the Hon'ble NGT (PB) dated 03.07.2018, an amount of Rs. 13,39,79,178 was released to the unit of M/s. SSM Builders & Promoters, Chennai – 600 063.
  - Received fine amount = Rs. 72, 84, 57, 399/-
  - 25% remitted to CPCB = Rs. 18, 21, 14, 350/-
  - Released to M/s. SSM builders & Promoter = Rs.13, 39, 79, 178/-
  - Balance amount with TNPCB = Rs. 41,23,63,871/-

Further an affidavit was filed by the Board, during March 2017 before the Hon'ble NGT (PB) in M.A.No. 18 of 2018 in O.A.No. 676 of 2017 to utilise the balance amount available with the TNPCB for eco-restoration of lakes in Tamil nadu massive tree plantation programme in the State, Automatic weather Stations, Training programme for effective implementation of Waste Management Rules, Environmental Awarness programme. Further order awaited.

Fine imposed to M/s.Sterlite Limited,Tuticorin:

Hon'ble Supreme Court of India in its order dated 02.04.2013, in Civil Appeal Nos. 2776-2783 of 2013 (arising out of SLP (C) Nos. 28116-2/123 of 2010), set aside the orders of the Hon'ble High Court, Madras with a direction to the unit to deposit Rs.100 Crores with the District Collector, Thoothukudi as compensation and further directed that the compensation amount will be kept in a FD in a Nationalized Bank for a minimum of five years and the interest accrued there from should be spent on suitable measures for improvement of the Environment, including water and soil, of the vicinity of the sterlite plant ,after consultation with TNPCB and approval of the Secretary, Environment, Government of Tamilnadu.

As per the Hon'ble Supreme Court order dated 02.04.2013, the unit has deposited Rs. 100 crores with the District Collector, Thoothukudi in the SBI, Thoothukudi in SB Account No.33123691584 on 13.07.2013 for formulation of necessary schemes for the improvement in the Environment of the vicinity of the sterilite plant.

The present status of the fund utilization is furnished below. (as on 31.12.2018)

Sl. No	Details	Amount
1	Interest amount from 01.07.2013 to 31.12.2018	Rs.47,19,79,440
2	So far approval given by the Government for the following works.	Rs.38,93,68,917
	• Implementing rain water harvesting work, construction of drainage, ground water recharges shaft at various villages, construction of labour ward at Ottapidaram etc., • Regarding construction of storm water drain, flood protection wall at various places, improvement of Village Oorani, construction of 3 check dams etc.,	
	• For Construction of Respiratory Medicine Unit at Thoothukudi Medical College, Park at Pudur Pandiapuram in Ottapidaram	

	Block, heritage Park at Collectorate campus in Thoothukudi	
	• For removal of slag, removal of sholes and debris in Tuticorin	
	• Desilting of Korampallam Tank and Creation of Oxy Zone near Madurai Bypass Road, Thoothukudi – Phase 1, Rejuvenation of Panchayat Union Tanks /Ooranies and Tree Plantation along their Bunds in Thoothukudi & Ottapidaram Blocks, Provision of Reverse Osmosis Plant (RO Plant) in Panchayat Union Schools in Thoothukudi Block, Providing Combined Water Supply Scheme (CWSS) Panchayats adjoining SIPCOT in Ottapidaram Block, Providing Greenery & Park Facilities nearby Villages of SIPCOT, Drainage Facilities in nearby Villages of SIPCOT, Ottapidaram Block	
3	Amount already released for the above said works	Rs.16,38,15,917
4	Other works pending in various stages in execution	Rs.22,55,53,000
5	Balance interest amount as on 31.12.2018	Rs.8,26,10,523
6	Further proposals sent by the District Collector to the Govt for approval during December-2018.	Rs.9,46,85,000

TNPCB has imposed Environmental Compensation of Rs.20.82 Lakhs from M/s.SPIC and Rs.58.8 Lakhs from M/s.JSW Limited, Salem for violation of conditions in consent order.

59

11. Status of setting up and proper functioning of STPs/CETPs/ ETPs (OA/593/2017)

- Based on the Court order, the CPCB has requested the TNPCB to submit the Action Taken report.
- TNPCB filed a reply affidavit during July 2017 by furnishing the status of ETPs/CETPs/STPs provided by Industrial units/local bodies in the State of Tamil Nadu.
- Public notice was issued on 10.05.2017 to industrial units in English and Tamil Daily News Paper as compliance of one of the directions of the Hon'ble Supreme Court so as to make the ETP fully operational to achieve the norms prescribed by the Board.
- During April 2018 TNPCB again filed a reply affidavit by furnishing the updated status of ETPs/CETPs/STPs provided by Industrial units/local bodies in the State of Tamil Nadu.
- TNPCB has been regularly furnishing the status of action taken report on monthly basis in E-track system of CPCB, also URL available in TNPCB website which displays online real time continuous monitoring system.
- **Compliance Status of ETPs/CETPs/STPs furnished to CPCBs as on February -2019**

Compliance status of ETPs :

- No. of industries which require ETP - 10996
- No. of industries having functional ETP -10975
  - ✓ No. of industries complying - 10947
  - ✓ No. of industries non-complying - 28 ✓
    - ❖ Show cause notice issued - 9
    - ❖ Closure directions issued - 19
- No. of industries operating without ETP - 21
  - ❖ Show cause notice issued -13
  - ❖ Closure directions issued - 8

Compliance status of CETPs :

- No. of CETPs - 35
  - ✓ No. of CETPs complying - 34
  - ✓ No. of CETPs non-complying - 1
    - ❖ Show cause notice issued - 1
      (Madavaram CETP, Ambattur -Tannery)

60

Compliance status of STPs :

- No. of STPs – 240
  - ✓ No. of STPs complying -237
  - ✓ No. of STPs non-complying - 3
    - ❖ Show cause notice issued - 1
      (Thirumazhisai Common STP ,Tiruvallur)
    - ❖ Action under process -2
      (Villupuram Municipality UGSS cum STP,Zone-1,Zone-2)

Details of under construction/proposed CETPs :

- No. of under construction/proposed CETPs - 4
  (Chennai for Engineering Industries, Kanchipuram , Erode-Andikulam, Erode- Kadayampatti for Textile Industries)
- Targeted time period - Jan, 2019 – 2020

Details of under construction/proposed STPs :

- No. of under construction/proposed STPs – 28
- Targeted time period -Oct, 2018 - March, 2020

Availability of OCEMS data in public domain (Feb, 2019) :

- Available

- In order to restrain the operation of the illegal units discharging the untreated effluent on land or into water bodies, TNPCB has constituted District Co-ordination Committee in all the Districts, under the Chairmanship of District Collector.
- This committee is empowered to carryout inspection of the units and to take immediate action to disconnect the power supply and also to carryout eviction of unauthorized units. As such no industry is permitted to operate without ETP.
- In order to constantly monitor the quality of effluent discharge by the industries, the TNPCB has established a Water Quality Watch Centre on 24x7 basis and Highly polluting units are connected to this centre and real time data are available in web site(www.tnpcb.gov.in)

(61)

- The performances of pollution control measures provided by the industries are monitored by periodical inspection and sample collection. The renewal of consent to these units is considered on compliance of the standards prescribed by the Board. The industries which generate sewage have provided sewage treatment plant and they are functional.

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62

Annexure No.

Plastic Waste Management Rules -2016 –Rule 16
State Level Advisory Committee (SLAC) Formation Government Order Dated :25.10.16

Solid Waste Management Rules -2016 –Rule 23
State Level Advisory Body (SLAB) Formation Government Order Dated : 25.01.17

Minutes of Meeting of SLAC & SLAB

SLAC Dates : 05.04.17,21.03.18,25.02.19 & 05.04.19

SLAB Dates : 16.03.17,21.03.18,25.02.19 & 05.04.19

ABSTRACT

Plastic Waste Management - Constitution of State Level Advisory Committee as per Plastic Waste Management Rules, 2016 – Orders – Issued.

Municipal Administration and Water Supply (MA.IV) Department

G.O (Ms).No.148

Dated : 25.10.2016.
திருவள்ளுவர் ஆண்டு 2047,
துன்முகி – ஐப்பசி – 9)

Read:

From the Commissioner of Municipal Administration,
Letter Roc. No.44555 / 2016 /13, dated.10.08.2016.

ORDER:

The Government after careful examination of the proposal of Commissioner of Municipal Administration in his letter read above have decided to constitute a State Level Advisory Committee as per rule 16 of the Plastic Waste Management Rules, 2016 for the purpose of effective monitoring of implementation of said rules, comprising the following members and order accordingly.

Sl.No.	Details	Position
1.	Principal Secretary, Department of Municipal Administration and Water Supply Department	Chairman
2.	Member Secretary, Tamil Nadu Pollution Control Board, Chennai.	Member Secretary
3.	Director, Department of Environment.	Member
4.	Commissioner, Greater Chennai Corporation, Chennai.	Member
5.	Commissioner of Municipal Administration, Chennai.	Member
6.	Director of Town Panchayats, Chennai.	Member

64

7.	Commissioner, Value added tax or his nominee, Commercial Tax Department, Chennai.	Member
8.	Commissioner, Sales Tax Department, Chennai.	Member
9.	One expert from the field of Industries: Director of Industries & Commerce, No.36, South Canal Bank Road, Mandavelipakkam.	Member
10.	One expert from the field of Acadamic Institution: Director, Environment Studies, Anna University, Chennai.	Member
11.	One expert from Local body: Chief Engineer Solid Waste Management / Superintending Engineer Solid Waste Management, Greater Chennai Corporation, Chennai.	Member
12.	One expert from NGO involved in waste management: Thiru. M. B. Nirmal, Social Activist, Exnora International, 40, Vijayaraghava Road, T.Nagar, Near Andhra club, Chennai,Tamilnadu-17.	Member
13.	Representative of Plastic Association, Drug Manufacturers' Association, Chemical Manufacturers' Association. President, Tamilnadu Plastic Manufacturers Association, C-1, First Floor, "Rams Square" 2 village Road, Nungampakkam, Chennai 34.	Member
14.	Chief Engineer / Superintending Engineer, O/o Commissioner of Municipal Administration, Chennai.	Member

2. The Government also order that the State level advisory body shall meet at least once in six months and may invite experts if it considers necessary.

(By Order of the Governor)

K. PHANINDRA REDDY
PRINCIPAL SECRETARY TO GOVERNMENT

To
The Commissioner of Municipal Administration, Chennai – 5.
The Member Secretary, Tamil Nadu Pollution Control Board, Guindy, Chennai -32.
The Director, Department of Environment, Saidapet, Chennai – 15.
The Commissioner, Greater Chennai Corporation, Chennai-3.
The Director of Town Panchayats, Chennai-108.
The Commissioner, Value added tax, The Commercial Taxes Department, Chennai – 6.

65

The Commissioner, Sales Tax Department, Chennai - 6.
The Director of Industries & Commerce,
No.36, South Canal Bank Road, Mandavelipakkam.
The Director, Environment Studies, Anna University, Chennai.
Chief Engineer Solid Waste Management / Superintending Engineer Solid Waste Management, Greater Chennai Corporation, Chennai - 3.
Thiru. N.B. Nirmal, Social Activist, Exnora International, 40, Vijayaraghava Road, T.Nagar, Near Andhra club, Chennai- 17.
The President, Tamilnadu Plastic Manufacturers Association, C-1, First Floor, "Rams Square" 2 village Road, Nungampakkam, Chennai 34.
Chief Engineer / Superintendent Engineer,
O/o Commissioner of Municipal Administration, Chennai - 5.

Copy to :

The Senior Personal Assistant to Minister (Municipal Administration, Rural Development and Implementation of Special Programme) Chennai – 600 009.
The Principal Private Secretary to Secretary to Government, Municipal Administration and Water Supply Department, Chennai – 600 009.
The Principal Secretary to Government, E&F Department, Secretariat, Chennai – 9.
The Municipal Administration and Water Supply (OP.II/MC.I/TP.II)Department, Chennai – 600 009.
SF/SC

/Forwarded by Order/

SECTION OFFICER

(66)

003257

ABSTRACT

Solid Waste Management Constitution of State Level Advisory Body as specified under Rule 23 of Solid Waste Management Rules, 2016 – Orders – Issued

Municipal Administration and Water Supply (MA.IV) Department

Dated: 25.01.2017
திருவள்ளுவர் ஆண்டு 2048,
தை 12

G.O. (Ms.) No.5

Read :

From the Commissioner of Municipal Administration, Letter Roc. No.16914/2016/P3, dated 28.12.2016.

ORDER:

The Government after careful examination of the proposal of Commissioner of Municipal Administration in his letter read above have decided to constitute a State Level Advisory Body as specified under Rule 23 of Solid Waste Management Rules, 2016 comprising the following members and order accordingly.

Sl. No	Details	Position
1	Principal Secretary to Government, Municipal Administration & Water Supply Department.	Chairperson, ex-officio
2	One representative of Panchayats or Rural Development Department not below the rank of Joint Secretary to State Government	Member, ex-officio
3	One representative of Revenue Department of State Government.	Member, ex-officio
4	One representative from Ministry of Environment, Forest and Climate Change Government of India	Member, ex-officio
5.	One representative from Ministry of Urban Development, Government of India.	Member, ex-officio
6.	One representative from Ministry of Rural Development, Government of India.	Member, ex-officio
7.	One representative from the Central Pollution Control Board.	Member, ex-officio
8.	One representative from the State Pollution Control Board or Pollution Control Committee.	Member, ex-officio
9.	Dr. Indumathi, Indian Institute of Technology, Chennai.	Member, ex-officio

(67)

10.	Chief Town Planner of the States, Director of Town and Country Planning	Member
11.	Commissioner, Greater Chennai Corporation	Member
12.	Commissioner, Commissionerate of Municipal Administration	Member
13.	Director, Directorate of Town Panchayats	Member
14.	Three representatives from the Local Bodies by rotation. 1. Commissioner, Tirunelveli Corporation 2. Municipal Commissioner, Avadi 3. Executive Officer, Perungalathur	Member
15.	Two representatives from census towns or urban agglomerations by rotation. 1. Viralimalai 2. Thalaivasal	Member
16.	One representative from reputed Non-Governmental Organisation or Civil Society working for the waste pickers or informal recycler or solid waste management Thiru N.B. Nirmal, EXNORA	Member
17.	One representative from a body representing Industries at the State or Central level Thiru K. Ramesh, Director and Head, CII, Tamil Nadu.	Member
18.	One representative from waste recycling industry Mr.Merchant, MK Aromatics, Alandur	Member
19.	Two-subject experts 1. Dr. Rajasekar, Solid Waste Management Expert 2. Dr. Kurien Joseph, Solid Waste Management Expert, Professor, Anna University	Member
20.	Co-opt One representative each from Agriculture Department, and Labour Department of State Government.	Member

2. The Government also order that as specified under rule 23(2) and (3) of the above said rules, the State Level Advisory Body shall meet at least once in every six months to review the matters related to implementation of these rules and the copies of the review report of State Level Advisory Body has to be forwarded to the State Pollution Control Board or Pollution Control Committee respectively for necessary action.

(By Order of the Governor)

K. PHANINDRA REDDY
PRINCIPAL SECRETARY TO GOVERNMENT

To
The Ministry of Environment, Forest and Climate Change,
Government of India, New Delhi.

68

The Ministry of Urban Development, Government of India, New Delhi.
The Ministry of Rural Development, Government of India, New Delhi.
The Central Pollution Control Board, Government of India, New Delhi.
The Rural Development & Panchayat Raj Department, Chennai – 9.
The Environment and Forest Department, Chennai – 9
The Revenue Department, Chennai – 9.
The Housing and Urban Development Department, Chennai – 9.
The Agriculture Department, Chennai – 9.
The Labour and Employment Department, Chennai – 9
The Commissioner, Greater Chennai Corporation, Chennai-3.
The Commissioner of Municipal Administration, Chennai – 5.
The Director of Town Panchayats, Chennai-108.
The Director of Rural Development & Panchayat Raj, Chennai – 15
The Member Secretary, Tamil Nadu Pollution Control Board, Guindy, Chennai – 32
The Director of Town and Country Planning, Chennai – 2.
The Director of Department of Environment, Saidapet, Chennai – 15.
The Director of Industries & Commerce,
No.36, South Canal Bank Road, Mandavelipakkam, Chennai - 614 904.
Dr. Indumathi, Indian Institute of Technology, Chennai – 600 036
The Director of Environment Studies, Anna University, Chennai – 28
The Commissioner, Tirunelveli Corporation / Municipal Commissioner, Avadi / Executive Officer, Perungalathur.
Thiru. N.B. Nirmal, Social Activist, EXNORA International, 40, Vijayaraghava Road, T.Nagar, Near Andhra Club, Chennai - 17.
Thiru K. Ramesh, Director and Head, CII, Confederation of Indian Industry, Tamil Nadu State Office, 98/1, Velacherry Main Road, Guindy, Chennai 600 032.
Mr. Merchant, MK Aromatics, Waste recycling Industry, Alandur, Chennai.
Dr. Rajasekar, Solid Waste Management Expert, Professor, Anna University, Chennai – 25.
Dr. Kurien Joseph, Solid Waste Management Expert, Professor, Anna University, Chennai – 25.

Copy to :

The Senior Personal Assistant to the Hon'ble Minister (Municipal Administration, Rural Development and Implementation of Special Programme) Chennai – 600 009.
The Senior Principal Private Secretary to Principal Secretary to Government, Municipal Administration and Water Supply Department, Chennai – 600 009.
The Municipal Administration and Water Supply (OP.II/MC.I/TP.II) Department, Chennai – 600 009.
SF/SC.

/Forwarded by Order/

SECTION OFFICER

69

Draft Minutes of the First meeting of the State Level Advisory Committee on Plastic Waste Management, Tamil Nadu held on 5.04.2017 at 4.00 p.m. at Secretariat, Chennai-9.

In the Chair: Thiru.K.Phanindra Reddy, I.A.S.,
Principal Secretary to Government, MAWS Dept.,

Members Present:

1)	Thiru.N.SundaraGopal, Member Secretary, Tamil Nadu Pollution Control Board, No.76, Mount Salai, Guindy,Chennai-32.
2)	Dr.H.Malleshappa,I.F.S., Director,Department of Environment, No.1, Jeenis road, Panagal Building, Ground Floor, Saidapet,Chennai-15.
3)	Thiru.G.Prakash,I.A.S., Commissioner of Municipal Administration, Chepauk, Chennai-5.
4)	Thiru.Magarabhushanam, Director of Town Panchayats, Chennai
5)	Tmt.A.Anbukkani, Deputy Commissioner (R.P) (C.T), Value added Tax or his nominee Ezhilagam Chennai -5.
6)	Thiru.P.Jagadeesh, Joint Director (Engg) of Industries and Commerce, No.36, South Canal Bank road, Mandavelipakkam, Chennai-28.
7)	Dr.S.Kanmani, Director, Department of Environment Studies, Anna University, Chennai.
8)	Thiru.R.Venkatachalam, Chief Engineer, O/oCMA, Chepauk, Chennai
9)	Thiru. N. Mahesan, Chief Engineer (SWM) Greater Chennai Corporation, Chennai.
10)	Thiru.M.B.Nirmal, Social activist , Exnora International, No.40, Vijayaraghava road, T.Nagar, near Andhra Club; Chennai-17.
11)	Thiru.V.Sekar, President, Tamil Nadu Plastic Manufacturer's Association, C1 first floor, Ram's square, No.2, Village road, Nungambakkam, Chennai-34

Other Officials:

1) Tmt.Sangeetha, Joint Commissioner(Administration), O/o CMA

2) Thiru.S.P.Balasubramanian, SE(SWM),O/o GCC

3) Thiru.D.Anbalagan, SE,O/o the CMA

At the outset,the Principal Secretary to Government, MAWS Department and Chairman of the State Level Advisory Committee welcomed the members of State Level Advisory committee. After prelliminary self- introduction of all the members of State Level Advisory Committee, the important aspects of the Plastic Waste Management Rules, 2016 notified on 18.3.17 by the Ministry of Environment, Forest and climate change, its comparison with the PWM Rules notified during 2011 and the current status of the ULBs with respect to the duties and responsibilities prescribed for them under the PWM Rules 2016 were discussed in detail as follows:

A comparison of Plastic waste (M&H) Rule 2011 and the PWM Rule 2016 reveals that the earlier rule was applicable only to Municipal area whereas the PWM Rule 2016 is applicable to every waste generator, Gram Panchayat, Local body, Manufacturers, Importers and Producers and the jurisdiction is also extended to Rural area. In this context, the Principal Secretary to Government, MAWS Department stressed the importance of including District Rural Development Agency (DRDA) as a member in the State Level Advisory Committee and insisted that one representative from DRDA should be invited for the next SLAC Meeting.

To ensure that the waste generators are made to pay user fee for the plastic waste generated by them and to levy spot fine in case of violation of the rules besides prohibiting open burning of plastics, suitable bye-laws have to be formulated and notified by the ULBs. It was further decided to formulate exclusive bye-law for Plastic wastes and include it with the existing bye-law of all ULBs formulated in consistent with the SWM Rules 2016 and get it notified before the end of April 2017.The Bye-law should also accommodate the provision for levying spot fine for open burning of plastics which should be fixed in consultation with TNPCB.

The Principal Secretary to Government, MAWS Department and the Chairman of the Committee further expressed that the total volume of Plastic waste handled by Municipalities, Corporations, Town Panchayats and Greater Chennai Corporation should also be mentioned separately in the presentation.

The Principal Secretary to Government, MAWS Department stressed that in order to ensure Channelization of recyclable plastic waste fraction to recyclers, the recyclers of plastic waste need to be identified and integrated in to the system. Statistics on the number of recyclers identified and integrated in the system by ULBs, Town Panchayats and Greater Chennai Corporation should also be made available during the next meeting.The President,Plastic manufacturer's association informed that the districtwise list of recyclers is already available with them and can be utilised by the ULBs.

The Principal Secretary to Government, MAWS Department emphasised that the Extended Producer's responsibility for the producers and Brand owners for the plastic waste generated from their products need to be planned and strictly enforced. This could be done by following other States which have already conceptualised, formulated and implemented the EPRs.

Commissioner of Municipal Administration detailed the plastic buy-back arrangement existing in Coimbatore and Tirunelveli and the practice of collection of plastic waste during the **designated days of the week** in Tirunelveli Corporation which is being emulated by other ULBs also.

The Committee discussed the fact that while Rule 4 of PWM Rules 2016 prescribes that the sachets using plastic material shall not be used for storing, packing or selling tobacco, gutkha and panmasala, it is not being followed in practice and the Commissioner of Municipal Administration insisted the need to curb this type of selling.

Thiru.M.B.Nirmal, President, Exnora highlighted that the Exnora is organising plastic pollution prevention campaigns throughout Tamil Nadu and various strategies for the management of pet bottles, paper wastes and plastic wastes are available for dissemination.The Principal Secretary to Government, MAWS Department informed that sufficient funds are available for undertaking IEC activities under Swachh Bharat mission and CMA can engage Organisations like Exnora in the conduct of awareness campaigns for schools, colleges, industries, hoteliers, Self help groups etc.,as a part of IEC towards curbing the plastic menace.

The State Level Advisory Committee further discussed the salient point of the Rule which insists that the minimum thickness of plastic carry bags should be 50 microns and observed that the usage of carry bags less than 50 micron thickness is also prevalent in the market. The President of Plastic Manufacturer's

(72)

association informed that the association does not recognise any of its members who involve in manufacturing activity against the Rules and the Carry bags with lesser thickness (<50 microns)penetrates the market from other States .

The Principal Secretary to Government, MAWS Department enquired the representative from the Department of Commercial taxes on the nature of action taken by the Department to prevent the entry of carry bags with less thickness in to the State for which the Deputy Commissioner, Commercial Taxes informed that the Department levy taxes for such products and there is no mechanism to prevent the entry of such products.Also,the Chairman requested the committee members to share the details of Manufacturers involved in the manufacture of carry bags with less than 50 micron thickness for formulating suitable enforcements.

The President, Plastic Manufacturer's Association informed that if the ULBs are ready to provide the land, raw material (Plastic waste) and grant towards the setting up of processing plants, the Plastic Manufacturer's association can set up units for the conversion of plastics in to useful products following DBFOT approach. Further it was informed that an Exhibition is proposed to be organised in the Month of June 2017 at Chennai Trade Centre wherein pavilions showcasing the recycling of plastic waste in to useful products will be arranged for the benefit of the visitors.Further,the ULBs were invited to participate in the event during which necessary tie-up for buy- back of plastic wastes can also be finalised.

The Chairman instructed that the Form V as prescribed in the Plastic Waste Management Rules 2016 should also be collected from all the ULBs and sent to Government by the end of June 2017.

The Chairman stressed that the Commissionerate of Municipal Administration, Tamil Nadu Pollution Control Board and the Department of Commercial Tax cum sales tax should coordinate with each other and play a vital role in the regulation of Plastic waste and curbing the plastic menace and the meeting ended with vote of thanks.

Principal Secretary to Government
MAWS Department

Minutes of the First meeting of the State Level Advisory Body on Solid Waste Management, Tamil Nadu held on 16.03.2017 at 3.00 p.m. at Secretariat, Chennai-9.

In the Chair: Thiru.K .Phanindra Reddy, I.A.S.,
Principal Secretary to Government, MAWS Dept.,

Members Present:

1)	Thiru.G.Prakash, I.A.S., Commissioner of Municipal Administration
2)	Thiru.K.Maharabushanam, I.A.S., Director of Town Panchayats
3)	Tmt.Vijayalakshmi I.A.S., Deputy Commissioner (Health), Greater Chennai Corporation, Chennai
4)	Thiru. Selvam, Joint Chief Engineer Tamil Nadu Poilution Control Board, Chennai.
5)	Representative from Commissionerate of Revenue Administration
6)	Thiru. Sivasubramanian, Commissioner, Tirunelveli Corporation
7)	Dr.Indumathi, Indian Institute of Technology, Madras
8)	Dr.S.Shaktheeswaran, National PMU, MoUD
9)	Thiru. P.M.N.Mujibur Rehman,B.Sc., Commissioner, Avadi Municipality
10)	Thiru. T.N.Kamal Raj, Executive officer – Perungalathur Town Panchayat
11)	Thiru.M.Ponnuswami, Confedration of Indian Industry, Chennai
12)	Thiru. Mahesh Merchant, M.K. Aromatics Ltd., Waste Recycling Industry, Chennai
13)	Dr.M.P.Rajasekhar, Solid Waste Management Expert
14)	Thiru.Shankar, Deputy Director(Fertilizers), O/o the Director of Agriculture, Chepauk, Chennai-5
15)	Tmt.S.Kalaivani, Commissioner, Commissionerate of Labour, Chennai

Other Officials:

1) Tmt. Jaya, I.A.S Joint Secretary to Government, MAWS Department, Secretariat, Chennai.
2) Tmt. Sangeetha, Joint Commissioner(Administration), O/o, CMA
3) Thiru. S.P.Balasubramanian, SE(SWM),O/o GCC
4) Thiru.N. Makesh, Chief Engineer (Buildings),O/o GCC
5) Thiru.R.Venkatachalam, Chief Engineer, O/o the CMA
6) Thiru.D.Anbalagan, SE, O/o the CMA
7) Thiru.Rajendran, SE,O/o DTP

At the outset, the Commissioner of Municipal Administration welcomed the Chairman and the members of State Level Advisory Body. The discussion on the agenda and the observations made are as follows:

(1) Status on implementation of Solid waste Management Rules 2016.

CMA presented the detailed action plan for the implementation of various duties of ULBs as stipulated in clause 15 of Solid Waste Management Rule 2016, and the time frame for the compliance of the duties prescribed in the Rule.

CMA expressed that segregation of solid waste at door step is targeted to be achieved in atleast 60% ULBs before 01.06.2017 and informed that all Corporations and 28 Amrut cities including Chennai Corporation have identified the informal sector for waste collection and authorized their service by issuing ID cards. Also the CMA suggested that the wet waste shall be collected on daily basis and the recyclable waste shall be collected on weekly basis as being done in Tirunelveli Corporation at present and the domestic hazardous waste shall be collected on monthly basis. It was also suggested to identify and authorise the agency to collect the hazardous waste and to deposit the same at the designated location.

The Joint Chief Engineer, TNPCB informed that there are two such hazardous landfill facilities available in Tamil Nadu at present.

Dr.Rajasekhar, SWM expert emphasized the usage of different colour bins for primary collection as specified in the SWM Rules 2016 and insisted its strict adherence.

It was insisted by the members that source segregation shall be immediately started from commercial establishments with the arrangement to collect the segregated waste at their door step.

It was also suggested to conduct regular meeting with bulk waste generators and commercial establishments to impart awareness on source segregation and handing over the waste to the waste collectors.

The Chairman expressed that besides recognizing informal waste collectors and integrating them in SWM as emphasized in SWM Rules 2016, the fact that the safety and hygine of the sanitary workers also needs attention.

The Commissioner of Municipal Administration added that the template for "Solid Waste Management Bye law " has been circulated to all the Urban Local bodies to impose the user charges concept with some penalty clauses as a part of follow up of Solid Waste Management Rule 2016. The Joint Chief Engineer, TNPCB expressed that suitable bye-laws should be framed by all ULBs with the provision for levying charges towards collection and disposal of Construction and Demolition waste also. It was told by CMA that a separate bye law and guidelines will be issued as far as the C & D wastes are concerned.

It was insisted by the members that silt management shall be carried out and ensured that it does not get mixed with other wastes.

Residential welfare Association meetings should be conducted in all ULBs on bimonthly basis to insist the waste generators not to litter or throw or dispose of any waste such as paper, water bottles, liquor bottles, soft drink cans, tetra packs, fruit peel, wrappers, etc., or burn or bury waste on streets, open public spaces, drains, water bodies and to segregate the waste at source. It was informed that the first meeting was held on 15.11.2016 and follow-up will be taken to have continuous effort towards this line of action. The representative from Tamil Nadu Pollution Control Board expressed that separate disposal facilities for sanitary waste, e-waste, etc., presently exist in two places in the State as emphasized in SWM Rules 2016.

Training programmes are planned and are being conducted through Tamil Nadu Institute for Urban Studies, Coimbatore to impart the knowledge of handling the waste by avoiding multiple handling and to emphasise the importance of source segregation at door step. The first training programme for sanitary workers started on 14th March 2017 and it is being conducted continuously region-wise and it is also planned to provide training to all the sanitary workers at least once in a year. Besides training programmes are planned to be conducted on a bimonthly basis to the Waste Collectors and informal Waste pickers at ULBs level by engaging Master trainers.

The representative from Confederation of Indian Industry stressed the importance of conducting the awareness programmes on SWM to the public through school children and Youth as it is bound to have a better impact.

The Commissioner of Municipal Administration replied that intensive IEC activities are proposed by engaging Animators, the locally available persons who can easily approach and explain the people continuously on day to basis to inculcate the behavioural changes among the public and school children in respect of handling of waste, segregation, disposal, prevention of ODF, general cleanliness etc., with a feeling of "My waste is my responsibility". Further the CMA added that one animator for each ward in Chennai corporation, one animator for 2 wards in other Corporations, one animator for 4 wards in Municipalities and one animator for 6 wards in Town panchayats are proposed and awaiting Government Orders for immediate implementation.

It was suggested by Dr. Rajasekhar, the field expert and member to focus on Bulk waste generators and to educate them to collect, segregate, process the waste generated at their premises and to reuse the end product. The Commissioner of Municipal Administration expressed that home composting, small capacity Bio methane plants are advocated to the Bulk waste generators. It was said that so far 29 Bio-methanation plants with a capacity of 5TPD each have been installed in the ULBs of Tamil Nadu to handle the market and food waste collected from the bulk generators and the end product like methane gas, electricity are being used for various purposes. Further CMA recorded that a training programme on operation and maintenance of Biomethanation plant was conducted to the ULB officials from 15th to 17th March 2017 through CLRI, Chennai.

The CMA informed that Government of Tamil Nadu created a special Solid Waste Management Fund in the year 2012 itself, even before the announcement of SBM and is contributing a huge grant of Rs. 100 crore every year for all the developmental activities pertaining to the solid waste sector and said that so far 8 Corporations, 98 Municipalities, and 323 Town panchayats have been sanctioned funds to the tune of Rs. 900 crore with the approval of State High Powered Committee to establish processing plants along with Material Recovery facilities.

Dr.Selvam, Joint Chief Engineer, representative from TNPCB expressed that the segregated waste, as a result of separation of the recyclable waste and wet waste, may not attain the adequate calorific value required for W2E

plant and Dr. Rajasekhar said that the plastic material and the organic waste other than the wet waste will have more calorific value and suitable for W2E plant. Complementing both views Dr. Indumathi, SWM member from IIT Chennai said that the W2 E plants are suitable for major Corporations.

It was insisted by the Chairman that the TNPCB may issue suitable guidelines to their District officers to process the application to issue authentication to Municipal compost yards as indicated in the SWM Rule 2016.

The Principal Secretary to Government viewed that the present SWM Rule do not address curbing of plastics and insisted the importance of this issue to be included in the SWM Rule/Policy. The Principal Secretary to Government further instructed the Tamil Nadu Pollution Control Board to facilitate the usage of RDF in Cement factories/ kilns. The Joint Chief Engineer, TNPCB, stated that a separate policy on use of plastics and wastes will be issued, and Dr. Rajasekhar informed that the Plastic Waste Management Rules 2016 is insisting the registration of the establishments who are willing to give carry bags on payment of charges.

In the above context, Dr. Indumathi expressed that the disposal of Napkins, Diapers and certain products coated with inseparable plastic and alumina layer are also very difficult to be disposed of scientifically except safe incineration and suggested the importance of sensitizing the industries towards adherence of SWM Rules 2016. Dr. Indumathi further emphasised the insistence of extended producer responsibility for better management of residential and domestic hazardous wastes.

It was informed by the CMA that identification of sites at regional level to receive the inerts are in progress. It was suggested to develop the land fill with suitable modification to accept the safe disposal of domestic hazardous waste in the proposed regional land fill site instead of transporting the hazardous waste to common hazardous waste disposal site available in Gummidipoondi and Virudhunagar.

The CMA stated that 30 ULBs prepared DPR for revamping the dump yard through Biomining and 7 ULBs have been sanctioned with Bio mining work by the SHPC to reclaim the land through bioremediation. It was stated that Kumbakonam Municipality has reclaimed 7.50 acres of land through bio mining the legacy waste.

The Representative from MoUD explained that 20 cities have been selected in the 1st phase for identification and remediation of dump sites and the Chairman, Principal Secretary to Government said that bio mining is a better option than capping for bio remediation, in view of the pressure on urban land.

(2) Status on State Policy on Solid Waste Management

The draft State Policy on Solid Waste Management has been briefed and a copy has been given to all the members with a request to give their inputs. It was informed that the Municipalities and Corporations are in the process of preparing the Solid waste Management Plan and it will be completed within the stipulated time.

(3) Strategies on Solid waste management

It was said that processing facilities, composting facilities and Material recovery facilities (MRFs) to recover recyclables will be set-up in all small ULBs and will be set up in Corporations on decentralised approach., and the ULBs generating more than 50 TPD can think of roping different technologies including Biomethanation etc., and in very large corporations such as Chennai, Coimbatore etc., establishment of common processing facilities and waste to energy technology shall be considered.

The Principal Secretary to Government stressed that all the members could give their inputs/suggestions for inclusion in the SWM Policy and the meeting ended with vote of thanks.

K. PHANINDRA REDDY
PRINCIPAL SECRETARY TO GOVERNMENT

/True Copy/

SECTIOIN OFFICER

From
Thiru.G.Prakash, I.A.S.,
Commissioner of Municipal Administration,
Chepauk, Chennai 600 005

To
1. All Members of the State Level Advisory Body (as per list)
2. All Members of the State Level Advisory Committee (as per list)

Roc.No:44555/2013/P3 dated:02.05.2018

Sir/Madam,

Sub: Solid Waste Management and Plastic Waste Management – Implementation of the rules – Second meeting of SLAB and SLAC held on 21.03.2018 – Minutes of the meeting communicated – regarding.

Ref: 1. Second meeting of SLAB and SLAC held on 21.03.2018
2. Government letter No.4735/MA .IV (2)/2018-1, Municipal Administration and Water Supply Department, Chennai, dated.24.04.2018.

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The Second meeting of SLAB and SLAC held on 21.03.2018 under the Chairmanship of Principal Secretary, Municipal Administration and Water Supply Department. The copy of the Minutes of the Meeting is enclosed and communicated for favour of information.

Enclosure: Minutes of the meeting

for Commissioner of Municipal Administration

(80)

Municipal Administration and Water Supply Department, Chennai - 09.

Minutes of the meeting of the State Level Advisory Body and State Level Advisory Committee on Solid Waste Management and Plastic Waste Management Rules 2016, Tamil Nadu held on 21.03.2018 by 12 Noon at Secretariat, Chennai-9.

In the Chair: Thiru Harmander Singh, I.A.S.,
Principal Secretary to Government, MAWS Dept.,

Members Present:

1) Thiru G.Prakash,I.A.S
Commissioner of Municipal Administration,
Chepauk, Chennai-5
2) Thiru P.Madhusudhan Reddy, I.A.S
Deputy Commissioner (Health)
Greater Chennai Corporation
3) Thiru Palanisamy, I.A.S
Director of Town Panchayats, Chennai
4) Thiru Selvan
Additional Chief Environmental Engineer,
Tamil Nadu Pollution Control Board
No 76, Mount Salai, Guindy Chennai-32
5) Thiru M.Sekaran
Assistant Director,
Director of Town and Country Planning
6) Tmt.Dr.IngruMathi
Indian Institute Of Technology, Chennai
7) Thiru Dr.Rajasekar SWM Expert
8) Thiru Dr.Kurien Joseph
SWM Expert/Professor
Anna University
9) Dr.S.Kanmani
Director
Department of Environment Studies
Anna University, Chennai
10) Thiru Narayana Nair
Commissioner(Incharge)
Tirunelveli Corporation
11) Thiru Kamal Raj
Executive Officer
Perungalathur Town Panchayat
12) Thiru.M.B.Nirmal
Social activist - Exnora International,
No 40, Vijayaraghava road,
T.Nagar, near Andhra Club, Chennai-17

81

13)	Thiru R.Venkatachalam, Chief Engineer, O/oCMA, Chepauk, Chennai
14)	Thiru. N. Mahesan, Chief Engineer (SWM) Greater Chennai Corporation, Chennai.

Other Officials:

1. Tmt. Kalaiselvi Mohan,
   Joint Commissioner of Municipal Administration, O/o CMA
2. Thiru.D.Anbalagan,
   Superintending Engineer, O/o the CMA

At the outset, the Commissioner of Municipal Administration on behalf of the Principal Secretary to Government, MAWS Department and Chairman of the State Level Advisory Body & State Level Committee welcomed the members of both the committees.

The compliance report of the duties prescribed to ULBs under Rule 15 with respect to SWM Rules 2016 and Rule 6 with respect to PWM rules 2016 was discussed in detail. On the status of achievement of 61 % source segregation in the State, the Principal Secretary to Government, MAWS department / Chairman of the committee insisted that source segregation is to be popularised and sustained through continuous IEC activities and enforcement action. Also, the contract agreement entered with the outsourcing agency for Collection and Transportation of MSW should incorporate a clause that only segregated wastes should be handed over by them at the processing site/ compost yard.

Thiru. M.B. Nirmal, President, EXNORA stressed the importance of conducting awareness programmes on Solid Waste Management and Plastic Waste Management to the public through imparting IEC to School children which will have a greater impact. He also informed that the list of volunteers who can be utilised in the IEC of schoolchildren and the Public will be provided by EXNORA who in turn can be utilised by the Department along with the animators, supervisors and coordinators engaged exclusively for carrying out IEC activities by the Department. He also explained about the products created by EXNORA through Upcycling.

The Principal Secretary to Government, MAWS department/ Chairman of the committee also emphasised strict enforcement of SWM and PWM bye-laws framed by the ULBs and stressed that the enforcement should be a continuous practice.

The practice of collection of Biodegradable waste on all days of the week and plastic waste on a designated day of the week which is yielding good results was advised to be followed in all the ULBs.

The Additional Chief Environmental Engineer TNPCB informed the availability of two facilities in Gummidipoondi and Virudunagar for the collection of domestic hazardous wastes such as paint drums, pesticide cans, CFL bulbs, Tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge etc., generated at the household level. It was observed that creation of regional facilities for the collection of such wastes will be of much use so that the wastes need not be transported to long distances. However Commissioner of Municipal Administration was requested to take up matter with all Commissioner through RDMA for strict compliance regarding despatch of hazardous waste to TNPCB facility at Gummidipoondi and virudhunagar.

The Chairman of the Committee observed that bimonthly meeting with manufacturers/ waste producers is to be conducted by CMA, GCC and DTP in coordination with TNPCB to formulate their duties and responsibilities as a part of formalizing the Extended Producer responsibilities(EPR).

The SWM Expert Professor Kurien Joseph, CES, Anna University expressed that while D2D collection and segregation is reasonably good, the processing of solid waste seems to be low in the State. The Commissioner of Municipal Administration replied that the works for construction of Processing centres is under progress and substantial improvement in processing will be achieved by the end of June 2018.

Regarding the establishment of C& D waste processing facilities in ULBs, the Commissioner of Municipal Administration informed that due to the low quantity of C& D waste generation in all ULBs except GCC, the project is not feasible and concessionaires are not coming forward to establish this facility on PPP mode. The committee decided that the quantity of C& D waste generated in all the ULBs may be collected and produced before the court in case of any violations observed by the Court. Meanwhile, strict enforcement should be in place to avoid dumping of C&D waste on roadsides and all the ULBs must ensure that the C& D wastes are properly disposed by filling the Low lying areas with the C&D waste generated.

The committee further observed that a plan of action is to be prepared for the remediation of all dumpsites throughout the State through Biomining and Biocapping as followed in Tiruvelveli Corporation. Besides motivating the best performing ULBs

(87)

in Solid Waste management & Plastic Waste Management in the areas of segregated collection, transportation and processing through cash prizes and awards the committee observed that strict enforcement is to be followed to avoid dumping of wastes in water bodies such as Rivers, Lakes, Ponds etc.,

With the above deliberations, the meeting ended with vote of Thanks

Harmander Singh
Principal Secretary to Government

/True copy/

Section Officer

19 MAR 2019
006805

Municipal Administration and Water Supply (MA.IV)Department,
Secretariat, Chennai – 600 009.

Letter No.4735/MA.IV(2)/2018 –4, dated:18.03.2019

From
Thiru S.Mathevan Pillai, M.Com.,
Deputy Secretary to Government.

To
The Commissioner of Municipal Administration,
75, Santhome High Road,
R.A.Puram,Chennai- 28 (w.e).

Sir,

Sub : Meeting - Solid Waste Management and Plastic Waste Management – Implementation of the Rules- Third meeting of State Level Advisory Body and State Level Advisory Committee held on 25.02.2019 – Minutes of the meeting – communication – Reg.

Ref:
1. G.O.Ms.No.148 Municipal Administration and Water Supply (MA.IV) Department, dated: 25.10.2016
2. G.O.Ms.No.5 Municipal Administration and Water Supply (MA.IV) Department, dated:25.01.2017
3. From the Commissioner of Municipal Administration Chennai Letter Roc.No.44555 / 2013/P3, dated:22.02.2018
4. Government.Letter.No.4735/MA.IV/2018-1,Municipal Administration and Water Supply (MA.IV) Department, dated:15.03.2018, 24.04.2018 and 21.02.2019

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I am directed to invite attention to the references cited and to enclose a copy of the minutes of the third meeting of the State Level Advisory Body for the Solid Waste Management, Rules, 2016 and State Level Advisory Committee of the Plastic Waste Management, Rules, 2016 held on **25.02.2019** at **11.30. A.M.** for necessary action.

2) I am also to request you to communicate the minutes to the Members of the State Level Advisory Body of the Solid Waste Management Rules, 2016 and State Level Advisory Committee of the Plastic Waste Management, Rules, 2016.

Yours faithfully,

for Deputy Secretary to Government.

Draft Minutes of the meeting of the State Level Advisory Body and State Level Advisory Committee on Solid Waste Management Rules and Plastic Waste Management Rules 2016, Tamil Nadu held on 25.02.2019 by 12 Noon at Secretariat, Chennai-9.

In the Chair: Thiru. Harmander Singh, I.A.S.,
Principal Secretary to Government,
Municipal Administration and Water Supply Department

Members Present:

1)	Dr.D. Karthikeyan, I.A.S., Commissioner of Municipal Administration, Chennai.
2)	Tmt. Kalaiselvi Mohan, I.A.S., Joint Commissioner of Municipal Administration, O/o CMA
3)	Thiru. P. Madhusudhan Reddy, I.A.S., Deputy Commissioner (Health) Greater Chennai Corporation
4)	Thiru. S. Palanisamy, I.A.S., Director of Town Panchayats, Chennai
5)	Dr.S. Selvan, Additional Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Guindy, Chennai.
6)	Dr. Tmt. Indhumathi, Indian Institute Of Technology, Chennai
7)	Dr. Tmt. S. Kanmani, Director, Department of Environment Studies, Anna University, Chennai.
8)	Dr. Thiru. Kurien Joseph, Solid Waste Management Expert/Professor, Anna University
9)	Thiru. Narayanan Nair, Commissioner (Incharge) Tirunelveli Corporation
10)	Thiru. S. Krishna Kumar, Social activist , Exnora International, Chennai
11)	Thiru. N. Natarajan, Chief Engineer, O/o CMA
12)	Thiru. D.Anbalagan, Superintending Engineer, O/o CMA
13)	Thiru. N. Mahesan, Chief Engineer (SWM) Greater Chennai Corporation, Chennai.

At the outset, the Commissioner of Municipal Administration / Member Secretary of the State Level Advisory Body & State Level Advisory Committee extended warm welcome to the Chairman& Members of both the committees.

The action taken report with respect to the points discussed during the 2nd meeting of State Level Advisory Committee & State Level Advisory Board

was discussed. On the status of achievement of 90% Door to Door collection and 83% Source Segregation in the State, the Principal Secretary to Government, Municipal Administration and Water Supply Department / Chairman of the committee insisted that 100% Door to Door collection and Source Segregation should be achieved by Commissioner of Municipal Administration (124 Municipalities and 11 Corporations), Director of Town Panchayats & Greater Chennai Corporation by 30.4.2019.

The Commissioner of Municipal Administration requested the Tamil Nadu Pollution Control Board to convene bimonthly meeting with manufacturers / waste producers along with Commissioner of Municipal Administration, Director of Town Panchayats & Greater Chennai Corporation, to formulate Producer's duties and responsibilities as a part of formalizing the Extended Producer Responsibilities (EPR) as envisaged under Solid Waste Management Rules & Plastic Waste Management Rules 2016.

Regarding Construction and Demolition Waste, it was felt that, bigger Corporations can take into consideration the Construction and Demolition waste generated in nearby smaller Town Panchayats also for earmarking Construction and Demolition waste processing facilities in the concerned Corporation so that the combined Construction and Demolition waste generated in both the Corporation and nearby Municipalities and Town Panchayats can be processed. Also, any Construction and Demolition waste generator who dumps the waste in the non ear marked location has to be levied penalties and fines as per provisions of existing law.

The Principal Secretary emphasised that though E-waste Management Rules 2016 had been enacted separately, it is not being implemented strictly in ground level due to many practical difficulties. The Principal Secretary insisted

the creation of source Recovery centres for the collection and storage of E-waste generated at Urban Local Bodies level and all the households must be sensitised on the availability of such centres and to deposit E-Waste separately in such centres. This E-waste must be periodically handed over to the recyclers (authorised agencies) notified by Tamil Nadu Pollution Control Board. According to the Additional Chief Environmental Engineer, Tamil Nadu Pollution Control Board, 25 recycling agencies have been approved in Tamil Nadu for dismantling and recycling E-Waste.

Deputy Commissioner (Health), Greater Chennai Corporation informed that a separate location for dumping of domestic hazardous waste has been earmarked for Greater Chennai Corporation. Further, it was informed that locations for E-Waste is yet to be decided by Greater Chennai Corporation and it is necessary to establish 40 – 50 centres throughout the city for the storage of both E – Waste and Construction & Demolition Waste.

The Superintending Engineer, O/o Commissioner of Municipal Administration informed that Resource Recovery Centres have been established in many ULBs and are functioning properly. The Chief Engineer, O/o Commissioner of Municipal Administration conveyed that 50 RRCs have been completed throughout Tamil Nadu and are put in use while the establishment of additional 24 RRCs are under progress. Also, it was insisted that the Municipalities without RRCs should allocate an area within the MCC for storage of domestic Hazardous Waste and E – Waste immediately.

The Principal Secretary instructed the officials to provide training for Sanitary Workers towards separate collection, handling and transportation of Domestic Hazardous Waste. Also, rigorous IEC activities should be carried out to generate more public awareness regarding the establishment of E-Waste

Collection Centres, Domestic Hazardous Waste Collection Centres and Construction &Demolition Waste Collection Centres in the ULBs. Pamphlets, flyers should be circulated among the Public and school students should be roped in to conduct rallies for motivating the public to drop their E-Waste, Domestic Hazardous Waste and Construction &Demolition Waste in the designated location. Quantification of E-Waste, Domestic Hazardous Waste and Construction &Demolition Waste has to be carried out and this should be regularly updated and kept as a record by the ULBs and should be reported to the Nodal Officer (Commissioner of Municipal Administration) every month without fail.

Any individual / household dumping E – Waste /Domestic Hazardous Waste on the streets have to be penalised stringently. The details of fine collected should also be updated every month by the ULBs.

Dr. Tmt.Indhumathi, IIT, Chennai said that many Residents' Associations are interested and are involved in carrying out Solid Waste Management activities in their localities. Residents' Welfare Associations can act as facilitators to encourage and ensure separate collection and handling of E – Waste and Domestic Hazardous Waste generated in their neighbourhood.

Professor Kurien Joseph, Solid Waste Management Expert from CES, Anna University expressed that the non-handling of waste in a segregated manner by the Urban Local Body will bring down the morale of public and they will not be encouraged to practice Source Segregation. On the contrary, handling of wastes in a segregated manner in functional MCCs will encourage the public towards achieving 100% source segregation. The Professor further added that 30% of waste recovered from the bio mining site comprised only plastic waste and RDF. Arrangements should be made for disposal of the same

with cement factories/ power plants/ sugar mills. It was insisted that a core team comprising of officials which concentrates exclusively on Solid Waste Management works has to be formed in the head quarters and at Regional level.

The Chief Engineer, Greater Chennai Corporation has reported that, Paterson Energy Private Limited, Sriperumpudhur has collected nearly 30 tones of plastic wastes. The Commissioner of Municipal Administration has reported that M/s. Ultra Tech Cements at Ariyalur, M/s. India Cements at Thiruvallur, M/s. ACC (Cements) at Coimbatore have agreed to collect the plastic waste and so far 10,000 tones of plastic wastes were lifted by them. From August 2018, up to date, nearly 1,51,000 tones have been segregated and sold. An amount of Rs.39 crore has been collected.

Dr.Tmt.S.Kanmani, Director, Centre for Environment Studies, Anna University, urged that the Municipalities should ensure that the workers in bio mining sites are provided with personal safety & protective equipments and also ensure that they are being used by them. Also, training should be conducted for all the workers by the contractors regarding workplace safety.

Thiru. S. Krishna Kumar, Social activist, Exnora International, stressed the importance of conducting awareness programmes on Source segregation and Home composting through school children. Also, awards can be given to schools that process their own waste.

The Principal Secretary also highlighted the concept of home composting should be promoted. Similarly bulk waste generator should be roped in to do it compulsorily.

As done by Greater Chennai Corporation, the Commissioner of Municipal Administration should also invoke a mobile based application

redressal mechanism wherein the public can report any solid waste management issue and get it rectified.

On a concluding note, the Principal Secretary stressed the following:

- ✓ All the Urban Local Bodies should ensure that the E-Waste, Domestic Hazardous Waste and Construction &Demolition Waste are collected every week separately and not mixed with other wastes.
- ✓ Tamil Nadu Pollution Control Board should conduct meeting with manufacturers / waste producers along with Commissioner of Municipal Administration, Greater Chennai Corporation & Director of Town Panchayats, for ensuring Extended Producer responsibilities (EPR) as envisaged under Solid Waste Management Rules &Plastic Waste Management Rules 2016.
- ✓ The State Level Advisory Board / State Level Advisory Committee meeting should be conducted periodically once in six months and all the Corporation / Municipality Commissioners and Regional Director of Municipal Administrations should be compulsorily present during the meeting.
- ✓ Welfare Associations /Youth Clubs/ NGOs should be actively involved in the propagation of home composting, separate collection of E-Waste, Domestic Hazardous Waste and Construction & Demolition waste, source segregations etc.,
- ✓ All the ULBs should completely achieve 100% door to door collection and segregation of waste by 30/4.

The meeting ended with vote of Thanks.

Harmander Singh
Principal Secretary to Government.

/True copy/

Section Officer

91

Municipal Administration and Water Supply (MA.IV)Department, Secretariat, Chennai – 600 009.

Letter No.4735/MA.IV(2)/2018, dated:12.04.2019

From
Thiru S.Mathevan Pillai, M.Com.,
Deputy Secretary to Government.

To
The Commissioner of Municipal Administration,
75, Santhome High Road,
R.A.Puram,Chennai- 28 (w.e).

Sir,

Sub : Meeting - Solid Waste Management and Plastic Waste Management – Implementation of the Rules - Fourth meeting of State Level Advisory Body and State Level Advisory Committee held on 05.04.2019 – Minutes of the meeting – communication – Reg.

Ref:
1. G.O.Ms.No.148 Municipal Administration and Water Supply (MA.IV) Department, dated: 25.10.2016
2. G.O.Ms.No.5 Municipal Administration and Water Supply (MA.IV) Department, dated:25.01.2017
3. From the Commissioner of Municipal Administration Chennai Letter Roc.No.44555 / 2013/P3, dated:22.02.2018
4. Government.Letter.No.4735/MA.IV/2018-1,Municipal Administration and Water Supply (MA.IV) Department, dated:15.03.2018, 24.04.2018, 21.02.201, and 18.3.2019.

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I am directed to invite attention to the references cited and to enclose a copy of the minutes of the Fourth meeting of the State Level Advisory Body for the Solid Waste Management, Rules, 2016 and State Level Advisory Committee of the Plastic Waste Management, Rules, 2016 held on 05.04.2019 for necessary action.

2) I am also to request you to communicate the above minutes to the Members of the State Level Advisory Body of the Solid Waste Management Rules, 2016 and State Level Advisory Committee of the Plastic Waste Management, Rules, 2016.

Yours faithfully,

for Deputy Secretary to Government.

Minutes of the meeting of the State Level Advisory Body on Solid Waste Management Rules 2016, Tamil Nadu held on 05.04.2019 at 4.00 PM, at Secretariat, Chennai-9.

In the Chair: Thiru. Harmander Singh, I.A.S.,

Principal Secretary to Government, MAWS Dept.,

Members Present:

1)	Dr. Thiru. D. Karthikeyan, I.A.S., Commissioner of Municipal Administration, Chennai.
2)	Thiru. S. Palanisamy, I.A.S., Director of Town Panchayats, Chennai
3)	Thiru. P. Madhusudhan Reddy, I.A.S., Deputy Commissioner (Health), Greater Chennai Corporation
4)	Dr. Tmt. Indhumathi, Indian Institute Of Technology, Chennai
5)	Dr. Thiru. Kurien Joseph SWM Expert/Professor, Anna University
6)	Thiru. P. M. N. Mujibur Rahman, The Regional Director of Municipal Administration, Chengalpattu
7)	Thiru. Vijayakumar, The Regional Director of Municipal Administration, Vellore
8)	Thiru. P. Ashok Kumar, The Regional Director of Municipal Administration, Salem
9)	Tmt. K. Uma Maheswari, The Regional Director of Municipal Administration, Thanjavur
10)	Tmt. A. Sulthana, The Regional Director of Municipal Administration, Tiruppur
11)	Thiru. K. Rajan, The Regional Director of Municipal Administration, Madurai
12)	Thiru. P. Kalimuthu, The Regional Director of Municipal Administration, Tirunelveli
13)	Thiru. L. Ravikumar, Executive Officer, Perungalathur
14)	Thiru. S. Krishna Kumar, Social activist, Exnora International, Chennai
15)	One representative from waste recycling industry

At the outset, the Commissioner of Municipal Administration / Member Secretary of the State Level Advisory Body welcomed the Chairman & Members of the committee. The Superintending Engineer, O/o CMA presented the Action Taken Report of the points discussed on the previous meeting.

D2D & Source Segregation:

The Superintending Engineer, O/o CMA stated that the state has achieved 93% Door to Door collection and 85% Source Segregation. The Principal Secretary insisted that strict measures should be taken to reach 100% D2D collection and Source Segregation since the time period as directed by State Level Monitoring Committee for achieving the same is nearing an end on 30.04.2019 & 31.05.19 respectively.

Construction & Demolition Waste

On the subject of Construction & Demolition waste, it was reiterated that proper locations should be earmarked in all the ULBs. After discussion it was resolved that, bigger Corporations such as Greater Chennai Corporation, Coimbatore & Madurai should plan to establish C&D Processing plants. Further smaller Municipalities / Town Panchayats can have a combined C&D Waste processing plant, placed at a location easily accessible for all the surrounding Municipalities /Town Panchayats. CMA can study existing models of Andrapradesh, Telangana and other States. The C&D Waste generators have to be fined if the waste is not properly handed over to the earmarked location as directed by the ULBs.

E – Waste & Domestic Hazardous Waste

It was again impasized that collection of E – Waste and Domestic Hazardous Waste from all the households at designated days has to be strictly followed. Also, Daily collection has to be done whenever insisted by the households.

E – Waste and Domestic Hazardous Waste collection centres should be displayed in the dailies and local television channels and through Corporation websites so that the information will reach the public and the public can also drop such waste at such centres. The animators should also be used to create awareness in this regard.

The Principal Secretary also insisted that the C&D waste, E-waste, and hazardous waste collected periodically by all ULBs should be maintained by CMA and submitted from next meeting onwards.

Processing

The Superintending Engineer, O/o CMA, stated that the 463 MCC has been completed throughout the state. The Principal Secretary insisted that all the MCCs should be completed and put into use before 31.05.2019.

Dr. Thiru. Kurien Joseph, SWM Expert, pointed out that segregation and storage of E – Waste and Domestic Hazardous Waste will be more effective once all the sanctioned MCCs are completed and put to use. The fresh waste generated should not be dumped in the existing legacy waste.

Home Composting & Bulk Waste Generators

The Superintending Engineer, O/o CMA stated that ULBs under CMA has successfully achieved home composting in 53,430 Households to process their own generated waste of 7.4 TPD.

The Principal Secretary instructed the DTP that Home composting should be adopted in TPs in the line of CMA. And also instructed that the details of number of Home composting locations should be gathered and monitored regularly. Further number of Bulk Waste Generators, quantity of waste handled by BWGs etc should also be periodically monitored and recorded.

Bin free ULB

The Principal Secretary encouraged the ULBs to go bin-less by streamlining door to door collection and segregation of waste on a day to day basis. It was also observed that going bin-less would lead to visibly cleaner cities. With more battery operated vehicles replacing tricycles, it will be easier for ULBs to achieve bin less station over next 6-9 months.

The Principal Secretary also asked GCC, CMA and DTP to have a list of vulnerable points where garbage is found in large quantity for each ULB and arrange for systematic arrangements to resolve the issues.

Online Portal

The Principal Secretary advised that the quantity of Waste generation, Collection, Segregation, processing and Disposal of all types of waste should be maintained and updated in the ULBs websites.

The meeting ended with vote of Thanks.

Harmander Singh
Principal Secretary to Government.

/True copy/

Section Officer

Minutes of the meeting of the State Level Advisory Committee on Plastic Waste Management Rules 2016, Tamil Nadu held on 05.04.2019 at 5.00 PM, at Secretariat, Chennai-9.

In the Chair: Thiru. Harmander Singh, I.A.S.,
Principal Secretary to Government, MAWS Dept.,

Members Present:

1)	Dr. Thiru. D. Karthikeyan, I.A.S., Commissioner of Municipal Administration, Chennai.
2)	Thiru. S. Palanisamy, I.A.S., Director of Town Panchayats, Chennai
3)	Thiru. P. Madhusudhan Reddy, I.A.S.,Deputy Commissioner (Health) Greater Chennai Corporation
4)	Dr. Tmt. S. Kanmani, Anna University
5)	Thiru. N. Natarajan, Chief Engineer, O/o CMA, M R C Nagar, Chennai
6)	Thiru. Anbalagan, Superintending Engineer, O/o CMA, M R C Nagar, Chennai
7)	Thiru. N. Mahesan, Chief Engineer (SWM) Greater Chennai Corporation, Chennai.
8)	Thiru. P. M. N. Mujibur Rahman, The Regional Director of Municipal Administration, Chengalpattu
9)	Thiru. Vijayakumar, The Regional Director of Municipal Administration, Vellore
10)	Thiru. P. Ashok Kumar, The Regional Director of Municipal Administration, Salem
11)	Tmt. K. Uma Maheswari, The Regional Director of Municipal Administration,Thanjavur
12)	Tmt. A. Sulthana, The Regional Director of Municipal Administration, Tiruppur
13)	Thiru. K. Rajan, The Regional Director of Municipal Administration, Madurai
14)	Thiru. P. Kalimuthu, The Regional Director of Municipal Administration, Tirunelveli
15)	Thiru. S. Krishna Kumar, Social activist , Exnora International, Chennai

At the outset, the Commissioner of Municipal Administration / Member Secretary of the State Level Advisory Committee welcomed the Chairman & Members of the committee.

Segregation & Collection

The Principal Secretary advised that all the ULBs should ensure that plastic waste is collected separately on designated days every week. And also emphasised that segregation of plastic waste has to be strictly done since many of the cement factories reject the waste if it is in the form of mixed waste. To reduce such risks of rejection by industries, segregation has to be done thoroughly.

The Chairman insisted that proper disposing of such wastes has to be done through vendors or cement industries.

Extended Producer Responsibility

The Principal Secretary instructed that PCB should convene meetings with the plastic manufacturers to arrange for proper disposal of dry waste.

The ongoing Bio-mining process in the ULBs would result in a huge quantity of plastic waste and other combustible waste which can be used as RDF in many factories and this waste should be properly disposed to the factories by the contractors.

96

Ban on plastic

The CMA also informed that, a well-organised mechanism is being followed by the Corporations & Municipalities in this aspect and from Aug 2017 to 10.3.19, a total quantity of 1,71,131 MT of recyclables is collected, sold to recyclers and an amount of Rs. 43.19 crore is disbursed among the sanitary workers.

The Principal Secretary enquired whether all the ULBs have notified the plastic ban bill and how the ban has affected the amount of plastic waste generated. Enforcement should be done strictly and very severe fine has to be placed on the offenders.

The CMA has informed that, due to the effective and rigorous enforcement of GO (Ms) No. 84, Environment & Forest (EC2) Department, dated 25.6.2018, one time use and throw away plastics irrespective of thickness is banned with effect from 1.1.19. And from January 2019 onwards, a total quantum of 454.71 tonnes of single use plastics had been seized and a fine of Rs.75.73 lakhs has been collected till 19.3.19 as detailed below.

S.No	Name of the ULB	Total PlasticSeizure in Upto 19.03.2019 (MT)	Total Fine Collected in (Lakh.) Upto 19.03.2019
(I)	Corporations		
1	Madurai	7.86	2.52
2	Coimbatore	2.25	4.16
3	Salem	10.30	3.85
4	Tiruchirappalli	27.12	9.32
5	Tirunelveli	3.80	0.22
6	Tiruppur	28.00	4.99
7	Erode	2.83	1.71
8	Vellore	6.19	0.99
9	Thoothukudi	3.73	0.14
10	Dindigul	11.98	2.55
11	Thanjavur	9.20	1.33
	Total	109.75	28.82
(II)	Regions		
1	Chengalpattu	83.96	14.41
2	Vellore	32.37	3.12
3	Salem	40.40	6.38
4	Tiruppur	14.76	5.16
5	Madurai	27.79	4.38
6	Thanjavur	45.72	7.74
7	Tirunelveli	10.62	5.01
	Total	255.60	46.19
(III)	GCC	115.00	0.00
(IV)	DTP	2.80	0.72
	Grant Total	483.15	75.73

The CMA, DTP and Commissioner, GCC were asked to sustain the momentum. The meeting ended with vote of Thanks.

Harmander Singh
Principal Secretary to Government.

/True copy/

Section Officer

Chennai Waterways

98

Status of River Restoration Projects in Chennai

As the restoration of Chennai Waterways has been at the top of the agenda for the Government of Tamil Nadu, an eco-restoration plan for Cooum and Adyar rivers has been prepared to rejuvenate the riverine system. The major implementation of restoring the rivers has been taken up by the Line Departments such as Chennai Metro Water Supply & Sewerage Board (CMWSSB), Greater Chennai Corporation, Public Works Department (PWD), Commissionerate of Municipal Administration, Directorate of Town Panchayats and Department of Rural Department in the project area where Chennai Rivers Restoration Trust is entrusted in coordinating and monitoring the projects.

I. Integrated Cooum River Ecorestoration Project (ICRERP)

The Integrated Cooum River Ecorestoration Project area presently being covered for restoration comprises the stretch from Paruthipattu anicut to the river mouth (32 km) in the Bay of Bengal. In this stretch, various pollution abatement measures are proposed such as Interceptors and diversion of sewage to improve the water quality, river channel improvement to enhance ecological flow of the river, development of parks and maintenance pathways. River bank vegetation and mangrove plantations are planned to enhance the diversity of flora and fauna in the Cooum riverine system.

The plan has a set of 69 activities to be performed in total, over three phases. Phase I consists of 60 activities, Phase II of 7 activities and Phase III comprises of maintenance activities after the restoration process is completed. The restoration of the river is expected to be completed over a total period of 8 years, out of which, the major activities are expected to be completed in a span of 3 years. At the outset, the Government have accorded Administrative Sanction for implementation of 60 Sub-Projects at a cost of Rs.604.77 crores vide G.O (Ms) No.9, Municipal Administration and Water Supply (MC.I) Department, Dated 13.01.2015. The Implementation of the sub projects are in various stages and the works are expected to be completed by December 2020 and UGSS by 2021.

In pursuant to the directions of the **Tribunal Order dated 28.7.2015**, the Bi-monthly meeting was convened and conducted under the Chairmanship of the Chief Secretary to Govt. of Tamil Nadu with all concerned line departments on 26.08.2015 and reviewed the progress of Integrated Cooum River Eco-Restoration Project and filed a detailed report before the

Tribunal. Then on, a bi-monthly review meeting is being regularly conducted by the Chief Secretary and a detailed progress report is filed as an Affidavit.

II. Adyar River Restoration Project (ARRP)

The ecorestoration plan for the entire stretch of the river from Adhanur tank to the river mouth (42 km) was prepared and various pollution abatement measures are proposed such as Interceptors and diversion of sewage to improve the water quality, installation of modular STPs, river channel improvement to enhance the flood carrying capacity of the river, development of parks and maintenance pathways, walkways, cycle tracks, boat jetties and parking lots. River bank vegetation and mangrove plantations are planned to enhance the diversity of flora and fauna in the Adyar riverine system.

The proposal has a set of 70 activities to be performed in total over a three phases. The short term (3 years) consists of 56 activities, medium term (8 years) of 13 activities and long term (5 years) consist of one activity. Thus, the restoration of the river will be completed over a total period of 16 years, out of which, the major activities will be over in three year period. For the short term phase, the Government has accorded Administrative Sanction of Rs 555.46 crores vide GO (Ms) No.72, Municipal Administration & Water Supply (MC.1) Department, dated. 12.7.2017. The restoration activities have just started by the line departments and it is expected to be completed by December 2021.

The above projects although has the proposal to stop sewage draining into Chennai Waterways, the Government of Tamil Nadu through Chennai Metropolitan and Water Supply Department has taken up various initiatives to improve the existing sewerage network and measures undertaken to augument the networks in collection and treatment to cater to the needs of the growing population in Chennai.

III. Steps taken to remove illegal encroachments.

To restore and protect the Chennai Waterways, the Government of Tamil Nadu has taken the initiatives to remove all the encroachments within the boundary of Waterways.

In the Integrated Cooum River Ecorestoration Project (ICRERP), 14257 Project Affected Families (PAFs) has been identified within the river boundary. Thus far, 8166 PAFs have been resettled and rehabilitated in the Tamil Nadu Slum Clearance Board tenements in the

Perumbakkam, Navalur, Gudapakkam, Thiruvotriyur AIR Schemes. Under Auto Nagar Scheme, 383 commercial units were demolished and allotted plots.

In the Adyar River Restoration Project (ARRP), a total of 9539 Project Affected Families (PAFs) from 27 habitations living alongside of the Adyar River have been identified for Resettlement and Rehabilitation. Thus far, 4398 PAFs have been resettled.

Since the resettlement and rehabilitation of families within the Right of Way in the above rivers is a continuous process, the biometric survey is being conducted in all the left over slums and the process of resettling the PAFs will be undertaken at the earliest.

The Tamil Nadu Slum Clearance Board have estimated nearly 70,000 households residing near the waterways and waterbodies in Chennai and the Government of Tamil Nadu have taken up measures to pose it for external funding for construction of tenements for the households. The Government will give more priority for the households residing with the Right of Way of the waterways.

IV. Steps Taken to Improve the Sewerage Network by CMWSSB

The improvement works in the existing sewage network have been taken up in 2 phases.

PHASE I WORKS :

The work has been taken up at an estimated cost of Rs.150.00 crore. This work involves:

- Enlargement of the existing gravity sewer main and laying of sewer mains in left out streets.
- Enlargement of sewage pumping main.
- Improvements to the existing sewage pumping stations and construction of new sewage pumping stations.
- Present status - 86% of physical works have been completed, balance works are expected to complete by December 2019.

(१०१)

PHASE II WORKS :

The work has been taken up in 3 categories such as:

- Enlargement of Sewage Pumping main Construction of road side pumping stations.
- Providing higher capacity pump sets, diesel generator & allied works.
- Enlargement of existing Gravity sewer main.
- Estimated cost of Rs.163.00 crore.

WORKS TAKEN UP UNDER PACKAGE II:

- **Adyar River**

  Package I- Estimate Cost Rs 41.00 crore – Work Completed.

- **Buckingham Canal:**

  Package 1A – Estimate Cost- Rs 20.91 crore - 79.72% of work completed. Balance work in progress and will be completed by June 2019.

  Package 1B – Estimate Cost- Rs 16.54 crore - Preliminary Work in progress and the entire work will be completed by April 2020.

  Package II – Estimate Cost- Rs 37.45 crore - 15% work completed. Balance work in progress and will be completed by January 2020.

- **Cooum River Basin:**

  Package 1A – Estimate Cost- Rs 18.00 crore - Work Completed.

  Package 1B – Estimate Cost- Rs 16.64 crore - Work Completed.

  Package II – Estimate Cost- Rs 22.07 crore - Work Completed.

Strengthening of STPs

Further, new STP are being constructed for 230 MLD and rehabilitation of existing STP for 290 MLD are being carried out at an estimated cost of Rs. 636 crs. Tender work is under evaluation the work is expected to be completed by March 2021.

V. Action Taken to Plug all the Sewage Outfalls into Chennai Waterways

The State has committed to have clean waterways and to have a healthy environment, the Government has taken lot of initiatives to plug all the sewage draining into the waterways. The following are the measures undertaken to stop the sewage flow into the waterways:

A. Short term measures taken to prevent the sewage flow into the waterways

a. Work under progress

In Cooum River, there are 118 outfalls.

- The mitigation measure are provided in the form of Interception and diversion (I&D) of sewage, Modular STPs and UGSS for Nerkundram at a total cost of 186.19 crore, fully funded by GoTN.
- Interception and diversion work for one package is completed in which 6 outfalls have been plugged and for 7 packages work is under progress and UGSS. Tender is yet to be floated for 1 package of Interception and Diversion work and all the works are expected **to be completed by Dec 2020 and UGSS by the end of 2021.**

In **Adyar River** there are 67 outfalls.

- The mitigation measure is provided in form of Interception and diversion of sewage and Modular STPs at a total cost of 123.19 crore, fully funded by GoTN.
- Works are under progress for 3 packages and tender is yet to be floated for 2 packages. **These works are expected to be completed by Dec 2021.**

b. Way Forward

- The Buckingham Canal from Ennore Creek to Muttukadu Backwaters within Chennai Metropolitan Area criss crosses Kosathalayar, Adyar and Cooum rivers and the current restoration efforts in Cooum and Adyar rivers cannot be comprehensively completed without restoration of Buckingham Canal. In this regard, a consultant has been appointed for the preparation of DPR for Buckingham Canal and other drains confluencing the canal. There are 1067

outfalls in **Buckingham Canal & its major canals**. Mitigation measures are proposed in form of I & D and Modular STP at a total cost of 591.74 crore. The final report will be submitted to MA&WS and PWD Department by the end of April 2019.

- There are 150 outfalls from major canals which confluence with **Cooum River.** Mitigation measures are proposed in the form of I & D and Modular STPs at a total cost of 31.46 crore. The DPR is in final stage of preparation and will be submitted to MA&WS Department / PWD by May 2019.
- There are 228 outfalls from major canals which confluence with **Adyar River.** Mitigation measures are proposed in form of I & D and Modular STP at a total cost of 80.72 crore. The DPR is in final stage of preparation and will be submitted to MA&WS Department / PWD by May 2019.

c. In addition to the above, there is a need to strengthen the existing system in order to cater to the needs of the burgeoning population of Chennai, following measure are proposed for a cost of Rs 300 crore to prevent sewage flow into the Chennai waterways:

- Laying of Pumping mains from 300 mm dia to 1000 mm dia for a length of 17.5 km.
- Construction of 30 MLD STP at Villivakkam lagoon.
- Construction of 6 nos of Road side pumping station and lift stations including laying pumping main.
- Improvements to Pumping stations in Areas VIII, IX, X, XIII and XIV.
- Enlargement of gravity sewer and Replacement of pumping main from 250 mm dia to 1000 mm dia for a length of 5 kms.
- R&M works for ensuring and monitoring discharge quality Standards continuously in 4 STPs.

All the above works that are proposed under short term phase are planned to be completed within 3 years for a total cost of **Rs. 1003.92 Cr** for which funding has been tied up.

B. Long term proposals for prevention of sewage flow in waterways

104

I. Proposal by CMWSSB

In order to prevent sewage flow in waterways, the following works have been proposed by CMWSSB in the jurisdiction of Greater Chennai Corporation for a total value of **Rs. 4260.68 Cr.**

- Enlargement of Sewage Pumping mains at various locations for a length of 72.10 km.
- Enlargement of existing Gravity sewer mains at various locations for a length of 733.86 km.
- Construction of 4 Nos of Road side pumping station & improvement to 79 Nos of existing pumping stations.
- UGSS works for the balance 17 Nos of local bodies and construction of additional STPs for a total capacity of 200 MLD.

The above projects will be completed within 5 years and it will be posed for various funding.

II. Proposals by Commissionerate of Municipal Administration (CMA)

The following works have been proposed by CMA for a total value of **Rs. 1897.65 crore** for Poonamallee cluster UGSS for 21 villages and UGSS work for adjacent areas in the jurisdiction of CMA in order to prevent sewage flow in waterways. These projects will be completed within 5 years and it will be posed for various funding.

VI. Recycle and Reuse

CMWSSB has been promoting the reuse of waste water in Chennai from the 1980s. The present inflow of sewage received, treated and discharged in Chennai city is 525 MLD, out of which 33 MLD is supplied for industrial purposes from the year 1993 and 0.23 MLD is supplied to GCC & TNRDC for landscaping and gardening purposes. The remaining 513 MLD is being discharged into the Chennai city water ways as per TNPCB norms.

105

CMWSSB in continuing its efforts to augment supply of water through sustainable sources made a detailed study based on the IIT Chennai model and presented it for consideration to the special water group constituted by GoTN.

After careful consideration GoTN issued in principle approval (131 (MS) MAWS Dt.10.12.2018) for two proposals of each 10 mld capacity for recycle and recharge of tertiary treated water from Nesapakkam STP and Perungudi STP to Porur and Perungudi lakes. The works costing Rs.83.78 Crore administratively sanctioned by GoTN, and are awarded on 07.03.2019 and will be completed in 12 months.

The components of work are establishing a 10 mld MBBR based secondary treatment and UF based tertiary treatment plant at the respective STP for 10 mld. Supplying and laying of pipeline to convey the tertiary treated water to the lake. Establishing a 10 mld capacity water treatment plant for reuse.

Further CMWSSB is preparing a DPR in consultation with IIT Chennai for recycle and reuse of 260 MLD of waste water entering the water ways.

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106

Annexure No.

Solid Waste Management Rules 2016 (Rule 12)

Minutes of Meeting Conducted by District Collector for Review of Implementation of Solid Waste Management Rules 2016 under Rule12

107

MINUTES OF THE MEETING CONDUCTED BY THE DISTRICT COLLECTOR PERAMBALUR TO REVIEW SOLID WASTE MANAGEMENT RULE-2016:RULE-12 OF PERAMBALUR MUNICIPALITY

Present:Tmt.V.Santha, I.A.S,

Roc.No: 16288/2015/H1 Date: 01.04.2019

The meeting was held on 01.04.2019 at 04.00 PM in Collectorate, Perambalur to review the solid waste management progress for successful implementation of SWM rules 2016. During the meeting, the progress of Perambalur Municipality reviewed the Commissioner (I/C), and Sanitary Inspector Perambalur Municipality attended the meeting.

As per Solid Waste Management Rules 2016, Rule 12, the duties of District Collector is as follows:

I) Facilitate identification and allocation of suitable land as per clause (f) of Rules 11 for setting up solid waste processing and disposal facilities to local authorities in his district in close co-ordination with the Secretary –in-charge of State Urban Development Department within one year from the date of notification of these rules.

II) Review the performance of local bodies, at least once in a quarter on waste segregation, processing, treatment and disposal and take corrective measures in consultation with the Commissioner or Director of Municipal Administration or Director of local bodies and secretary-in- charge of the State urban development.

As per the instruction from the CMA office, the State monitoring committee of SWM constituted by the NGT had insisted that all Urban Local bodies should prepare the ULB level solid waste management policy and plan to notify the same in the gazette.

Vide reference from the Regional Director of Municipal Administration Thanjavur Letter No.214/2019/A3, Dated.16.03.2019 Thanjavur and Commissioner Perambalur Municipality Letter No.16288/2015/H1,Dated.01.04.2019 have prepared and submitted the SWM policy and Action Plan booklet in respect of Perambalur Municipality and had requested the CMA to give approval for the same to notify it in Gazette.

108

Approval of the Action plan and policy is accorded by CMA vide letter No2268/2019/P3, dated.26.03.2019

The main objective of the meeting was to assess the progress of Door to door collection, Source segregation, Waste disposal, wet waste processing facility Dry waste disposal, hazardous waste and E waste storage facility created, Bio-mining and formation of SWM monitoring committee at district level.

1. The District Collector directed that the door to door collection and Source segregation should be achieved 100% by Perambalur Municipality. The Perambalur Municipality is instructed to achieve 100% D2D collection and Source segregation before 30.04.2019
2. The ULB was advised to strictly prevent the burning and throwing of wastes to the water bodies and were advised to levy heavy fines for such activities.
3. The ULBs was advised to improve the processing facility for wet waste by ensuring the efficient functioning of MCCs and OCCs created.
4. The ULBs was advised to periodically practice the disposal mechanism for dry waste.
5. The ULBs was advised to ensure separate collection of Domestic hazardous wastes as envisaged in SWM Rules 2016 and were instructed to identify the storage facility and disposal mechanism for hazardous waste, E waste and Construction & Demolition wastes. A separate storage facility has to be created for depositing the above wastes and wide publicity has to be given for the availability of such centers to the general public and they should be encouraged to deposit the wastes in these earmarked Location/ Centers by themselves.
6. Stringent Penalizing mechanism should be in place for the unauthorized dumping of C & D Wastes.
7. The ULB was advised to speed up the process of bio mining
8. The Perambalur Municipality was instructed to take earnest efforts to make the ULB as "Dump free and Bin free city".

District Collector
Perambalur

To:

1. Regional Director of Municipal Administration, Thanjavur.
2. The Commissioner, Perambalur Municipality

Copy submitted to:

The Commissioner of Municipal Administration, Chennai

109

Minutes of the Meeting conducted by the District Collector *Pudukkottai to review Solid Waste Management Rule – 2016 : Rule – 12* of Pudukkottai and Aranthangi Municipalities
Present : Thirmathi. P. Uma Maheswari, IAS,

Rc.No.1933/V2(Dev.)/2019 dated: 09.04.2019

The meeting was held on 04.04.2019 at 5.00 PM in Collectorate, Pudukkottai to review Solid Waste Management progress for successful implementation of SWM rules 2016. During the meeting, the progress of Pudukkottai and Aranthangi Municipality were reviewed. The Commissioner (I/c), Pudukkottai Municipality, -The Commissioner, Aranthangi Municipality, Municipal Health Officer, Pudukkottai, Sanitary Officer, Aranthangi Municipality attended the meeting.

As per ***Solid Waste Management Rules 2016, Rule 12***, the duties of District Collector is as follows;

I) Facilitate identification and allocation of suitable land as per clause (f) of Rules 11 for setting up Solid Waste Processing and disposal facilities to local bodies in his/her district in close co-ordination with the Secretary-in-charge of State Urban Development Department within one year from the date of notification of these rules.

II) Review the performance of local bodies, at least once in a quarter on waste segregation, processing, treatment and disposal and take corrective measures in consultation with the Commissioner or Director of Municipal Administration or Director of local bodies and Secretary-in-charge of the State Urban Development.

As per the instructions from the CMA office, the State monitoring committee of SWM constituted by the NGT had insisted that all Urban Local bodies should prepare the ULB level Solid Waste Management policy and plan to notify the same in the Gazette.

Vide reference from the Regional Director of Municipal Administration Thanjavur letter No. 214/2019/A3 Dated 16.03.2019, Thanjavur have prepared and submitted the SWM policy and action plan booklet in respect of 18 Municipalities and had requested CMA to give approval for the same to notify it in the Gazette.

11e

Approval of the Action plan and policy is accorded by CMA vide letter No. 2288/2019/P3, dated 25.03.2019.

The main objective of the meeting was to assess the progress of door to door collection, Source segregation, Waste disposal, Wet waste processing facility, Dry Waste disposal, Hazardous waste and e-waste storage facility created, Bio-Mining and formation of SWM monitoring committee at district level.

1. The District Collector directed that the door to door collection and Source segregation should be achieved 100% by all Pudukkottai and Aranthangi Municipalities. The both Municipal Commissioners were instructed to achieve 100% D2D collection and Source segregation before 30.04.2019.

2. Both Municipal Commissioners were advised to strictly prevent the burning and throwing of wastes to the water bodies and were advised to levy heavy fines for such activities.

3. Both Municipal Commissioners were advised to improve the processing facility for wet waste by ensuring the efficient functioning of MCC's and OCC's created.

4. Both Municipal Commissioners were advised to periodically practice the disposal mechanism for dry waste.

5. Both Municipal Commissioners were advised to ensure separate collection of Domestic hazardous wastes as envisaged in SWM Rules 2016 and were instructed to identify the storage facility and disposal mechanism for hazardous waste, E waste and Construction & Demolition wastes. A separate storage facility has to be created for depositing the above wastes and wide publicity has to be given for the availability of such centres to the general public and they should be encouraged to deposit the wastes in these earmarked locations by themselves.

(111)

6. Stringent Penalising mechanism should be in place for the unauthorized dumping of Construction & Demolished Wastes.
7. Both Municipal Commissioners were advised to speed up the process of Bio-Mining.
8. Both Municipal Commissioners were instructed to take earnest efforts to make the ULB as "Dump free and Bin free cities".

District Collector
Pudukkottai

To

1. The Regional Director of Municipal Administration, Thanjavur.
2. The Commissioner, Pudukkottai Municipality.
3. The Commissioner, Aranthangi Municipality.

Copy to:

The Commissioner of Municipal Administration, Chennai.

112

Minutes of the meeting conducted by the District Collector Tiruchirappalli to review Solid Waste Management Rule – 2016 Rule – 12 of Tiruchirappalli Corporation and Tiruchirappalli District ULBs

In the Chair : Thiru.S.Sivarasu, IAS
District Collector, Tiruchirappalli

Officers Present:-

1.	Thiru.N.Ravichandran	Corporation Commissioner Tiruchirappalli Corporation
2.	Thiru.V.Navendiran	Municipal Commissioner Thuraiyur
3.	Tmt.N.Sridevi	Municipal Commissioner, Manapparai.
4.	Tmt.N.Sridevi	Municipal Commissioner Thuvakudi (I/c)

A meeting was held on 04.04.2019 in Collector Office, Tiruchirappalli to review the solid waste management progress for successful implementation of SWM rules 2016. During the meeting the progress of Thuraiyur, Manapparai, Thuvakudi Municipalities and Tiruchirappalli Corporation was reviewed.

As per ***Solid Waste Management rules 2016, rule 12,*** the duties of District Collector is as follows:

1. Facilitate identification and allocation of suitable land as per clause (1) of Rules 11 for setting up solid waste processing and disposal facilities to local authorities in his district in close coordination with the Secretary-in-charge of State Urban Development Department within one year from the date of notification of these rules;
2. Review the performance of local bodies, at least once in a year on waste segregation, processing, treatment and disposal and take corrective measures in consultation with the Commissioner or Director of Municipal Administration or Director of local bodies and secretary-in-charge of the State monitoring urban development.

As per the instruction from the CMA office, the State monitoring committee of SWM constituted by the NGT had insisted that all Urban Local Bodies should prepare the ULB level solid waste management policy and plan to notify them in the gazette.

Vide reference from the Regional Director of Municipal Administration, Thanjavur **letter No.214/2019/A3, dated.16.03.2019** and Corporation Commissioner, Tiruchirappalli **letter No.2684/2019/H11(Main), dated.19.03.2019** the Regional Director of Municipal Administration, Thanjavur and Corporation Commissioner, Tiruchirappalli have prepared and submitted the SWM policy and Action Plan booklet in respect of 3 Municipalities and 1 Corporation and had requested the CMA to give approval for the same to notify it in Gazette.

Approval of the Action Plan and policy is accorded by CMA vide letter No.2288/2019/P3, dated:26.0 2019.

The main objective of e meeting was to asses the progress of Door to door collection, Source segregation Waste disposal, wet waste processing facility, Dry Waste disposal, hazardous waste and waste storage facility cr ted, Bio mining and formation of SWM monitoring committe at district level.

1. The District C ector instructed to form a subcommittee as per SWM Rules 2016 in ULB's and submit the report.
2. The District Co ector directed that the do to door collection and source segregation sh d be achieved 100% by ll ULBs and Corporation. The ULB Commis ners and Corporation Commissioner were instructed to achieve 100% D collection and Source egregation before 30.04.2019.
3. ULBs were ad ed to strictly prevent the urning and throwing of wastes to the water dies and were advised o levy heavy fines for such activities.
4. All ULBs were vised to improve the processing facility for wet waste by ensuring the ef ient functioning of MCC and OWC's created.
5. All ULBs were advised to periodically p ctice the disposal mechanism for dry waste.
6. All ULBs we advised to ensure se rate collection of Domestic hazardous was as envisaged in SWM Rules 2016 and were instructed to identify the st ge facility and disposal echanism for hazardous waste, E waste and Co truction & Demolition w tes. A separate storage facility has to be creat for depositing the above astes and wide publicity has to be given for th availability of such cente to the general public and they should be encou aged to deposit the waste in these earmarked Locations / Centres by thes elves.
7. Stringent Pena ing mechanism should b in place for the unauthorized dumping of C D Wastes.
8. The ULBs were dvised to speed up the p ocess of bio mining.
9. The ULBs we instructed to take carn efforts to make the ULB as "Dump free an Bin free cities".

District Collector,
Tiruchirappalli.

To

The Regional Director of Mu ipal Administration, Thanjavur.
The Commissioner, Tiruchira alli City Corporation.

Copy submitted to:

The Commissioner of Munic l Administration, Chenn

114

பொது சுகாதாரம், தி.க்கழிவு மேலாண்மை விதிகள் 2016 செயல்படுத்துதல் தொடர்பாக மாவட்ட ஆட்சியர் அவர்களின் தலைமையில் 02.04.2019 அன்று நடை பெற்ற ஆய்வுக் கூட்ட நடவடிக்கைகள்

முன்னிலை– திரு.ஆ. அண்ணாதுரை, இ.ஆ.ப.,
மாவட்ட ஆட்சியர், தஞ்சாவூர்.

நகஎண். 4678/2019/எச்.8 நாள். 10.04.2019

தஞ்சாவூர் மாவட்டம் பொது சுகாதாரம், தி.க்கழிவு மேலாண்மை விதிகள் 2016 செயல்படுத்துதல் தொடர்பாக மாவட்ட ஆட்சியர் அவர்களின் தலைமையில் 02.04.2019 அன்று முற்பகல் 11 மணிக்கு நடை பெற்ற ஆய்வுக் கூட்டத்தில் கீழ்கண்ட அலுவலர்கள், கலந்து கொண்டனர்.

கூட்டத்தில் கலந்து கொண்டவர்கள்:

1. மாவட்ட வருவாய் அலுவலர், தஞ்சாவூர்.
2. மாநகராட்சி ஆணையாளர், தஞ்சாவூர் மாநகராட்சி.
3. நகராட்சி நிர்வாக மண்டல இயக்குநர், தஞ்சாவூர்.
4. உதவி இயக்குநர், பேரூராட்சிகள், தஞ்சாவூர் மண்டலம்.
5. மாநகராட்சி செயற்பொறியாளர், தஞ்சாவூர் மாநகராட்சி.
6. ஆணையாளர், கும்பகோணம் நகராட்சி.
7. ஆணையாளர், பட்டுக்கோட்டை நகராட்சி.
8. மாநகர்நல அலுவலர், தஞ்சாவூர் மாநகராட்சி.
9. நகர்நல அலுவலர், கும்பகோணம் நகராட்சி.
10. துப்புரவு அலுவலர், பட்டுக்கோட்டை நகராட்சி.

தேசிய பசுமை தீர்ப்பாயம் முதன்மை அமர்வு புதுடெல்லி உத்தரவு எண்.606/18-ல் தி.க்கழிவு மேலாண்மை 2016 விதிமுறைகளை நாடு முழுவதும் அமுல்படுத்த உத்தரவிட்டுள்ளது.

மேற்படி விதிமுறைகளை அமல்படுத்துவது தொடர்பாக நகராட்சி நிர்வாக ஆணையர் அவர்களின் 2286/2019/P3 நாள் 25.03.2019 கடிதத்தில் அறிவுறுத்தப்பட்டுள்ளவாறு தி.க்கழிவு மேலாண்மை விதிகள்-2016 விதி 12-ன் படி அந்தந்த மாவட்டத்தில் தேசிய பசுமை தீர்ப்பாயம் வகுத்துள்ள வழிமுறைகளின்படி தி.க்கழிவு மேலாண்மை பணிகளை செயல்களை செயல் உரிய செயல்திட்டம் தயாரித்து

(17)

ஆகவை அமுல்படுத்தும் பொருட்டு சம்பந்தப்பட்ட அலுவலர்கள் உடனான ஆய்வு கூட்டம் மாவட்ட ஆட்சியர் அவர்கள் தலைமையில் முறையிட்ட கால இடைவெளியில் நடத்தப்படும் என மாவட்ட ஆட்சியர் அவர்களால் தெரிவிக்கப்பட்டது.

ஆய்வுக்கூட்டத்தில் திடக்கழிவு மேலாண்மை விதி 2016 பிரிவு 12-ல் குறிப்பிடப்பட்டுள்ள கீழ்காணும் பொருள்கள் தொடர்பாக ஆய்வு செய்யப்பட்டது.

I. Facility identification and allocation of suitable land as per clause(f) of rules 12 for the setting up of waste processing and disposal facilities to local bodies in this district in close Coordination with the Secretary in charge of state urban development department within from the date of notification of these rules.

மேற்காணும் பொருளில் தெரிவித்துள்ள இடம் தேர்வு மாவட்ட ஆட்சியர் அவர்களால் கோரப்பட்டதற்கு ஆய்வு செய்து தஞ்சாவூர் மாவட்டத்தில் உள்ள மாநகராட்சி, நகராட்சி மற்றும் பேரூராட்சிகளில் திடக்கழிவு மேலாண்மைக்கு போதுமான இடவசதி உள்ளதாக சம்பந்தப்பட்ட அலுவலர்கள் தெரிவித்தார்கள்.

II. Review the performance of local bodies, at least once in on quarter on waste segregation, processing, treatment and disposal and take corrective measures in consultation with the Commissioner or Director of Municipal Administration or Director of local bodies and Secretary in charge of state urban development.

தஞ்சாவூர் மாவட்டத்தில் உள்ள கும்பகோணம் மற்றும் பட்டுக்கோட்டை நகராட்சிகளில் திடக்கழிவு மேலாண்மை கொள்கை மற்றும் செயல்திட்டம் தயார் செய்யப்பட்டு அரசிதழில் வெளியிட நகராட்சி நிர்வாக ஆணையர் அவர்களின் அனுமதி பெறப்பட்டுள்ளது எனவும், தஞ்சாவூர் மாநகராட்சியில் திடக்கழிவு மேலாண்மை கொள்கை மற்றும் செயல்திட்டம் தயார் செய்யப்பட்டு நகராட்சி நிர்வாக ஆணையரின் அனுமதிக்காக சமர்பிக்கப்பட்டுள்ளது எனவும், மேற்படி கொள்கை தஞ்சாவூர் மாநகராட்சி

(116)

மற்றும் கொள்கை அறிக்கையினை அறுவதி பெற்று மாவட்ட அரசிதழில் வெளியிட தகுந்த நடவடிக்கை மேற்கொள்ளுமாறு மாவட்ட ஆட்சியர் அவர்களால் அறிவுறுத்தப்பட்டுள்ளது.

தஞ்சாவூர் மாவட்டத்தில் உள்ள அனைத்து பேரூராட்சிகளிலும் திடக்கழிவு மேலாண்மை கொள்கை மற்றும் செயல்திட்டம் தயார் செய்து பேரூராட்சிகளின் இயக்குநரிடம் அனுமதி பெற்று மாவட்ட அரசிதழில் வெளியிட நடவடிக்கை மேற்கொள்ள மாவட்ட ஆட்சியர் அவர்களால் அறிவுறுத்தப்பட்டது.

திடக்கழிவு மேலாண்மை கொள்கை மாற்றம் திட்ட அறிக்கையில் குறித்துள்ள பணிகளை குறியிட்ட காக் கெடுவுக்குள் முடித்து அறிக்கை செயதிட சம்பந்தப்பட்ட அலுவலர்களுக்கு அறிவுரை வழங்கப்பட்டது. மேலும் இப்பொருள் தொடர்பான ஆய்வுக்கூட்டம் 3 மாதங்களுக்கு ஒருமுறை தொடர்ந்து நடைபெறும் எனவும் தெரிவிக்கப்பட்டது.

மாவட்ட ஆட்சியர்,
தஞ்சாவூர்

14/4/17

பெறுநர்:

1. மாவட்ட வருவாய் அலுவலர், தஞ்சாவூர்.
2. நகராட்சி நிர்வாக இயக்குநர், சென்னை.
3. மாநகராட்சி ஆணையாளர், தஞ்சாவூர் மாநகராட்சி.
4. ஆணையாளர், கும்பகோணம் நகராட்சி.
5. ஆணையாளர், பட்டுக்கோட்டை நகராட்சி.
6. உதவி இயக்குநர், பேரூராட்சிகள், தஞ்சாவூர் மண்டலம்.

நகல்:

இயக்குநர், நகராட்சி நிர்வாக இயக்கம், நகராட்சி நிர்வாக ஆணையர், நகராட்சி நிர்வாக கட்டிட எண்.[illegible] அண்ணாசாலை, MRC நகர், சென்னை-28.

(117)

Minutes of the meeting conducted by the District Collector Nagapattinam to Review Solid Waste Management Rule-2016, Rule -12 of Nagapattinam District ULBs

In the Chair: Thiru.Dr.S.Sureshkumar I.A.S,
District Collector,Nagapattinam.

Officers Present:-

1.Thiru N.R.Ravichandran	Municipal Commissioner(i/c), Nagapattinam
2. Thiru P Krishnamoorthi	Municipal Commissioner, Mayiladuthurai
3. Tmt M Aitha Banu	Municipal Commissioner, Sirkazhi
4. Thiru N.R.Ravichandran	Municipal Commissioner Vedaranyam
5. Dr T Prabu	Municipal Health Officer, Nagapattinam Municipality
6. Dr Pradeep V Krishna Kumar	Municipal Health Officer Mayiladuthurai Municipality

A Meeting held on 08.04.2019 in Collector Office, Nagapattinam to review the Solid Waste Management progress for successful Implementation of SWM Rules 2016. During the meeting, the progress of Nagapattinam, Mayiladuthurai,Sirkazhi Vedaranyam municipalities were reviewed.

As per Solid Waste Management Rules 2016, Rules12 The Duties of District Collector is as Follows

I) Facilitate identification and allocation of suitable land as per clause (f) of Rules 11 for setting of solid waste processing and disposal facilities to local authorities in his district in close coordination with the Secretary-In-Charge of State Urban Development Department within one year from the date of Notification of these rules

II) Review the performance of local bodies, at least once in a quarter on waste Segregation, processing,treatment and disposal and take corrective measures in consultation with the Commissioner or Director of Municipal Administration or Director of local bodies and secretary-in-charge of the State Urban Development.

118

As per the instruction from the CMA office the State Monitoring committee of SWM Constituted by the NGT had insisted that all urban local bodies should prepare the ULB level solid waste Management policy and plan to notify the same in the gazette.

Vide Reference from the Regional Director of Municipal Administration Thanjavur letter No.214/2019/A3 Dated 16.03.2019,the RDMA Thanjavur have Prepared and Submitted the SWM policy and Action plan booklet in respect of 4 Municipalities and had requested the CMA to give approval for the same to notify it in Gazette.

Approval of the Action plan and Policy is Accorded by CMA vide letter NO.2288/2019/P3, dated 25.03.2019.

The main objective of the meeting were to assess the Progress of Door to door collection Source segregation, Waste disposal, wet waste Processing facility, Dry waste disposal, hazardous waste and e waste storage facility created. Bio mining and formation of SWM monitoring committee at district level.

1. The District Collector instructed to form a subcommittee as per SWM Rules 2016 in all ULB s and submit the report.
2. The District Collector directed that the door to door collection and Source Segregation should be achieved 100% by all ULBs. The ULB Commissioners were instructed to achieve 100% D2D collection and Source segregation before 30.04.19.
3. ULBs were advised to Strictly prevent the burning and throwing of wastes to the water bodies.
4. All ULBs were advised to improve the processing facility for wet waste by ensuring the efficient functioning of MCCs and OCCs Created.
5. All ULBs were advised to Periodically practice the disposal mechanism for dry waste.

(119)

6. All ULBs were advised to ensure separate collection of Domestic hazardous Wastes as envisaged in SWM Rules 2016 and were instructed to identify the storage facility and disposal mechanism for hazardous waste E waste and Construction & Demolition Wastes. A separate Storage facility has to be created for depositing the above wastes and wide publicity has to be given for the availability of such centres to the general public and they should be encouraged to deposit the wastes in these earmarked Locations/ Centres by themselves.

7. Stringent Penalising mechanism should be in place for the unauthorized dumping Of C &D Wastes

8. The ULBs were advised to speed up the process of bio mining.

9. The ULBs were instructed to take earnest efforts to make the ULB as 'Dump free and Bin free cities'

District Collector
Nagapattinam

To

1. The Regional Director of Municipal Administration, Thanjavur
2. The Commissioner of Nagapattinam Municipality (I/C).
3. The Commissioner of Mayiladudurai Municipality
4. The Commissioner of Sirkazhi Municipality.
5. The Commissioner of Vedaranyam Municipality

Copy Submitted to:

The Commissioner of Municipal Administration, Chennai

மாவட்ட ஆட்சியர் அலுவலகம்,
அரியலூர்.
நாள். 01.04.2019.

120

கூட்ட நடவடிக்கைகள்

அரியலூர் மாவட்ட ஆட்சித்தலைவர் அவர்களின் தலைமையில் 01.04.2019 அன்று பிற்பகல் 3.00 மணி அளவில் மாவட்ட ஆட்சியர் அலுவலகத்தில், அரியலூர் மற்றும் ஜெயங்கொண்டம் நகராட்சிகளில் நடைபெறும் திடக்கழிவு மேலாண்மை கையாளுதல் பற்றி விவாதிக்கப்பட்ட கூட்ட நடவடிக்கைகள்.

தலைமை :

மாவட்ட ஆட்சித்தலைவர் அவர்கள்,
அரியலூர் மாவட்டம்

கூட்டத்தில் கலந்து கொண்டவர்கள் :

1. நகராட்சி ஆணையர்,
அரியலூர் நகராட்சி
2. நகராட்சி ஆணையர் (பொ) மற்றும் நகராட்சி பொறியாளர்,
ஜெயங்கொண்டம் நகராட்சி
3. நகராட்சி பொறியாளர்,
அரியலூர் நகராட்சி
4. சுகாதார ஆய்வாளர்,
அரியலூர் நகராட்சி
5. சுகாதார ஆய்வாளர்,
ஜெயங்கொண்டம் நகராட்சி

அரியலூர் நகராட்சி :

அரியலூர் நகராட்சி அன்றாடம் பொதுமக்கள் மற்றும் வணிக நிறுவனங்களின் பயன்பாட்டிலிருந்து வரக்கூடிய கழிவுகள் 14 MT அதில் 8 MT ஈரக் கழிவுகள் (Wet waste), 5 MT உலர்கழிவுகள் (Dry Waste). அதனை உருவாக்கக் கூடிய தரத்திலேயே அழிக்கும் பொருட்டு கீழ்கண்டவாறு கையாளப்படுகிறது என தெரிவிக்கப்பட்டது.

I. அரியலூர் நகராட்சி எல்லைக்குட்பட்ட பகுதிகளில் அன்றாடம் வீடுகளிலிருந்து கழிவுகளை ஈரக்கழிவுகள், உலர்கழிவுகள் ஆகிய இரு வகைகளாக பிரித்து BOV, LCV மற்றும் தள்ளுவண்டி (Push Cart) ஆகியவற்றைக் கொண்டு சேகரிக்கப்படுகிறது.

II. சேகரமாகக்கூடிய கழிவுகளில் 8 MT ஈரக்கழிவுகளை உரமாக்கும்பொருட்டு, MCC (Micro Compost Centre) தற்சமயம் கட்டுமான பணி மேற்கொள்ளப்பட்டு வருகிறது. அதன் கொள்ளளவு 5 MT மீதமுள்ள 3 MT–க்கு Onsite Compost Centre 0.5 MT கொள்ளளவு வீதம் மொத்தம் 6 இடங்கள் தேர்வு செய்யப்பட்டு 2 இடங்களில் உரமாக்குதல் பணி நடைபெறுகிறது. மீதமுள்ளவை கட்டுமானப் பணியில் உள்ளது.

(121)

III உலர்கழிவுகள் 4.4 MT-ல் வீடு வீடாக சேகரிக்கக் கூடிய கழிவுகளில் மறுசுழற்சி செய்ய இயலாத 2.4 MT பிளாஸ்டிக் மற்றும் எரிக்கக் கூடிய பொருட்கள் அல்ட்ரா டெக் சிமெண்ட் நிறுவனம் மற்றும் டால்மியா சிமெண்ட் நிறுவனத்திற்கு அனுப்பி வைக்கப்படுகிறது. மறுசுழற்சி செய்யக் கூடிய பிளாஸ்டிக் மற்றும் பொருட்கள் 2 MT சேகரித்து வாரந்தோறும் விற்பனை செய்து துப்புரவு பணியாளர்களுக்கு சமமாக பிரித்து வழங்கப்படுகிறது.

IV E-Waste மின்சார்ந்த கழிவுகள் இந்நகராட்சிக்கு சொந்தமான சமுதாயக்கூட கட்டிடத்தில் சேகரித்து பின் அப்புறப்படுத்தப்படுகிறது. மேலும் 0.1 MT மறுசுழற்சி செய்ய இயலாத Hazardous waste (நச்சுக்கழிவுகள்) சேகரித்து (Incineration) எரித்து அப்புறப்படுத்தப்படுகிறது.

இவ்வாறு ஜெயங்கொண்டம் நகராட்சி எல்லைக்குட்பட்ட பகுதிகளில் சேகரமாகும் கழிவுகள் 11 MT உற்பத்தியாகக்கூடிய தளத்திலேயே அழிக்கப் போதுமான நடவடிக்கைகள் மேற்கொள்ளப்பட்டு வருகிறது. மேலும் ஜெயங்கொண்டம் நகராட்சிக்குட்பட்ட கொம்மேடு சாலைக்கு அருகில் உள்ள கழிவுகள் கிடங்கில் (Dump yard) உள்ள சுமார் 3000 MT அளவுள்ள கழிவுகளில் தினசரி இந்நகராட்சி 10 துப்புரவு பணியாளர்கள் அனுப்பி வைக்கப்பட்டு. மறுசுழற்சி செய்ய இயலாத பிளாஸ்டிக் மற்றும் எரியக்கூடிய பொருட்கள் தரம் பிரிக்கப்பட்டு அல்ட்ரா டெக் சிமெண்ட் நிறுவனம் மற்றும் டால்மியா சிமெண்ட் நிறுவனத்திற்கு வாரந்தோறும் 2.5 MT அளவில் அனுப்பி வைக்கப்படுகிறது.

மாவட்ட ஆட்சித்தலைவர்
அரியலூர் மாவட்டம்.

(2/3) 1.A.15

122

Annexure No.

Regional Monitoring Committee of Southern States

Solid Waste Management

Constitution by Government of India vide NGT OA No.606/2018 , Dated 20.08.18

Minutes of the 5 Regional Monitoring Committee

Conversion of Regional Monitoring Committee into State Monitoring Committee of NGT , Dated : 29.01.19

Minutes of 1st Meeting Dated : 12.02.19

Minutes of 2nd Meeting Jointly with Chief Secretary ,Dated : 29.03.19

123

Revised Order
Corrected on: 31.08.2018

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH
NEW DELHI

O.A. No. 606/2018

In the matter of:

Compliance of Municipal Solid Waste Management Rules, 2016

ORDER

1. Municipal Solid Waste (MSW) remains one of the most serious challenges for environment protection. Deficiencies in proper management of solid waste have resulted in outbreak of serious diseases in the past and have such potential in future. The issue has been highlighted and considered at all concerned levels and has also been subject matter of decisions of Courts.[1]

2. This Tribunal also considered the matter pursuant to order of the Hon'ble Supreme Court transferring the pending Writ Petition to this Tribunal.[2]

3. The revised Rules[3] have been framed in the year 2016 but implementation remains a problem. Under the Rules, 2016 a report is compiled every year. In the recent annual report[4] prepared in April, 2018, serious deficiencies have been found

[1]Dr. B.L Wadhera vs. Union of India (1996(2) SCC 594), Almitra H. Patel and Ors. vs. Union of India & Ors. (1998) 2 SCC 416, Almitra H. Patel and Anr. vs. Union of India (2004) 13 SCC 538, Municipal Corporation Vs. BVC India Ltd (2018) 5 SCC 462

[2]Order dated 22.12.2016 in O.A. No. 199 of 2014 in the matter of Mrs. Almitra H. Patel and Anr. vs. Union of India & Ors.

[3]Solid Waste Management Rules, 2016 replacing earlier Rules.

[4]Consolidated Annual Report for the year 2016-2017 prepared by CPCB.
http://cpcb.nic.in/openpdffile.php?id=UmVwb3J0RmlsZXMvNjE0XzE1MjYzMDE0ODhfbWVkaWFwaG90
hsEyMzg3LnBkZg==

may also be sent to the Tribunal by the Regional Monitoring Committees after three months of their working. The Regional Monitoring Committees will be paid remuneration and such logistic support as required by Department of Urban Development, Government of Punjab, Madhya Pradesh, Maharashtra, Tamil Nadu and West Bengal for Northern Zone, Central Zone, Western Zone, South Zone and Eastern Zone respectively. The States will be entitled to recover proportionate expenses from the member States and Union Territories in the respective zones All the States are advised to maintain the parity with regard to the remuneration of Chairperson of the Regional Monitoring Committees. The Committees may function for a period of one year subject to any further order.

20. The constitution of the Regional Monitoring Committees will be as follows:

North Zone – Chandigarh-Delhi		
1.	Mrs. Rajwant Sandhu, IAS, Former Secretary, GoI & Former Member, CAT	Chairperson
2.	Principal Secretary of Urban Development, Government of Punjab, Punjab	Member Secretary
3.	Principal Secretaries of Urban Development of Government of Jammu & Kashmir, Himachal Pradesh, Haryana, Uttarakhand, NCT Delhi, Uttar Pradesh, Union Territory, Chandigarh	Members
4.	Member Secretaries of State PCBs/PCCs of Jammu & Kashmir, Himachal Pradesh, Haryana, Punjab, Uttarakhand, NCT Delhi, Uttar Pradesh, Union Territory, Chandigarh	Members
5	Representative of Central Pollution Control Board (CPCB).	Member

(195)

Eastern Zone-Kolkata		
1.	Hon'ble Mr. Justice Jayanta Kumar Biswas Former Judge, Calcutta High Court	Chairman
2.	Principal Secretary, Urban Development, Government of West Bengal, Kolkata, West Bengal.	Member Secretary
3.	Principal Secretaries of Urban Development of State of Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam, Tripura, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim	Members
4.	Member Secretaries of PCBs/PCCs of Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam, Tripura, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim	Members
5.	Representative of CPCB	Member

Western Zone – Mumbai-Pune		
1.	Hon'ble Mr. Justice J.P Devadhar Former Judge, Bombay High Court	Chairman
2.	Principal Secretary, Urban Development, Government of Maharashtra	Member Secretary
3.	Principal Secretaries of Urban Development of Govt. of Gujarat, Goa, Daman & Diu, Dadra and Nagar Haveli	Members
4.	Member Secretaries of State PCBs/PCCs of Maharashtra, Gujarat, Goa, Daman & Diu, Dadra and Nagar Haveli	Members
5.	Representative of Central Pollution Control Board	Member

Central Zone – Bhopal		
1.	Hon'ble Mr. Justice K.K.Trivedi Former Judge, Madhya Pradesh High Court	Chairman
2.	Principal Secretaries of Urban Development Government of Madhya Pradesh, Bhopal. Madhya Pradesh.	Member Secretary
3.	Principal Secretary of Urban Development, Government of Chattisgarh and Rajasthan	Member
4.	Member Secretaries of Madhya Pradesh, Rajasthan and Chattisgarh State Pollution Control Boards	Members
5.	Representative of Central Pollution Control Board.	Member

Southern Zone-Chennai		
1.	Hon'ble Mr. Justice P.Jyothimani Former Judge Madras High Court Former Judicial Member, NGT, Southern Bench, Chennai	Chairman
2.	Principal Secretary, Urban Development, Government of Tamil Nadu	Member Secretary
3.	Principal Secretaries of Urban Development of Government of Karnataka, Kerala, Andhra Pradesh, Telangana Puducherry, Andaman & Nicobar Islands, Lakshadweep Islands.	Members
4.	Member Secretaries of PCBs/PCCs of Tamil Nadu, Karnataka, Kerala, Andhra Pradesh, Telangana and Puducherry, Andaman & Nicobar Islands, Lakshadweep Islands.	Members
5.	Representative of CPCB	Member

21. There will also be State Level Committees headed by Secretary of the Urban Development Department with Secretary of the Environment Department as Members. The representatives

from the Central Pollution Control Board and State Pollution Control Boards would assist the State Level Committees. The State Level Committees may have interactions with the Local Bodies preferably once in two weeks. The Local Bodies may furnish report to the State Committees twice a month. The State Committees will take a call on technical and policy issues in accordance with the Rules, 2016 consistent with directions of Apex and Regional Monitoring Committees. The Local Bodies may be required to have suitable nodal officers of particular level having regard to the nature of work. For bigger Local Bodies, committees headed by senior officials may be constituted. Public involvement may be encouraged and status of Municipal Solid Waste be put in public domain. The State Level Committees may also function for a period of one year subject to any further order. The report may be given to the Regional Monitoring Committees on monthly basis.

22. The Tribunal is of the view that instead of every Local Body individually floating tenders for different services, standards and technical specifications of available services may be specified by the Department of Urban Development and adopted by Local Bodies. Such services may be hired on laid down standard norms to save time. However, this aspect may be finally gone into by the Committees.

128

MAWS (MA.IV) DEPT

Sub: National Green Tribunal, New Delhi – Orders of National Green Tribunal dated: 20.08.2018 – Constitution of Regional Monitoring Committee (South) under the chairmanship of Hon'ble Mr.Justice P.Jyothimani – Implementation of Orders – Meeting on 20.09.2019 – reg

Ref: Orders of the National Green Tribunal dated.20.08.2018 in OA.No.606/2018.

This file relates to constitution of State Level committee as ordered by the National Green Tribunal dated. 20.08.2018 in O.A.No.606 of 2018 and formation of Southern Regional Monitoring Committee in Chennai under the Chairmanship of Hon'ble Mr.Justice P.Jyothimani to monitor the implementation of the Solid Waste Management Rules, 2016.

2. The Hon'ble National Green Tribunal, New Delhi in its Order dated 20.08.2018 in OA.No.606 of 2018, directed to constitute an Apex Monitoring Committee in New Delhi and five Regional Monitoring Committees, (North Zone- Chandigarh – Delhi, Eastern Zone- Kolkata, Western Zone- Mumbai - Pune, central Zone – Bhopal, Southern Zone- Chennai) and State Level Committees. The National Green Tribunal also ordered the following persons as chairman, Member Secretary and Members for southern zone:-

Southern Zone- Chennai.		
1.	Hon'ble Mr.Justice P.Jyothimani Former Judge Madras High Court Former Judicial Member, NGT, Southern Bench, Chennai.	Chairman
2.	Principal Secretary, Urban Development, Government of Tamil Nadu	Member Secretary
3.	Principal Secretaries of Urban Development of Government of Karnataka, Kerala, Andhra Pradesh, Telangana, Puducherry, Andaman and Nicobar Islands, Lakshadweep Islands.	Members
4.	Member Secretaries of Pollution Control Boards / Pollution Control Committees of Tamil Nadu, Karnataka, Kerala, Andhra Pradesh, Telangana, and Puducherry, Andaman and Nicobar Islands, Lakshadweep Islands.	Members
5.	Representative of Central Polution Control Board	Member

3. The National Green Tribunal, has also ordered that the Regional Monitoring Committee Southern Zone will be paid remuneration and such logistic support as required by Department of Urban Development Tamil Nadu and will be entitled to recover proportionate expenses from the member states and Union Territories in the Southern Zone. And also advised to maintain the parity with regard to the remuneration of Chairperson of the Regional Monitoring committee. The Committee may function for a period of one year subject to any further order. The National Green Tribunal also specified the roles and functioning of the Regional Monitoring committee.

130

Draft Minutes of the Regional Monitoring Committee meeting held under the Chairmanship of Hon'ble Justice P.Jyothimani, on 28.09.2018 at 12.30 pm at Old Conference Hall, Secretariat, Chennai -9.

List of participants

1.	Hon'ble Justice Thiru.P.Jyothimani	Chairman, Regional Monitoring Committee
2.	Thiru.Harmander Singh, IAS.,	Principal Secretary to Government Municipal Administration & Water Supply Department, Government of Tamil Nadu / Member Secretary, Regional Monitoring Committee
3.	Sri Arvind Kumar, IAS.,	Principal Secretary, Municipal Administration and Urban Development, Government of Telangana
4.	Thiru.G.Prakash, IAS.,	Commissioner of Municipal Administration, Government of Tamil Nadu
5.	P.Jawahar, IAS	Secretary, Local Administration, Puducherry
6.	Thiru.S.Palanisamy, IAS.,	Director of Town Panchayats, Government of Tamil Nadu
7.	R.Lalitha, IAS	Commissioner (i/c), Greater Chennai Corporation
8.	Thiru.S.S.Shekarappa, IAS.,	Director, Municipal Administration, Government of Karnataka
9.	Thiru.Manoj Kumar, IFS.,	Member Secretary, Karnataka State, Pollution Control Board
10.	Nabanita Ganguly, IFS	Andaman Nicobar Pollution Control Committee
11.	Thiru.S.Suresh	Regional Director, Central Pollution Control Board, Bangalore
12.	R.Smitha	Member Secretary, Pondicherry Pollution Control Committee
13.	R.Vishwanathan	Chief Environmental Engineer, Telangana Pollution Control Board
14.	N.Ravikiran	Additional Commissioner, Health and Sanitation, Greater Hyderabad Municipal Corporation
15.	N.Mahesan	Chief Engineer, Greater Chennai Corporation

(131)

16.	Kishore Kumar Dath	Joint Secretary, Lakshadweep
17.	T.A.Thangappan	Member Secretary, Pollution Control Board, Kerala
18.	P.Selvan	Member Secretary, Tamil Nadu Pollution Control Board
19.	K.Kannabab	Director, Municipal Administration, Government of Andhra Pradesh
20.	T.K.Sreedevi	CDMA, Government of Telungana, Hyderabad

The Ist meeting of the Regional Monitoring Committee constituted by NGT was conducted at 12.30 p.m. at Secretariat in Chennai. It was Chaired by Hon'ble Justice Thiru.Jyothimani and coordinated by Member-Secretary Thiru Harmander Singh, I.A.S., Principal Secretary, Municipal Administration and Water Supply Department, Government of Tamil Nadu.

To begin with Member Secretary i.e the Principal Secretary, T.W Municipal Administration and Water Supply Department under whose control the Municipal Solid Waste management of the State of TamilNadu vest, welcomed the Hon'ble Chairman and members of the committee.

The Chairman in the introductory remark explained about the objective of Constitution of Regional Monitoring Committee by the National Green Tribunal, New Delhi which is basically to ensure proper and effective implementation of Solid Waste

anagement Rules'2016. He also directed that the copy of the M/s.Almithra patel Judgment in OP.No.199/2014 dated: 22.12.2016 to be given to all the member States and requested the members to go through the judgment so as to understand the concept fully.

Later all the members States were enquired about the status of notification of Solid Waste Management policy. It was reported that except Andaman and Nicobar Islands all other 7 member States have notified Solid Waste Management policy. They were asked to hand over a copy of their Solid Waste Management policy to the Regional Monitoring Committee.

Thereafter, each state gave a brief account about the current status of their Solid Waste disposal. They were asked to submit a brief written statement to the committee. Chairman also requested to adhere to the timelines prescribed in the Rules and as intended by the National Green Tribunal and make a presentation by each State during the next meeting of the Regional Monitoring Committee.

The Commissioner of Municipal Administration then made a detailed presentation about various steps taken by the Tamil Nadu to implement the Solid Waste Management Rules including adoption of innovative approach of decentralized Micro Compost Centre, disposal of legacy waste by bio-mining, recycling of the plastic waste by sale through Sanitary workers, despatch of other types of non saleable plastics to nearby cement factories by entering in Memorandum of Understanding with them. He also highlighted innovative models adopted by various UL Bs in this regard.

The Principal Secretary of Andhra Pradesh mentioned about the usage of swatch autos in SWM in Hyderabad and adoption of septage management model in few corporations. He also requested the Regional Monitoring Committee to recommend for dedicated funds for Solid Waste Management and Septage Management in 15th Finance Commission Grant. The Chairman stated that his request will be examined.

After detailed discussion it was decided to have next meeting on 30.10.2018 at Bengaluru . The Director of Municipal Administration was asked to inform their State's convenience to

(134)

the Member Secretary of Regional Monitoring Committee by 03.10.2018.

The Member Secretary requested the member States to get necessary approval from appropriate authorities in their States for sharing of expenditure of the expenses incurred on logistics salary and the expenses of RLC which will be communicated to them in due course.

To conclude, Member Secretary thanked the Chairman and the participants and expressed hope that this forum will play effective and construction role in monitoring implementation of Solid Waste Management Rules' 2016 in the concerned States and Union Territories which come under the Southern region monitoring Committee.

4/10/18

Member Secretary/
Principal Secretary.
Municipal administration and
Water Supply Department
Government of Tamil Nadu
Chennai.

4.10.2018

Chairman
Regional Monitoring Committee
(South) Chennai.

Minutes of the Regional Monitoring Committee (South) 2nd Meeting at Vidhan Soudha, Bengaluru conducted under the Chairmanship of Hon'ble Justice P. Jyothimani on 30.10.2018 at 12 Noon.

The 2nd Regional Monitoring Committee (South) Meeting was convened at Vidhan Soudha, Bengaluru under the Chairmanship of Hon'ble Justice P. Jyothimani on 30.10.2018 at 12 Noon. The list of participant in the meeting is ~~enclosed~~ as follows:-

1.	Hon'ble Justice P Jyothimani	Chairman, NGT Regional Monitoring Committee (South)
2.	Sri Harmander Singh IAS	Principal Secretary (MA&WS), Govt. of Tamil Nadu/ Member Secretary, NGT Regional Monitoring Committee (South)
3.	Sri Mahendra Jain IAS	Additional Chief Secretary, Urban Development, Government of Karnataka
4.	Sri. R Karikal Valaven IAS	Principal Secretary (MA&UD), Govt. of Andhra Pradesh
5.	Sri Aravind Kumar IAS	Principal Secretary (UD), Government of Telangana
6.	Sri P Sathyanarayana Reddy IAS	Member Secretary, Telangana State Pollution Control Board
7.	Sri B S Shekharappa IAS	Commissioner, Directorate Municipal Administration, Karnataka

136

8.	Sri N Manjunath Prasad IAS	Commissioner,Bruhat Bengaluru Mahanagara Palike
9.	Sri G Prakash IAS	Commissioner, Commissionerate of Municipal [illegible] Tamil Nadu
10.	Dr. T K Sridevi IAS	Commissioner & Director Municipal Administration, Telangana
11.	Sri Randeep. D. IAS	Special Commissioner (SWM), Bruhat Bengaluru Mahanagara Palike
12.	Sri Manoj Kumar IFS	Member Secretary, KSPCB
13.	Sri Malar Kannan	Additional Secretary LAD cum Director LAD, Puducherry
14.	Sri V P Jeyaseelan	Dy. Secretary, (H&UD), Government of Tamil Nadu
15.	Sri Damodhar A T IAS	Secretary, Environment & Forest, UT of Lakshadweep
16.	Sri Phalgun Kumar	Assistant Director, DMA, Telangana
17.	Sri Sarfaraz Khan	Joint Commissioner (SWM), Bruhat Bengaluru Mahanagara Palike
18.	Sri S Suresh	Regional Director, Central Pollution Control Board, Bengaluru.
19.	Sri D Sekar	Member Secretary, Tamil Nadu Pollution Control Board

20.	Sri T A Thankappan	Member Secretary, Kerala Pollution Control Board
21.	Smt. R Smita	Member Secretary, Puducherry Pollution Control Committee
22.	Sri Avinash Singh	Executive Engineer, Andaman & Nicobar Pollution Control Committee
23.	Dr. K H Vinay Kumar	Director EMPRI
24.	Sri Vijay Kumar	Director, Ecology & Environment
25.	Sri G. Thirumurthy	Senior Environment Engineer, Central Pollution Control Board, Bengaluru
26.	Sri A Vijaya Kumar	Joint Chief Environmental Engineer, Andhra Pradesh Pollution Control Board
27.	Smt. Shreeroopa	Additional Deputy Commissioner, Bangalore Urban District
28.	Sri P Vishwanath	Chief Engineer (SWM), Bruhat Bengaluru Mahanagara Palike
29.	Sri Somesh M C	Executive Engineer, Directorate Municipal Administration, Karnataka

To begin with Municipal Commissioner, Bruhat Bengaluru Mahanagara Palike welcomed the Chairman, Member Secretary and other members of the Committee to Bangalore for the 2nd meeting of the Regional Monitoring Committee constituted by National Green Tribunal.

The Chairman in his opening remarks explained the purpose behind the Constitution of the Regional Level Committee by the National Green Tribunal. He also requested all the Member States to finalise and notify the Solid Waste Rules and the connected Rules and submit copies of statutory orders / rules notified so far.

The various States including Andhra Pradesh, Puducherry and Andaman and Nicobar gave a copy of rules which have been framed by them. Additional Chief Secretary, Urban Development, Government of Karnataka informed that they will be notifying Solid waste policy.

Member Secretary requested the host State and other states to make a presentation on the current status of the implementation of Solid Waste Management rules.

To begin with Additional Chief Secretary Karnataka made introductory remarks on the status of Solid Waste Management in Karnataka.

Director of Municipal Administration, Karnataka made presentation of the various steps taken by Government in regard to Segregation of garbage, door to door collection and processing of Solid Waste. Director of Municipal Administration also shared some of the best practices adopted by Bagalkote and Kattu ..... and ..... Municipalities.

Further, the Commissioner, Bruhat Bengaluru Mahanagara Palike highlighted various strategies, adopted with regard to Solid Waste Board as mentioned below.

1. Decentralized Stream – wise Processing

   Shift from open dumping of mixed waste to ensuring stream-wise segregation, collection & scientific processing of waste.

2. Separation of Bulk Generators.

   Bulk generators are encouraged to set up in-situ systems or link-up with BBMP Empanelled Vendors to manage their Waste.

3. Micro Plan for each and every ward.

   A Micro Plan is a process of decentralizing the planning & management of solid waste to the smallest unit, i.e

by splitting the Ward into Blocks (One Block-750 Household + shops).

There after Principal Secretary, Andhra Pradesh made a brief presentation about the notification of Rules and policies. He also mentioned about constitution of State Level Advisory body on implementation of Solid Waste Management Rules 2016.

Thereafter Director of Municipal Administration, Telengana made a presentation mentioning about fecal sludge management. Finally Commissioner of Municipal Administration, Tamil Nadu made a presentation about various innovative practices taken up by various cities with regard to door to door collection, segregation of wastes and processing of wastes. He also mentioned about locking of the Vellore dump yard as waste is segregated and processed at micro composite centers. This garbage is not sent to a single dumping yard. He also mentioned about the 67 projects which have already been sanctioned by the Government to clear the legacy waste .

In his concluding remarks the Chairman observed that representative from Kerala have not attended the previous

meeting / this meeting and asked the Member Secretary, Pollution Control Board, Kerala to inform the Principal Secretary, to attend the next meeting. He further observed that Regional Level Committee first priority to ensure that appropriate policies and Rules are notified by all States followed by implementation same as next step in a time bound manner.

It has been decided that the next meeting will be conducted in Andhra Pradesh on 26.11.2018.

Principal Secretary, Andhra Pradesh assured to fix up venue and make necessary arrangements.

The Chairman , Member Secretary and other members also visited the leachate treatment plant at Bellahalli and Bagalur landfill to see the various innovative steps taken by Karnataka Government.

7/11/18

Member Secretary/
Principal Secretary,
Municipal Administration &
Water Supply Department,
Government of Tamil Nadu, Chennai.

Chairman
Regional Monitoring Committee
(South) Chennai.

Letter No.3/RMC1/2018
Regional Monitoring Committee (Southern States)
for Solid Waste Management

142

183, Poonamallee High Road,
Kilpauk, Chennai – 600 010.
Ph. & Fax : 044-2645 3200
E-mail : rmcsouthswm@gmail.com

7th December 2018

Subject : Minutes of the 3rd Meeting of the Regional Monitoring Committee (South) held on 29.11.2018.

*****

The 3rd meeting of the Regional Monitoring Committee (South) was held under the Chairmanship of Hon'ble Justice Dr.P.Jyothimani, Chairperson, Regional Monitoring Committee (Southern States) for Solid Waste Management on 29th November 2018 at Tirupati.

The Minutes of the meeting enclosed for necessary action by all concerned.

Sd/- P.Jyothimani,
Chairperson,
Regional Monitoring Committee (South)

To

1. Thiru.Harmander Singh, I.A.S., Member Secretary, Regional Monitoring Committee (South Zone) & Principal Secretary to Government, Municipal Administration and Water Supply Department, Government of Tamil Nadu, Chennai.
2. The Additional Chief Secretary to Government, Urban Development Department, Room No.436, Vikasa Soudha, Bangalore.
3. Thiru.K. Kanna Babu, I.A.S., Director of Municipal Administration, Andhra Pradesh, Guntur.
4. Dr.Mithra T., I.A.S., Additional Secretary, Urban Development and Local Self Government, Thiruvananthapuram.
5. Smt. T.K. Sridevi, I.A.S., Commissioner & Director of Municipal Administration, Telangana, Hyderabad.
6. Sri P. Jawahar, I.A.S., Secretary, Local Administration Department, Chief Secretariat, Puducherry.
7. Sri. Josmone, Joint Secretary, Urban Development Department, Andaman & Nicobar, Portblair.
8. Sri A.T.Damodar, I.F.S., Secretary, Department of Urban Development, UT of Lakshadweep Administration, Kavaratti.

9. Sri S.Suresh, Regional Director, CPCB, Bengaluru.
10. Sri B.S.S.Prasad, Chairman, Andhra Pradesh State PCB, Vijayawada.
11. Sri D. Sekhar, Member Secretary, TNPCB, Chennai.
12. Sri B.G. Mohan Krishna, Chief Environment Officer, Karnataka SPCB, Bengaluru.
13. Sri T.A. Thankappan, Member Secretary, Kerala SPCB, Thiruvananthapuram.
14. Sri Viswanadh, Chief Engineer, Telangana SPCB, Hyderabad.
15. Sri K. Sajeevan, Chairman, Kerala SPCB
16. Smt R.Smita, Member Secretary, Pondicherry PCC, Pondicherry.
17. The Member Secretary, Andaman & Nicobar Islands PCC, Department of Science & Technology, Dollygung van sadan, Haddo P.O., Portblair.
18. The Member Secretary, Lakshadweep PCC, Department of Science, Technology & Environment, Kavaratti.

Copy to :

1. The Commissioner,
   Commissionerate of Municipal Administration,
   Chennai – 600 005.
2. The Director,
   Directorate of Town Panchayats,
   Chennai – 600 108.
3. The Commissioner,
   Greater Chennai Corporation,
   Chennai – 600 003.

//Forwarded by Order//

7/12/18
Superintendent

144

Minutes of the Regional Monitoring Committee (South) 3rd meeting at Fortune Select Grand Ridge, Tirupati conducted under the Chairmanship of Hon'ble Justice P. Jyothimani on 29th November, 2018 at 12 Noon.

The 3rd Regional Monitoring Committee (South) meeting was convened at Tirupati under the Chairmanship of Justice P. Jyothimani on 29th November at 12.00 noon.

The list of participants in the meeting are as follows:

Sl.No.	Name of the member	Designation
1	Hon'ble Mr. Justice P.Jyothimani	Chairman, Regional Monitoring Committee (South Zone), National Green Tribunal, Chennai.
2	Harmander Singh, I.A.S.	Member Secretary, Regional Monitoring Committee, (South Zone)& Principal Secretary to Govt., Municipal Administration and Water Supply Department, Govt. of Tamil Nadu, Chennai.
3	K. Kanna Babu, I.A.S.	Director of Municipal Administration, Andhra Pradesh, Guntur.
4	Dr. Mithra T., I.A.S.	Additional Secretary, Urban Development and Local Self Government. Thiruvananthapuram.
5	Smt. T.K. Sridevi, I.A.S.	Commissioner & Director of Municipal Administration, Telengana, Hyderabad.
6	Sri P. Jawahar, I.A.S.	Secretary, Local Administration Department, Chief Secretariat, Puducherry.
7	Sri P. Madhusudhan Reddy, I.A.S.	Deputy Commissioner, Chennai Municipal Corporation, Chennai.
8	Sri Vijay Rama Raju. V, I.A.S.	Commissioner, Tirupati Municipal Corporation.
9	Sri B.S.S. Prasad	Chairman, Andhra Pradesh State PCB, Vijayawada

10	Sri A.T. Damodar, I.F.S.	Secretary, Department of Urban Development, UT of Lakshadweep Administration, Kavaratti.
11	Sri. Josmone	Joint Secretary,Urban Development Dept., Andaman & Nicobar, Portblair.
12	Sri S. Suresh	Regional Director, CPCB, Bengaluru.
13	Sri D. Sekhar	Member Secretary, TNPCB, Chennai.
14	Sri. Somesh, M.C,	Executive Engineer, Directorate of Municipal administration, Karnataka.
15	Sri B.G. Mohan Krishna	Chief Environment Officer Karnataka SPCB, Bengaluru.
16	Sri T.A. Thankappan	Member Secretary, Kerala SPCB, Thiruvananthapuram.
17	Sri Viswanadh	Chief Engineer, Telengana SPCB, Hyderabad.
18	Sri K. Sajeevan	Chairman, Kerala SPCB
19	Smt R.Smita	Member Secretary, Pondicherry PCC, Pondicherry.
20	Dr. Ajay Kumar Varma	Executive Director, Swachhata Mission, Thiruvanathapuram.

To begin with Commissioner, Tirupati Municipal Corporation welcomed the Chairman, Regional Monitoring Committee (South), Member Secretary and other Members of the Committee for the 3rd Meeting of the Regional Monitoring Committee. The Hon'ble Justice P.Jyothimani then made his opening remarks.

The Chairman in his opening remarks explained the purpose behind the constitution of Regional Level committee by the National Green Tribunal. He has expressed satisfaction on the field visit in the Tirupati Town on the activities of door to door collection, segregation of waste. Composting of waste in the park. He has

opined that the requirement of land for dumping may not be large if the processing of waste onsite is practiced.

The Member Secretary in his remarks has stated that in the first and second meetings efforts were to ascertain policy framework accomplished by the States. Except Karnataka State, remaining states have submitted the SWM policies. At that time, it was informed by the Karnataka State that their SWM Policy will be notified shortly as the meetings with Stakeholders have been completed. Further, the Member Secretary stated that as per the solid Waste management Rules, NGT directions and other court directions, 100% door to door collection, 100% source segregation and 100% processing of the wastes are to be achieved. Hence, all the States must have State level plan of action covering every ULBs for compliance of the Solid Waste Management Rules, 2016. Each ULBs can adopt their own programme like Tirupati.

Recently, the NGT has requested the RMCs to see that the States choose one model in handing the waste and find out whether the same can be replicated in other ULB's. As per the statutory rules, orders issued by the Supreme Court , NGT and other courts the deadline given in processing and disposal of the Plastic Waste, Construction & Demolition waste, Bio Medical Waste, E-waste etc. has come to an end long back. The states have initiated action for processing and treating the solid waste and action has to be taken for complete compliance of the rules. In this regard, the Member Secretary, has requested the CPCB and Pollution Control Boards to make their presentations.

The CPCB represented by its Regional Director, Bangalore and the Member Secretary of the Tamil Nadu Pollution Control Board made presentations on the Waste Management Rules i.e. Plastic Waste, Bio Medical Waste, Construction and Demolition Waste & E-waste and explained the roles and responsibilities of various authorities i.e. waste generators, producer extended responsibility, State Government, Local Authorities, Pollution Control Board with reference to compliance of the rules. All states were requested to come out with Construction and Demolition waste management policies preferably by 31.3.2019. Annual reports are yet to be furnished by all the State Governments. According to Central Pollution Control Board, the report has been filed by Tamilnadu and Telengana only and it is expected from other States. Regarding Bio-medical, E-waste and hazardous material, waste management responsibility is basically with Pollution Control Board's.

Further, they also explained the guidelines and notifications issued and informed that they are placed in their website and they can be accessed. During the course of the said presentation, the Hon'ble Chairman has asked about the interim arrangements that can be made to handle the Construction & Demolition Waste, as framing of policy and finalizing the service provider may take some time. The CPCB and Pollution Control Board officials stated that they will submit clarification in that regard. Similarly, in the case of E-waste also the Hon'ble Chairman has asked on the

enforcement mechanism at lower level. The CPCB and Pollution Control Board officials have informed that the CPCB has issued guidelines and as per the guidelines EPR registration is a must and the producer has the extended responsibility. The Hon'ble Chairman has expressed the need on strong IEC activities. In respect of the Plastic Waste Management Rules, the CPCB officials have informed that they are conducting meetings with Stakeholders and also involving various institutions, NGOs etc. to control the usage of the plastic carry bags which are below 50 microns. Further, they have informed that the Urban Local Bodies have to control the retailers and wholesalers, by compulsorily registering with them duly collecting the fees @ Rs. 4,000/-. The CPCB/PCB officials have stated that, Plastic which has been seized in huge quantities can be used for cement factories. In the case of Bio Medical Waste, the CPCB officials have brought to the notice that they are not being allowed to inspect defense health care facilities on security reasons. Further, the Municipalities shall ensure that suitable land is allocated for development of CBMWTFS as per the guidelines and not to mix the Bio medical waste with solid waste. Further, the CPCB officials have informed that they are making efforts for capacity building of the functionaries working in ULBs on the Waste Management Rules. But, there is a lukewarm response in some cases. The Hon'ble Chairperson has instructed the State Governments to take action in the matter.

On behalf of the State Government of Andhra Pradesh, the Director of Municipal Administration, has submitted presentation on the implementation of Waste Management Rules. The Director, in his presentation narrated broad outlines on the policies and strategies framed by the Government of Andhra Pradesh on implementation Solid Waste Management Rules, with technology (IOT and ICTC) integrated initiatives, operational guidelines issued in the G.O.Ms.No. 279, micro-planning, rationalization of the men material, implements and vehicles switching over from the workers outsourcing to work outsourcing etc. Unique initiatives of the Government of Andhra Pradesh i.e. Real Time Monitoring System by using IOT and ICTC for capturing of attendance through facial recognition system, monitoring the gate to gate collection with RFID tags and scanners, monitoring of the vehicle movement with GPS Trackers, managing of garbage vulnerable points with black spot management and monitoring system by using mobile app integrating with command communication center established at state level. Further, the Director has stated that the Government of AP has established Swachha Andhra Corporation for hand holding support to the ULBs in Solid Waste Management and procurement of Technologies, deployment of compactors, street skid loaders etc. to the ULBs and mechanization of the Solid Waste Management, establishment of Waste to Energy Plants, Waste to compost and waste to biomethanization plants etc. He has also explained about the Puraseva application and its features especially on the grievances and services which can be accessed through the application. Further, he has also explained on the unique programme initiation of the Government of AP on the Drones and modular integrated robotics for service delivery monitoring. He has

also stated about the status on the establishment of waste to energy plants, waste to compost plants, C&D Waste processing, treatment of legacy waste, bio- caping project in Kadapa etc. He has also presented on the initiatives taken up for capacity building, institution building and IEBC activities and formation of federations at Micro Pocket level, ward level, ULB level, state level and its versatility on citizen engagement in all the aspects for creating sustainable system of local self governance beyond the SWM.

Followed by that, the Commissioner and Director of Municipal Administration, Government of Telengana, has presented videos on the ODF+, initiatives taken up and establishment of Fecal Sludge Treatment Plant at Siricilla and other plants for achieving the ODF+, Swachhata initiatives taken up in the Peerjalaguda Nagar Panchayat which is located in the periphery of the Greater Hyderabad Municipal Corporation surroundings. Achievement of the 100% ODF+. Regulation of the private operators who are handing the faecal sludge by issuing licences, tracking of their movements with GPS trackers and ensuring of wearing of personal protective gear by the workers etc. Further, the CDMA, Telengana has stated that in the previous meeting she has already presented the action taken by the Government of Telengana.

Then the Commissioner, Municipal Corporation, Tirupati made presentation on the initiatives taken up by the Municipal Corporation on banning plastic by passing Council Resolution, measures taken by the Municipal Corporation to control the plastic usage and waste. He has consulted Chamber of Commerce, Public Representatives, NGOs, citizens and involved all the citizens by taking up IEC activities on large scale and controlled the one time usage plastic and efforts are being carried out for sustaining the same. He has also presented about the initiatives taken up for handling the Construction and Demolition waste.

Then the Secretary, Environment and Forest, Union Territory, Lakshadweep, has made a presentation on the Solid Waste policies, strategies and action plan, implementing agencies, action taken and achievements made, awareness programmes conducted etc. In his presentation he has stated that most of the houses have the cattle, hens etc. and utilizing the food waste for feeding the livestock and backyard kitchen is emerging trend among the islanders.

According to the Principal Secretary, Lakshadweep, there are only 12000 houses in 36 islands which are basically Village Panchayats. The wastes collected from house to house are transported to central garbage respectively.

Deputy Commissioner (Health), Greater Chennai Corporation also made a brief presentation on their proposed C & D facility and waste to energy facility.

The Member Secretary requested to all states to furnish time bound action plan to achieve 100% door to door collection, source segregation and processing of

(149)

waste ULB wise. The Hon'ble Chairman, RMC, in his concluding remarks appreciated the CPCB, Pollution Control Board's & State Government presentations.

Hon'ble Chairman has directed the States to submit documents on the success they have achieved through peoples participation. Further, the Hon'ble Chairman has requested the CPCB and Pollution Control Boards to create awareness among the public and especially to conduct meeting for the Pollution Control Board and Corporation officials who must know the rules. A copy of booklet prepared by Tamil Nadu Pollution Control Board consolidating various provisions was handed over to all members. It was also observed that the meeting has enabled the members to share their views and experiences which will help to implement same with greater vigor in their respective States. He has also expressed happiness on the active participation of the officials and the Committee members and stated that this spirit shall continue.

The next meeting will be held at Trichy on 19th December, 2018.

6/12/18

Harmander Singh
Member – Secretary
Principal Secretary
Municipal Administration and Water
Supply Department,
Government of Tamil Nadu,
Chennai-9

7.12.2018

Justice Dr.P.Jyothimani
Chairman,
Regional Monitoring Committee (South),
Chennai.

(150)

Minutes of the 4th Meeting of the Regional Monitoring Committee (Southern States) for Solid Waste Management held on 20th December 2018 at Tiruchirappalli

The meeting chaired by Hon'ble Justice.Dr.P.Jyothimani, Chairman, Regional Monitoring Committee (Southern States) was held in Tiruchirappalli on 20th December 2018.

The Commissioner of Municipal Administration, Chennai welcomed all the participants. List of participants is annexed.

(i) The Chairman, Regional Monitoring Committee (Southern States) narrated briefly about the purpose of the meeting as below :

In order to implement the Solid Waste Management Rules 2016 more effectively, The National Green Tribunal formed The Regional Monitoring Committee (Southern States) to oversee the Solid Waste Management activities in the Southern States. The National Green Tribunal formed four Regional Monitoring Committees namely East, West, South and Central, each headed by a Chairman.

The 1st, 2nd and 3rd meeting was conducted in Chennai, Bangalore and Tirupathi respectively and Fourth meeting is presently being held in Trichy. The Chairman shared experience of using RFID at household level by Tirupathi Municipal Corporation by whichs Collection of Garbage is being monitored directly from the Commissioner's Office for better co-ordination with all the concerned authorities and general public.

The chairman also informed that Bio-mining of legacy waste is permissible. The legacy waste should be reused, recycled or retained for safe disposal. Dumping is not allowed in any form. Wastes shall be separated in every house hold as compostable wastes and non-compostable wastes and from the compostable wastes manure shall be prepared and non-compostable wastes shall be used/recycled and then safely disposed off.

(ii) The Member-Secretary, Regional Monitoring Committee (South) stressed the need to achieve 100% door to door collection, Source Segregation and Processing of Solid Waste.

(iii) Thereafter, the Central Pollution Control Board Officials, Bangalure have made a powerpoint presentation regarding Hazardous and Other Wastes (Management and Trans boundary) Rules 2016. In his presentation he has narrated as follows :

Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 comprises of 6 Chapters, 8 Schedules and 12 Forms and the relevant portions are explained in detail.

He has brought out the significance of the word "hazardous waste" under the rule. He has also explain the Basel convention of United Nations Environment Programme apart from various treat facilities.

The following are the Hazardous Waste handling facilities in Southern Region :

State	HW generated in lakhs (TPA) (2016-17)	No. of TSDF
AP	2.82	1 (Vizag)
Karnataka	4.20	2 (Bengaluru)
Kerala	0.38	1(Kochi)
Puducherry	0.15	0, Captive incinerator, SLF
Tamil Nadu	6.40	2 (Gummidipundi, Virudhnagar)
Telangana	2.77	1 (Dindigul Village)

(taken from website)

The member Secretary requested CPCB to share the details of the operators with ULBs concerned. Chairman also endorsed their suggestion.

(iv) On behalf of the State Government of Kerala, the Additional Secretary Local Self Government Department made a brief presentation on the implementation of Waste Management Rules. The Additional Secretary narrated as follows :

Rural Kerala declared 100% Open defecation free on 1st November 2016

- 1,74,720 new toilets constructed in critical areas- remote tribal hamlets, water-logged areas and coastal stretches- last mile connectivity
- Urban Kerala is all set to declare 100% ODF – 99.7% completed
- Behaviour change through Inter Personal Communication by ASHA & Kudumbasree workers
- Mission accomplished through Total Sanitation Campaign, Swach Bharath Mission & State Plan Fund

Approach to waste management

- The focus is on Reduce, Reuse & Recycle of waste, finally achieving ***zero waste***
- Segregation of waste at source

i. House hold :

Devices (Kitchen bin, bucket composter, ring compost, tri-bin compost, pipe compost, bio-gas plant, pot compost and tri-pot compost) of various capacities distributed to households to manage kitchen wastes.

ii. Community / Institutional :

Aerobic bins, bio-gas plants, organic waste converters for housing colonies, apartment complexes and public places like markets to manage the wastes.

- Cleaning public places
- Source level composting of bio-degradables
- Door-to-Door collection of non-biodegradables
- Resource Recovery Facility
- Captive facilities for Bulk Waste Generators
- Enabling Legal framework - Penaltics for violation and enforcement of rules
- Green protocol for waste reduction
  - Green protocol focuses on waste reduction, primarily to prevent the use of disposables through reusable alternatives like glass/stainless/porcelain plates/cups/cutleries, 1369 Government offices in the State following green protocol.
- They conduct regular pre-monsoon cleaning (Arogyajagratha)

Waste management – Progress so far

- *Total waste generation in Kerala is - 9000 tpd. About 45% of the biodegradable waste generated is handled through these systems*
- 1,39,851 biogas plants at households
- 1320 biogas plants at institutions
- 98 biogas plants at community level
- 314205 composting plants at HH level
- 29420 composting plants at institutions
- 2003 composting plants at community level
- About 30 lakh composting pits
- 10 centralized composting plants
- 261 Material Collection Facilities (MCFs)
- 88 Resource Recovery Facilities (RRFs)
- 106 Plastic shredding units

Door to door Collection of non-biodegradables

Harithakarmasena (HKS) formed in 1005 LSGIs out of 1034

- 26358 trained HKS by the Kudumbasree Mission
- 355 HKS units operational for door-to-door collection of non-biodegradables
- Haritha Karma Sena (HKS) or Green Task Force - a Micro Enterprise Unit formed in each LSGI with 2 persons in each ward to do door to door collection of non-biodegradable waste & assist in biodegradable waste management by charging a user fee (Rs.60/- Rs. 800/- depending on services provided)

The Commissioner of Municipal Administration, Tamil Nadu has insisted need to create awareness and encourage the public in practicing the Source Segregation, Trichy Corporation has awarded 4 lucky winners with 1 Gram Gold Coin on every Wednesday from July 2017 to October 2017 through private sponsorship as a part of awareness programme. So far 31 Nos. of Gold Coins were distributed

WAY FORWARD

- **93 ULBs to become zero waste on ground** over a period of next 18 months
- **Source level biowaste management** at Household, Institutional & Community level
- **Establishment of MCFs** for secondary storage of non-biodegradables
- **Establishment of RRFs** for facilitating recycling

(v) The Commissioner of Vijayawada Municipal Corporation (Andhra Pradesh) made a PowerPoint Presentation about various initiates taken by them in order to keep the City Clean. Special emphasis is given on

Construction & Demolition Waste Management in the City, which is outsourced to a Private Firm on PPP Model. The Plant put up by them is processing 100 MT every day. Transportation of waste is in the scope of bidder, in turn the bidder will collect fee for transportation and processing of C&D waste from the public.

Sanitation Profile of the city

Profile of the City

- Total area of the city - 61.88 Sq Kms
- Total population - 10,34,358 (2011 census)
- No of sanitary wards & Circles - 59 Sanitary Wards & 3 Circles
- No of Sanitary workers engaged - 3357
- Quantity of garbage generated and lifted - 550 MTs /day
- Approximate Quantity of Wet waste - 275 MTs/day (50% of 550 MTs)
- Approximate Quantity sent to Vermi Compost units – 20 MTs/day
- Approximate Quantity sent to Onsite Compost units – 207 MTs/day
- Available Onsite Compost units in VMC -12 No's (5 Centralized & 7 De-centralized Units)

Decentralised Composting

- 19 decentralized units
- 4 methods – OWC, VERMI, BED, WINDROW
- Reduced Transporation Cost
- Efficient turnout time
- All Mandis/ Rythu Bazars
- Compost Selling – 5Rs/Kg
- Capacity - 210 MT
- Shredding increases windrow composting efficiency

(156)

Door to Door basket collection/primary collection

- 100% door to door Collection aimed
- 1400 workers engaged
- Twin bin not mandatory
- Apartment – Critical Area
- Land fill reduction

Usage of Technology

- Compactor bins – Insitu emptying
- Time of lifting reduced to 1/5th
- Solar CC Camera Monitoring of Dumper Bin Station.
- 24/7 Monitoring
- Effective Surveillance

C & D Waste Plant

- 100 MT processing Capacity
- PPP basis
- Transportation scope included in bidder part
- Processing and Transportation fee collected by bidder
- 5 sizes of separation 40mm, 20mm, 6mm, +2mm, -2mm

School Toilets

- Setting standards high
- Automatically motivated towards Sanitation and hygiene
- Sanitary Napkin vending Machine
- Reduced drop outs
- Proving a point

(vi) The CPCB officials explained the need for disposal of medicines with expired date and bio-medical wastes effectively. The Government of Karnataka has instructed that all the Hospitals in the State shall have their own bio-medical waste disposal facilities and permission to any Hospitals shall be given only if they have bio-medical waste disposal facility of their own.

(vii) The Member Secretary, Tamil Nadu Pollution Control Board informed that the Government of Tamil Nadu will ban the use of 14 environmentally dangerous items of plastics from 01.01.2019.

(viii) The Member Secretary of Regional Monitoring Committee in his remarks has stated that in the first and second meetings efforts were to ascertain policy framework accomplished by the States. And all the ULBs in each state should have publish their own solid Waste Management Rules in compliance of the Solid Waste Management Rules, 2016 by 31.01.2019. Each ULB can adopt their own programme. Further Cities / Towns having more than 1 Lakh population must be closely monitored for a period of 3 months and take intensive measures (awareness activities in Schools, Institutions, Offices) for implementation of Solid Waste Management as per the suggestions by the Apex Monitoring Committee that the video conference. He also addressed the States to furnish immediately the list of Town/Cities being made their one lakh population and to furnish the details of the steps taken so far and requested to take intensive steps continuously for 3 months and send frequent and periodical reports to the office of Regional Monitoring Committee in this regard. It is also suggested that Railway premises including stations may also be monitored Railways should also be engaged in the monitoring process.

He also requested all States to furnish action plan to achieve 100% door to door collection, source segregation and processing of Solid Waste to the Committee with particulars of the local bodies which have already achieved the same.

The Hon'ble Justice and Chairman, Regional Monitoring Committee (Southern States) requested the members to inspect the Hospitals and to create awareness about the danger involved in mishandling the bio-medical wastes. If any hospitals found violating the rules, they shall be dealt with severely.

The Chairman also insisted the presence of Principal Secretaries of Urban Development of concerned States as they are member of the Regional Monitoring Committee.

It was also decided that the next meeting will be held at Kochi for two days from 24.01.2019 to 25.01.2019.

The meeting ended with a vote of thanks.

Sd/- Harmander Singh,
Member Secretary,
Regional Monitoring Committee
(Southern States) /
Principal Secretary,
Municipal Administration and Water
Supply Department,
Chennai.

Sd/- Justice Dr.P.Jyothimani,
Chairman
Regional Monitoring Committee
(Southern States),
Chennai.

// Forwurded by Order//

Superintendent

The list or participants :

- Shri.Harmandar Singh, IAS, The Member Secretary, Regional Monitoring Committee South and Principal Secretary, MA&WS Department, Government of Tamilnadu
- Shri.G.Prakash, IAS, The Commissioner of Municipal Administration, Chennai
- Dr.T.Mithra, IAS, Additional Secretary Local Self Government Department, Government of Kerala
- Shri.J.Nivas, IAS Commissioner, Vijayawada Municipal Corporation, Government of Andhra Pradesh
- Shri.Sibi Adhithya Senthil Kumar, IAS, Sub-Collector, Srirangam.
- Shri.K.Sajeevan, Chairman, Kerala State Pollution Control Board
- Shri.T.A.Thankappan, Member Secretary, Kerala State Pollution Control Board
- Shri.A.Vijayakumar, Joint Chief Environmental Engineer, Andhra Pradesh Pollution Control Board
- Shri.P.Viswanatham, Chief Environmental Engineer, Telangana Pollution Control Board
- Shri.D.Sekar, Member Secretary, Tamilnadu Pollution Control Board
- Shri.S.Suresh, Regional Director, Central Pollution Control Board, Bengaluru
- Smt.V.AnjanaKumari, Environmental Engineer, Central Pollution Control Board, Bengaluru
- Shri.D.Narendar, Environmental Engineer, Telangana State Pollution Control Board
- Shri.K.Sreenivasa Reddy, Senior Environmental Engineer, Telangana State Pollution Control Board
- Shri.G.Malar Kannan, Director of Local Administration, Puducherry
- Shri.M.Adharsh, Commissioner, Pondicherry Municipality
- Smt.R.Smita, Member Secretary, Pondicherry Pollution Control Committee
- Dr.Ramesh, Senior Environmental Engineer, Pondicherry Pollution Control Committee

160

Minutes of the 5th Meeting of the Regional Monitoring Committee (Southern States) for Solid Waste Management held on 25th January 2019 at Kochi

The meeting chaired by Hon'ble Justice.Dr.P.Jyothimani, Chairman, Regional Monitoring Committee (Southern States) was held in Kochi on 25th January 2019. List of participants is annexed.

The Smt.R.Girija IAS, Director, Urban Affairs Department, Government of Kerala welcomed the Chairman, Member Secretary and other participants.

(i) In his introductory remarks, Shri.Harmandar Singh, Member Secretary, Regional Monitoring Committee (Southern States) thanked the Additional Chief Secretary for Urban Development Government of Kerala for the excellent arrangement made for the Regional Monitoring Committee meeting in Kochi. The members visited many Solid Waste Management sites including Brahmapuram, which was specifically referred to the committee by the NGT to study and report. He reminded the states regarding submission of actions plan for 100% door to door collection and segregation in cities with more than one lakh population. The states were asked to give the report by 31st January 2019. There was a special mention by the member secretary regarding the Liquid Waste Management systems especially the decentralised septage treatment facilities and the water reuse policy of the State of Tamil Nadu. He also requested all the states to come up with concrete plans for waste water reuse for industrial purpose Presentations on Waste Management initiatives by the members states were done following the introductory remarks by the Member Secretary:

(ii) Telangana, Kochi Corporation, Kerala State Pollution Control Board and Tamil Nadu presented their initiatives in waste management sector.

Solid Waste Management Status

1. ***Telangana***
   - Urban Population – 14.72 million
   - % of Urban Population – 42%

Minutes of the 5th Meeting of the Regional Monitoring Committee (Southern States) for Solid Waste Management held on 25th January 2019 at Kochi

The meeting chaired by Hon'ble Justice.Dr.P.Jyothimani, Chairman, Regional Monitoring Committee (Southern States) was held in Kochi on 25th January 2019. List of participants is annexed.

The Smt.R.Girija IAS, Director, Urban Affairs Department, Government of Kerala welcomed the Chairman, Member Secretary and other participants.

(i) In his introductory remarks, Shri.Harmandar Singh, Member Secretary, Regional Monitoring Committee (Southern States) thanked the Additional Chief Secretary for Urban Development Government of Kerala for the excellent arrangement made for the Regional Monitoring Committee meeting in Kochi. The members visited many Solid Waste Management sites including Brahmapuram, which was specifically referred to the committee by the NGT to study and report. He reminded the states regarding submission of actions plan for 100% door to door collection and segregation in cities with more than one lakh population. The states were asked to give the report by 31st January 2019. There was a special mention by the member secretary regarding the Liquid Waste Management systems especially the decentralised septage treatment facilities and the water reuse policy of the State of Tamil Nadu. He also requested all the states to come up with concrete plans for waste water reuse for industrial purpose Presentations on Waste Management initiatives by the members states were done following the introductory remarks by the Member Secretary:

(ii) Telangana, Kochi Corporation, Kerala State Pollution Control Board and Tamil Nadu presented their initiatives in waste management sector.

Solid Waste Management Status

1. Telangana

- Urban Population – 14.72 million
- % of Urban Population – 42%

162

- Waste generation (MTD) - 8336
  (GHMC-5547 + all ULBs 2789)
- Door to door collection (%) - 95
- Segregation at source (%) - 48
- Processing (MTD) - 6085 – 65% of total waste
- No. of ULBs practicing composting - 56
- No. of ULBs have Dry waste collection centers - 30
- *The GHMC is having fully mechanized processing system and scientific landfill facility in the State.*

Method	No.of ULBs	Quantity of waste processed (TPD)
Dry waste Recycling Centers (DWRC)	30	781
Composting	56	2737
Biomethanation	1	4
RDF	1	1897
Total		5419
Landfill	1	666
Grand Total		6085

- A total of 29,238 MT of dry recyclables have been recovered and recycled from April to November 2018 from the cities where the WOW Initiative is being implemented.
- GHMC capped 472469 sqmt of Legacy dumpsite at Jawaharnagar dumpsite. Landfill capping with methane extraction will lead to GHG emission reduction of about 1.2 lakhs metric tons per year.
- **The DPRs of 72 ULBs (CD only) were shared with the Regional Monitoring Committee.**
- Revision of the Byelaws for penalizing violators and user charge recovery
- Upgrading the existing SWM infrastructure

(167)

- State Action Plan on Solid Waste Management

Category	Present Status	Target	Timeline
Door to Door Collection	94%	100%	Oct-19
Source Segregation	48%	100%	Oct-19
Processing	65%	100%	2022
Scientific Landfill	Nil	Less than 10% of total waste	2022

2. Kerala – Kochi Municipal Corporation

- Area - 94.88 km²
- Population - 633553
- No. of Households - 1,50,758
- Existing facility/practice of sewage treatment and septage management
  - Existing Sewerage System - 5% of the area
  - Existing Plant Capacity - 4.5 mld under KWA
    - 900 kld under GCDA
  - As per socio economic survey, 85% house hold having proper septic tank.
  - Septage generated in Kochi Corporation is 379 KLD/m3 per day
  - 2 Septage treatment plants of 100KLD each is operational to treat the septage generated
  - Under Amrut Mission construction of a New 5MLD sewage treatment plant is tendered at Elamkulam. Project Cost- 13.7 Cr
- New Proposal Under AMRUT MISSION (Decentralized sewage system at Division 15,16 & 17)
  - Project Cost - 44.56 Cr
  - Total Capacity - 4.5 MLD
  - Benefitted Population - 27000
  - Total area covered - 3.75 sq.KM (4% of the total area)

164

3. Tamil Nadu – Overview of Commissionerate of Municipal Administration (11 Corporations and 124 Municipalities)

- Urban Population – 31.52 million
- % of Urban Population – 48.45%
- Waste generation (MTD) – 13894 TPD (GCC-5400 + all ULBs 8494)
- Door to door collection (%)
  - Corporations (11) – 92%
  - Municipalities (124) – 85%
  - For Effective Management of the D2D collection under introduced Battery operated vehicles (one per 400 HH) and Light commercial vehicles (One per 1200 HH) for carrying out Primary collection and the state is progressively Marching towards eliminating the push carts and tricycles.
  - Around 7987 no's of Bulk Waste Generators have been identified in all the ULBs and encouraged to set up onsite (Either individually or opting for common facility) composting facilities as envisaged in SWM Rule 2016
- Segregation at source (%)
  - Corporations (11) – 52%
  - Municipalities (124) – 62%
  - Proposed to achieve 100% segregation at source in 11 Corporations, 124 Municipalities before 31.03.2019
- Processing (MTD)
  - Decentralized MCCs approach with installed capacity of 3145 TPD – 1382 TPD Garbage Reduction carried out by implementation of MCCs
    - By establishing DMCC, Secondary transportation is eliminated in Tiruchirappalli, Vellore, Tirunelveli and Thoothukudi Corporations, Hosur, Avadi, Tiruvallur, Poonammallee, Thiruverkadu Municipalities.
    - On the same line of action is being taken to eliminate the secondary transportation in the remaining ULBs in the subsequent years.

(165)

- MCC Infrastructure Development works are in early pace completion to achieve 100% processing before October 2019.

❖ Proposed to construct 5 Mega Bio Gas Bottling projects in Coimbatore, Salem, Madurai, Trichy and Tambaram with combined capacity of 350 TPD.

❖ Windrow composting is being practiced in 3 Corporations and 56 Municipalities

❖ 36 nos. of Bio methanation plants are established to process 156 TPD

❖ 84 Nos. of Bio mining projects are takenup and works are in various stage

➢ Dry waste collection

❖ So far 1,32,363 MT of Plastic waste are sold and Rs.34.23 Crore was earned as revenue and the same was disbursed to the sanitary worker and women SHG workers as incentive.

❖ Other initiatives – Disposal of Non Saleable Waste through Pyrolysis

❖ 1188 TPD Non Recyclable Waste collected in Tamil Nadu

❖ So far 8320 Tonne disposed to the identified Cement industries

❖ 7 Cement Industries identified for disposal of waste

❖ Within 100 kms radius – Transport by Cement industries

❖ Morethan 100 kms radius – Transport by ULBs

❖ 63 ULBs entered in to MoU with cements Industries for disposal of waste

➢ Bio-mining Projects

❖ Sanctioned – 85 ULBs

❖ Completed – 2 ULBs (Kumbakonam & Sembakkam)

- Kumbakonam – Total garbage removed 2,00,000 m^3 and land reclaimed 12 acres
- Sembakkam – Total garbage removed 39,393 m^3 and land reclaimed 4.5 acres

❖ Ongoing projects in Corporations - 5

- Bio-Capping
  - In Madurai, Coimbatore and Tirunelveli Corporations Solid Waste is collected and packed in a closed condition and maintained in a scientific way known as Bio-capping.
- IEC
  - About 2846 no. of animators, 230 no. of supervisors and 11 no. of coordinators are being engaged in 664 ULBs in the creation of desirable behavioral changes regarding health, sanitation and solid waste management practices among the public. In particularly focusing on Door to Door propagation on the benefits of source segregation.

(iii) Justice Dr.P.Jyothimani, the Chairman, RMC referred to the teams visit to CREDAI Waste Management activities in the apartments of Kochi and lauded their efforts. Chief Operations Manager, CREDAI was asked to make a presentation.

- Selected 25 apartment complexes for the implementation of self contained waste management system in Kochi

1. CREDAI Eco Composter (Aerobic Microbial Composting)

Dimension	- 6 x 3 x 2.5 ft.
Capacity in Kg	- 40 kg/DAY
No. of Flats	- 40
Area Required	- 250 Sq ft.
No. of bins	- 2 bins
Power Requirement	- Nil
End product	- Compost
Advantage	- Manual system
Area of Installation	- Terrace Area

Conduct training programme for workers

Waste deposited in CREDAI Eco Composter

Applying Bio culture

Mixing compost to speed up process

Compost ready after 30 days

(167)

2. CREDAI Transhguard (Anaerobic Processing)

Capacity -25/35/50/65/80 and 110 kg/DAY

No. of Flats	- 25 to 110 Flats
Area Required	- 150 Sq. ft
Power Supply	- 3 phase
Power Rating	- 0.10 units/day
End product	- Biogas
Advantage	- Fully Automatic
Area of Installation	- Ground

- ❖ Treatment Efficiency 90% in terms of Solid reduction
- ❖ Waste can be directly dropped without any pre-processing
- ❖ Negligible Power Consumption (Less than 0.10 unit/day)
- ❖ Completely sealed and Environment Friendly
- ❖ Bio Gas obtained as fuel

- ➢ Yearly 16000 tones bio degradable waste processed to compost at source without usage of Govt. funds. The savings to Govt. @ 4000/ tone /day is Rs. 6.5 Crores in a year.
- ➢ 3200 tones of Compost generated / year from the processing of bio degradable waste at source.
- ➢ 780 Tonnes of Non degradable waste transferred to recycling units in year, thereby reducing landfill. (65 Tonnes x 12 months)
- ➢ The service is Available in 7 cities of Kerala, Trivandrum, Kottayam, Kochi, Thrissur, Palakkad , Calicut & Kannur

(iv) Following the presentation, the Chairman said the Apex Committee meeting of NGT held on 19th December 2018 reviewed the solid waste management activities in the country and gave directions to the states regarding door to door collection, segregation, transportation of waste, managing waste in public places, responsibility of bulk waste generations in the states have to abide by that directions.

The Chairman informed the members that the Ministry of Housing and Urban Affair, Government of India has published SWM manual and the states would have received it by then. All the states are supposed to rely on this document to have uniformity throughout the country.

168

The Chairman then referred to the teams visit to Brahmapuram, Kochi upon specific directions of NGT. He observed that he has noticed improvement over a period and directed that there is needs to do continuous monitoring and the officials have to give a report on this issue.

The chairman referred to the cleaning of Sembakkam Lake in Chennai that had remained polluted for a long time. The cleaning that has happened using biomining technology is something unprecedented. The members should visit such sites and they are entitled to undertake such visits.

The chairman informed the members of the Regional Monitoring Committee that this meeting will be the last meeting of RMC as the National Green Tribunal has decided to form State Level Monitoring Committees enabling quicker and more effective monitoring. The Honourable Judges have been appointed for each State to chair the committee.

The Chairman also mentioned that the incumbent Chairman of Kerala State Pollution Control Board is Shri.Ajith Haridas.

The meeting ended with a vote of thanks.

Sd/- Harmander Singh,
Member Secretary,
Regional Monitoring Committee
(Southern States) /
Principal Secretary,
Municipal Administration and Water
Supply Department,
Chennai.

Sd/- Justice Dr.P.Jyothimani,
Chairman
Regional Monitoring Committee
(Southern States),
Chennai.

// Forwarded by Order//

1.2.19
Superintendent

169

From

Justice Dr.P.Jyothimani,
Chairperson,
State Level Monitoring Committee
of NGT for Solid Waste
Management in Tamil Nadu,
183, EVR Periyar Road
Kilpauk, Chennai – 600 010.

To

1. Thiru.D.Sekar,
Member Secretary,
Tamil Nadu Pollution Control
Board, Chennai.
2. Thiru. Harmandar Singh, I.A.S.,
Municipal Administration and
Water Supply Department,
Chennai
3. Thiru. Shambhu Kallolikar, I.A.S.,
Principal Secretary,
Environment & Forest
Department, Chennai.
4. Thiru.Hans Raj Varma, I.A.S.,
Addition Chief Secretary,
Rural Development and
Panchayat, Chennai.
5. Dr.Radhakrishnan, I.A.S.,
Principal Secretary,
Health & Family Welfare
Department, Chennai.
6. Thiru.S.Suresh,
Regional Director
Central Pollution Control Board,
Bangalore.

Letter No. 1/SLC/2018 Dated : 29.01.2019

Sir,

Sub. : National Green Tribunal, New Delhi – Orders of National Green Tribunal dated 20.08.2018 – Constitution of Regional Monitoring Committee (Southern States) modified as State Level Monitoring Committee in Tamil Nadu - Tribunal dated 16.01.2019 – Nominating members and First Meeting intimation – Regarding.

Ref. : 1. Orders of the National Green Tribunal dated 20.08.2018 in OA.No.606/2018.
2. Orders of the National Green Tribunal dated 16.01.2019 in OA.No.606/2018

*****

In the reference 2nd cited, the National Green Tribunal, Principal Bench, New Delhi directed constitute to the State Level Monitoring Committee, to function in the modified form.

The State Level Monitoring Committee of NGT for Solid Waste Management in Tamil Nadu constituted comprising the following members.

1.	Chairperson	Justice Dr.P.Jyothimani, Former Judge, Madras High Court, Former Judicial Member, National Green Tribunal
2.	Member Secretary	The Member Secretary, Tamil Nadu Pollution Control Board
3.	Member	The Principal Secretary, Municipal Administration and Water Supply Department
4.	Member	The Additional Chief Secretary, Rural Development and Panchayat Raj Department
5.	Member	The Principal Secretary, Housing and Urban Development Department
6.	Member	The Principal Secretary Environment & Forest Department
7.	Member	The Principal Secretary, Health & Family Welfare Department
8.	Member	Representative of the Central Pollution Control Board

In this regard, the Chairman convenes the first meeting of the Committee on 12.02.2019 at 10.30 a.m. at Tamil Nadu Secretariat conference hall. Hence, all the Committee members are requested to participate without fail.

Chairman,
State Level Monitoring Committee

(171)

Letter No.4/SMC1/2018

State Monitoring Committee of NGT
for Solid Waste Management in Tamilnadu

183, Poonamallee High Road,
Kilpauk, Chennai - 600 010.
Ph. & Fax : 044-2645 3200
E-mail : rmcsouthswm@gmail.com

19th February 2019

Subject : Minutes of the 1st Meeting of the State Monitoring Committee held on 12.02.2019 at Chennai.

*****

The 1st meeting of the State Monitoring Committee was held under the Chairmanship of Hon'ble Justice Dr.P.Jyothimani, Chairperson, State Monitoring committee for Solid Waste Management in Tamilnadu on 20th February 2019 at Kochi.

The Minutes of the meeting enclosed for necessary action by all concerned.

Sd/- Justice Dr.P.Jyothimani,
Chairperson
State Monitoring Committee of NGT
for Solid Waste Management in TamilNadu

To

1. Thiru.D.Sekar, Member Secretary, Tamil Nadu Pollution Control Board, Chennai.
2. Shri.Harmandar Singh, I.A.S., The Principal Secretary, Municipal Administration and Water Supply Department, Government of Tamilnadu.
3. Thiru.Hans Raj Varma, I.A.S.,Addition Chief Secretary,Rural Development and Panchayat raj Department, Chennai.
4. Thiru.S.Krishnan, I.A.S., Principal Secretary, Housing and Urban Development Department, Chennai.
5. Tmt.Beela Rajesh, I.A.S., Principal Secretary, Health & Family Welfare Department, Chennai.
6. Thiru. Shambhu Kallolikar, I.A.S., Principal Secretary, Environment & Forest Department, Chennai.
7. Thiru.R.Rajkumar, Senior Environmental Engineer, Central Pollution Control Board, Bangalore.

171

Copy to :

1. The Commissioner,
   Commissionerate of Municipal Administration, Chennai – 600 005.
2. The Director,
   Directorate of Town Panchayats, Chennai – 600 108.
3. The Commissioner,
   Greater Chennai Corporation, Chennai – 600 003.

//Forwarded by order//

6/2/09

Superintendent

(172)

Minutes of the State Level Monitoring Committee meeting for the Solid Waste Management in Tamilnadu held on 12.02.2019 under the Chairmanship of Justice Dr. P. Jyothimani, at the Chennai

I) The Member Secretary, Tamil Nadu Pollution Control Board welcomed the Hon'ble Justice Dr. P. Jyothimani, Chairperson of the State Level Monitoring Committee of NGT for Solid Waste Management and other members who attended the meeting.

The list of participants attended the meeting is below.

1. Thiru.D.Sekar, Member Secretary, Tamil Nadu Pollution Control Board, Chennai.
2. Thiru.S.Krishnan, I.A.S., Principal Secretary, Housing and Urban Development Department, Chennai.
3. Thiru. Harmandar Singh, I.A.S., Principal Secretary, Municipal Administration and Water Supply Department, Chennai.
4. Dr.Radhakrishnan, I.A.S., Principal Secretary, Health & Family Welfare Department, Chennai.
5. Thiru. Shambhu Kallolikar, I.A.S., Principal Secretary, Environment & Forest Department, Chennai.
6. Thiru.R.Rajkumar, Senior Environmental Engineer, Central Pollution Control Board, Bangalore.
7. Thiru.Alby John Varghese, I.A.S., Commissioner, Thoothukudi Corporation
8. Thiru.K.Vijayakarthikeyan, I.A.S. Commissioner, Coimbatore Corporation
9. Dr.Aneesh Sekher, I.A.S., Commissioner, Madurai Corporation
10. Thiru.M.Seeni Ajmal Khan, Commissioner, Erode Corporation
11. Mrs.P.JanakiRaveendran, Regional Director of Municipal Administration, Madurai
12. Dr..M.Elangovan, Regional Director of Municipal Administration, Chengalpattu
13. Thiru.Kalimuthu, Regional Director of Municipal Administration, Thanjavur,
14. Tmt.Sulthana, Regional Director of Municipal Administration, Thiruppur,
15. Dr.C.Vijayakumar, Regional Director of Municipal Administration, Vellore
16. Thiru.N.Ravichandran, Commissioner, Trichy Corporation
17. Thiru.S.Sivasubramanian, Commissioner, Vellore Corporation
18. Thiru.K.Sivakumar, Commissioner, Tiruppur Corporation
19. Thiru.R.Sadheesh, Commissioner, Salem Corporation

II) The Principal Secretary, Municipal Administration & Water Supply Department presented keynote address and stated that as per the Hon'ble NGT orders major challenge ahead with respect to the compliance of

Solid Waste Management Rules, 2016, Plastic Waste Management Rules, 2016 and Construction & Demolition Waste Management Rules, 2016. He stated that all the solid, plastic waste along with sewage need to be properly collected and recycled. He stressed that NGT had earlier levied fines to the Corporations of Bangalore & Delhi and recently with the Gudalur Municipality. He addressed all the Commissioners to take effective role in implementation of the Rules and shall be responsible for any lapses.

III) **The Additional Chief Environmental Engineer, TNPCB** made a presentation on the regulatory compliance by the Local Bodies, Health Care Establishments and other concerned Agencies as per Solid Waste Management Rules, 2016, Plastic Waste Management Rules, 2016, Bio-medical Waste Management Rules, 2016 and Construction & Demolition Waste Management Rules, 2016.

IV) **The Chairperson of the State Level Monitoring Committee** requested all members of the Committee to share their views.

V) **The Principal Secretary, Health & Family Welfare Department** stated the followings:

- Biomedical waste generated from around 303 government hospitals, 4200 private hospitals, 1000 Primary Health Care Centres are being transported to the Common Biomedical Waste Treatment Facilities.
- All the government hospitals and private hospitals will comply with the Bio-medical Waste Management Rules, 2016.

VI) **The Principal Secretary, Environment & Forest Department** stated the following:

- TNPCB has taken necessary actions for the compliance of all Waste Management Rules, 2016 especially Plastic Waste Management Rules, 2016 & Bio-medical Waste Management Rules, 2016.
- The applications received for grant of authorisation are being handled in time bound manner.
- Tamilnadu State is emerging a model state with respect to handling of waste management and requested all the local bodies for proper collection, segregation and disposal of solid and plastic wastes.

VII) **The Commissioner, Greater Chennai Corporation** shared the following views:

- The source segregation and door to door collection is the key for effective implementation and GCC will strive hard to meet the expectations of the State Level Monitoring Committee.
- GCC has taken steps in 8 zones out of 15 zones, service based delivery payment is in practice and not based on the tons of solid waste collected.

VIII) The Principal Secretary, Municipal Administration & Water Supply Department shared the following:

- All local bodies shall ensure that no drain consist of plastic waste, sullage, etc.
  And also close illegal connections to channels and ensure it.
- Also, Chicken and Mutton stalls shall be regulated such that blood and other waste shall not be mixed with the drains. The Sanitary Inspector of the respective urban local body shall be sensitized so as to take necessary action.
- Micro composting / home composting shall be promoted.
- The seized plastics in view of government ban, may be sent to pyrolysis plant for producing diesel and in this regard necessary assistance may be sought from the Greater Chennai Corporation.
- Plastic Ban to be empowered strictly by ULB. Burning of garbage's must not be taken. Putting mechanism to prompt entry for sewages.
- All ULBs implement the SWM work to aim in the achieve the model City.

IX) The Chairman of the State Level Monitoring Committee stated the following:

- This committee was formed and after re-modified to effective implementation of SWM Rules, Bio medical management Rules and Construction and Demolition Rules in the State Level. It was insisted that Bulk Waste Generators like Hotels, Hospitals, Colleges, Universities, Railways must be made to follow the Rules and the Solid Waste should never be mixed with Bio-Medical Waste.
- All the government hospitals and private hospitals have to comply with the Bio-medical Waste Management Rules, 2016. As per order, first meeting of SMC to take before 15.02.2019. As per the direction of the

Hon'ble NGT, the discussion of Solid Waste Management Rules 2016 and its implementation were effectively carried on.

- At SMC it was suggested that our members should follow Kochi, CREDAI model of waste Management, in the multi-storeyed buildings. Greater Chennai Corporation must carry out 100 % door to door collection and segregation. When Trichy Corporation and certain Municipalities like Anakaputhur and Pammal are carrying are the Waste process it must be followed by Greater Chennai Corporation.
- NGTs latest order makes very clear that the Pollution Control Board must watch the implementation as per the legal mandate. The issue relating to Water Pollution in Southern States as well as Northern states of india are pending many years and it was said that inspite of huge amount spent nothing fruitful has happened. In the light of the said position the Monitoring Committees responsibilities are heavy and Chairperson has insisted all members as well as the Commissioners of Corporation present to take serious note of this issue.
- The Chairperson has explained the historical event as to how Solid Waste Management has not been implemented as per rules. Inspite of the rules of 2011 follow by rules of 2016 nothing happened. It was in Almitra Patel case, the NGT Delhi has given various directions by extending the time for the implementation and inspite of the same no progress was made. The NGT has constituted the Regional Level Monitoring Committee which was subsequently made as State Level Committee for effective implementation and Monitoring in the order date 19.01.2019. Therefore as the Committee to implement in the Tamil Nadu State all the stakeholders shall extend utmost co-operation and series of programmes and visits will be made to achieve 100 % source segregation and removal of legacy waste.
- As per SWM Rules, 2016, the bulk waste generators such as high rise buildings, hospitals, universities, colleges, Railways must be sensitised are instructed to treat their solid wastes in their premises. In this regard, CREDAI shall be entrusted to provide treatment systems for handling solid waste in buildings as being followed in Cochin, Delhi, Punjab, etc. In Salem Corporation, good door to door collection of solid waste is

carried out which need to be followed by all Corporations and Municipalities.

- Solid waste management is the prime responsibility of the urban local bodies and they should follow bio-mining process apart from composting process of Bio-degradable Waste in decentralized form.
- The NGT has viewed that inspite of formation of Regional Level Monitoring Committee there is no expected progress and hence NGT has directed formation of Monitoring Committee in each States. Based on the order, a fully fledged Committee has been formed in order to implement Solid Waste Management Rules, 2016 in the States including TamilNadu.

In view of the above, the following decisions were arrived:

1. The aim of the State Level Monitoring Committee is to show continuing progressive results of compliance Waste Management Rules, 2016 and as per directions of the Hon'ble NGT, every Corporations and Municipalities must show periodical progress in respect of Door to Door Collection 100 % segregation etc.,
2. Policy Note and Action plans, ULB wise need to be submitted by each of the local bodies and the following timeline for the implementation of solid waste management to be followed:

i.	Notification of ULB wise Policy and Action plan by all local bodies	-	15.03.2019
ii.	100% door to door collection	-	30.04.2019
iii.	100% Source Segregation	-	31.05.2019
iv.	100% Processing of solid waste	-	30.06.2019

3. All local bodies shall conduct sensitization programme involving students, traders and public covering all the ambit of the Waste Management Rules, 2016 Plastic Waste Management Rule 2016, E-Waste Management Rule 2016 and Bio Medical Waste Management Rules 2016.
4. All the local bodies shall apply for Authorisation under Solid Waste Management Rules, 2016 before 15.04.2019 and TNPCB, as a statutory body and Regulative shall grant authorisation based on merit within the prescribed time limit.
5. Action shall be taken against all the manufacturers, traders, retailers, shop owners as per PWM Rules, 2016 & as per Government notification.

(177)

6. All brand owners of multilayered plastics along with endorsement of EPR policy by local body shall obtain Registration from Tamil Nadu Pollution Control Board immediately and report to the Committee.
7. All Primary Health Care Centres and Hospitals shall apply for Authorisation under Bio-medical Waste Management Rules, 2016 before 30.04.2019. The TNPCB shall provide the list of Hospitals who are authorised with Bio-Medical Waste Management rules.
8. All health care establishments shall ensure that Bio-Medical Waste is not mixed with other solid wastes.
9. All local bodies shall furnish details on solid waste management in the format prescribed by committee copy of which have been communication and enclosed herewith.

The following nodal officers are nominated for State Level Monitoring Committee.

1.	Municipal Administration And Water Supply Department	Commissioner, Municipal Administration
2.	Environment & Forest Department	The Additional Chief Environmental Engineer, TNPCB
3.	Health Department	Director of Medical Education
4.	Rural Development and Panchayat Raj Department	Director of Rural Development and Panchayat Raj
5.	Housing and Urban Development	Deputy Secretary
6.	Animal Husbandry	Director of Animal Husbandry & Veterinary Department

It was decided to have another meeting if member to finalise programmes of the Committee.

The Meeting ended with a vote of Thanks.

19.2.2019

Justice Dr.P.Jyothimani,
Chairman
State Monitoring Committee of NGT
for Solid Waste Management in
TamilNadu

178

Minutes of the State Level Monitoring Committeemeeting for the Solid Waste Management in Tamil Nadu held on 29.03.2019 under the Chairmanship of Justice Dr. P. Jyothimani, at Chennai

I) **The Principal Secretary, MAWS Department** welcomed the Hon'ble Justice Dr.P.Jyothimani, Chairperson of the State Level Monitoring Committee of NGT for Solid Waste Management, Respected Chief Secretary and other members who attended the meeting.

The list of participants attended the meeting is below.

1. Thiru.S.Krishnan, I.A.S., Principal Secretary to Government, Housing and Urban Development Department, Chennai.
2. Thiru. Harmandar Singh, I.A.S., Principal Secretary to Government, Municipal Administration and Water Supply Department, Chennai.
3. Thiru.ShambhuKallolikar, I.A.S., Principal Secretary to Government, Environment & Forest Department, Chennai.
4. Dr.Beela Rajesh, I.A.S, Principal Secretary to Government Health and Family Welfare Department, Chennai.
5. Thiru.Karthikeyan, I.A.S., Commissioner of Municipal Administration, Department, Chennai.
6. Thiru.Madusudhan Reddy, I.A.S., Deputy Commissioner (Health), Greater Chennai Corporation.
7. Thiru.D.Sekar, Member Secretary, Tamil Nadu Pollution Control Board Chennai
8. Dr.PinkyJovel, Special Secretary to Government, Rural Development & Panchayat Raj. Chennai.
9. Thiru.P.Manimaran, Deputy Secretary to Government, AHO & F Department, Secretariat.
10. Thiru.N.Mahesan, Chief Engineer, Greater Chennai Corporation,
11. Thiru.N.Natarajan, CE. Commisisonerate of Municipal Administration, Chennai.
12. Thiru.A.Krishnamoorthy, JCEE, Tamil Nadu Pollution Control Board, Chennai.
13. Thiru. G.Rajendran, SE. Directorate of Town Panchayat, Chennai
14. Dr.A.SamuelRajkumar, Executive Engineer, Corporate Office, Chennai.
15. Thiru.MalayamanThirumudikari, Joint Director, DTP, Chennai.

179

II) **The Principal Secretary, Municipal Administration & Water Supply** Department has explained the purpose behind the constitution of State Monitoring Committee by the Hon'ble Green Tribunal. The Member Secretary narrated about outlines on the policies and strategies which SLMC is following. Further he stated that as per the SWM Rules, NGT directions 100 % Door to Door Collection, Source Segregation and processing of the waste are to be achieved by ULBs. Further processing facilitation having capacity of processing garbage of 5 ton or more per day will have to obtain and TNPCB concurrence by 15.04.2019 and also submit their plan of action. He stated that all the solid, plastic waste along with sewage need to be properly collected and recycled and disposed. All brand owners of multilayered plastics along with endorsement of EPR policy by local bodies shall obtain registration from TNPCB. He assured that suitable steps be taken to remove the legacy waste dumped through bio-mining process. He insisted that the SWM rules have mandated the source segregation of waste in order to channelise the waste to wealth by recovery, reuse and recycle. Waste generators would now have to segregate waste into three streams- Biodegradables, Dry (Plastic, Paper, metal, Wood, etc.) and Domestic Hazardous waste (diapers, napkins, mosquito repellents, cleaning agents etc.) before handing it over to the collector. Hence citizen's participation in all the aspects for creating sustainable system is required. Further, he has also explained how Micro composting / Home composting are promoted and all steps are taken to reduce the generation of garbage. The seized plastics in view of government ban, are being sent to pyrolysis plant for producing diesel and in this regard necessary assistance may be sought from the Greater Chennai Corporation. Plastic Ban to be enforced strictly by ULBs. Burning of garbages must not be allowed at any cost. Proper mechanism to prompt entry for sewages and being modulated .

A request was made by the Committee that all ULBs should continuous fby sending particular regarding periodical progress made in the proper format given by SMC and the same should be continued.

The Meeting ended with a vote of Thanks by CMA

15/4/19

Harmander Singh
Member – Secretary
Principal Secretary
Municipal Administration and Water
Supply Department,
Government of Tamil Nadu,
Chennai-9

Justice Dr.P.Jyothimani,
Chairperson
State Monitoring Committee of NGT
for Solid Waste Management in
TamilNadu

(181)

Annexure No.

River Restoration Committee

Formulation of Committee vide G.O (D) No.372 Dated : 26.12.18

Minutes of Meeting River Rejuvenation Committee held of 15.03.19

182

Action Taken Report for Solid and Liquid Waste Management on Polluted River Stretches

I.Name of the River: Bhavani

Name of the stretch: Sirumugai to Kalingarayan

- ✓ Name of the ULB : Gobichettipalayam
- ✓ Population:63633
- ✓ MSW Generation:20TPD
- ✓ Households:18135
- ✓ Wet Waste:11TPD
- ✓ Dry Waste : 9 TPD
- ✓ Door to Door Collection:100%
- ✓ Segregation: 83%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 4.90MLD

Wet Waste of 11 TPD is processed as below:

- ✓ Micro Composting Plant (under SBM Fund) – 2 Nos. of 7 TPD (Will be put to use in May 2019)
- ✓ Bio Methanation Plant – 1 TPD (Completed and put to Use)- Gas Used for Internal Lighting
- ✓ On – Site Composting – 7 locations – 1 TPD (Completed and put to Use)
- ✓ Windrow Composting – 2 TPD – Functioning

Dry waste – 9 TPD

- ✓ Saleable waste (Plastic, metal, Rubber etc.,@ 5.0 TPD sold out to the identified vendors & registers are being maintained.
- ✓ The Non Biodegradable waste of 3TPD is stored in the RRC at Puduswamy koil street and periodically disposed to M/s Ultratech cements &Perundalaiyar Sugar factory
- ✓ Inert & Silt-1.0 TPD – Stored along with C&D waste. Used for Filling Low Lying Areas

183

Liquid Waste Management

- Gobichettipalayam Municipality generates 4.90MLD of wastewater daily
- The blackwater is collected in septic tanks by individual households
- In order to treat the black water, it is proposed to establish 20KLD FSTP at an estimated cost of Rs.2.50crore with the financial assistance of ensuing 2019-20 IUDM funding. Expected to be completed by December 2019.
- Sullage water generated from the town is discharged to Keeri palam odai which belongs to PWD. To handle this sullage water, PWD has proposed to rejunuvate the odai at an estimated cost of Rs.55.20crore and to construct a STP of 5MLD capacity along the thadapalli canal at an estimated cost of Rs.12.41 crore with the financial assistance from NABARD and the work is expected to complete by December 2020.
- After the completion of this scheme work, Outfalls in the River Bhavani will be stopped permanently and only treated water will be discharged.

Name of the ULB: Mettupalayam

- ✓ Population:80217
- ✓ MSW Generation:24TPD
- ✓ Households:17076
- ✓ Wet Waste:12TPD
- ✓ Dry Waste: 12 TPD
- ✓ Door to Door Collection: 95%
- ✓ Segregation: 70%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 7.08MLD

Wet Waste of 12 TPD is processed as below:

- ✓ Micro Composting Plant – 2 Nos. of 8 TPD (Will be put to use in May 2019-SBM Funds)
- ✓ Bio-Methanation Plant – 1 no. of 3 TPD (Completed and put to Use)- Gas Used for Internal Lighting
- ✓ On – Site Composting – 3 locations – 1.0 TPD (Functioning)

184

Dry Waste – 12 TPD

- ✓ Saleable waste (plastic, metal, rubber etc., 7.0 TPD sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 4.0TPD is stored in the RRC at Old Municipal office and periodically disposed to M/s ACC, Cements.
- ✓ Inerts & Silt -1 TPD Stored along with C&D waste. Used in Filling Low Lying Areas

Liquid Waste Management

- Mettupalayam Municipality generates **7.08MLD** of wastewater daily.
- To treat the waste water, **Under Ground Sewerage scheme work** was taken up and is under implementation at an estimated cost of Rs.91.70crore with a **STP** capacity of 8.65MLD and it will be completed by **June 2020,** after completion of scheme only the treated sewage will be discharged.
- 17000 number of house service connections will be effected parallely during the project itself and it will be completed by June2020.
- After the completion of this scheme work, Outfalls in the River Bhavani will be stopped permanently and only treated water will be discharged.

Name of the ULB : Sathiyamangalam

- ✓ Population:38194
- ✓ MSW Generation:12TPD
- ✓ Households:11408
- ✓ Wet Waste :7 TPD
- ✓ Dry Waste : 5 TPD
- ✓ Door to Door Collection: 92%
- ✓ Segregation 86%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 2.90MLD

Wet Waste of 7 TPD are processed as below:

- ✓ Micro Composting Plant – 2 Nos. of 6 TPD (Will be put to use in May 2019- SBM Funds)
- ✓ On – Site Composting – 1 location – 0.5 TPD (Completed and put to Use)

- ✓ Windrow Composting – 1 TPD (Functioning)

Dry waste – 5 TPD

- ✓ Saleable waste (Plastic, metal & Rubber) 3TPD sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 1.50 TPD is stored in the RRC at the compost yard (Athaani road) and periodically disposed to M/s Ultratech cements, Ariyalur
- ✓ Inert &Silt -0.5TPD Stored along with C&D waste. Used for Filling Low Lying Areas

Liquid Waste Management

- Sathiyamangalam Municipality generates 2.90MLD of wastewater daily.
- To treat the waste water, **Under Ground Sewerage scheme work** was taken up and is under implementation at an estimated cost of Rs.54.26 crore with 2 no. of STPs of 5.38MLD capacity and it will be completed by **December 2019**, after completion of scheme work the sewage will be discharged into STP.
- 7200 number of house service connections will be effected parallely during the project itself and it will be completed on December 2019.
- After the completion of this scheme work, Outfalls in the River Bhavani will be stopped permanently.

Name of the ULB : Erode Corporation

- ✓ Population:547933
- ✓ MSW Generation:170TPD
- ✓ Households:140365
- ✓ Wet Waste:85TPD
- ✓ Dry Waste : 85 TPD
- ✓ Door to Door Collection: 87%
- ✓ Segregation: 49%
- ✓ 100% Door to Door collection & segregation will be achieved before 30.06.19
- ✓ Liquid waste Generation : 44.59MLD

Wet Waste of 85 TPD are processed as below:

- ✓ Micro Composting Plant – 19 Nos. of 50 TPD (Will be completed before Aug 2019 and 5 Nos of 20 TPD will be completed by Oct 2019)
- ✓ On – Site Composting – 25 locations – 5 TPD (Completed and put to use)
- ✓ Bio Methanation– 1 nos. of 10 TPD (functioning)

Dry waste – 85TPD

- ✓ Saleable waste (Plastic, Metal & Rubber) of 35 TPD sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 20 TPD is stored in the earmarked location at Vendipalayam
- ✓ It is proposed to supply 30 TPD of dry waste to Incinerator for Combustible. All ready Available Incinerator - 1nos 5 TPD
- ✓ Inert & Silt - 20 TPD Stored along with C&D waste. Used in Filling Low Lying Areas
- ✓ Bio-mining of Vairapalayam Dump yard on the banks of River Cauvery-work will be commenced in May 2019 & completed in March 2020- Funding under SMART CITY

Liquid Waste Management

- Erode Corporation generates **44.59MLD** of wastewater daily.
- To treat the waste water, the implementation of **Under Ground Sewerage scheme work** was taken up and is under implementation at an estimated cost of Rs.209.22 crore with a STP capacity of **50.55 MLD** and it will be completed by **December 2019.**
- As on date, out of 72500 connections, 7274 number of house service connections were effected and the remaining connections will be effected before December 2019.
- After the completion of this scheme work, Outfalls in the River Bhavani will be stopped permanently.
-

187

II. Name of the River: Cauvery

Name of the stretch: Mettur to Mayiladuthurai

Name of the ULB : Mettur

- ✓ Population:55200
- ✓ MSW Generation 15TPD
- ✓ Households:12501
- ✓ Wet Waste:9TPD
- ✓ Dry Waste : 6 TPD
- ✓ Door to Door Collection: 87%
- ✓ Segregation: 52%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 5.96MLD

Wet Waste of 9 TPD are processed as below:

- ✓ Micro Composting Plant – 3Nos. of 9TPD (Will be completed before June 2019)
- ✓ On – Site Composting – 3 locations – 0.5 TPD (Completed and put to use)
- ✓ Bio Methanation– 1 no. of 5TPD (Completed and put to Use)- Gas Used for Internal Lighting in compost yard

Dry waste – 6 TPD

- ✓ Saleable waste of 4 TPD sold out to the identified vendors & registers are being maintained
- ✓ The Non saleable Non Biodegradable waste of 1.50 TPD is stored in the RRC at KombaranKaadu
- ✓ Inert &Silt -0.50TPD Stored along with C&D waste. Used for Filling Low Lying Areas

Liquid Waste Management

- Mettur Municipality generates **5.96 MLD** of wastewater daily.
- To treat the waste water, **Under Ground Sewerage scheme work** is completed at an estimated cost of Rs. 73.09 crore with 3 number of STPs of total capacity **7.20 MLD** and **is functioning.**
- As on date, out of **15000 connections**, 7274 number of houses service connections were effected and the remaining connections will be effected before August 2019.

- After the completion of this scheme work, Outfalls in the River Cauvery will be stopped permanently.

Name of the ULB : Komarapalyam

- ✓ Population:76120
- ✓ MSW Generation:22 TPD
- ✓ Households:22053
- ✓ Wet Waste:14TPD
- ✓ Dry Waste : 8 TPD
- ✓ Door to Door Collection: 100%
- ✓ Segregation: 100%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 5.60 MLD

Wet Waste of 14TPD are processed as below:

- ✓ Micro Composting Plant – 2 Nos. of 6 TPD (Completed and put to use)
- ✓ On - Site Composting – 3 locations – 0.5 TPD (Completed and put to use)
- ✓ Barrel Composting– 1800 nos. of 9 TPD - Functioning

Dry waste – 8 TPD

- ✓ Saleable waste of 4.50 TPD sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable, Non Biodegradable waste of 3.5 TPD is stored in the RRC at C.N Palayam Weekly Market and periodically disposed to Ponni Sugar mills
- ✓ Inert & Silt -0.50TPD Stored along with C&D waste. Used for Filling Low Lying Areas

Liquid Waste Management

- Komarapalayam Municipality generates **5.60MLD** of wastewater daily.
- The blackwater is collected in septic tanks by individual households.
- In order to treat the black water, it is proposed to establish **20KLD FSTP** at an estimated cost of Rs.2.50crore with the financial assistance of ensuing 2019-20 IUDM funding and is expected to completed before December 2019.
- To handle the **sullage water** discharged through 7 nos. of major channels which confluence with the river stretch, it is proposed to provide **in-situ treatment**

methodology by providing Screen, Grit followed by Horizontal planted gravel filter.

- The ULB has prepared detailed estimate for establishing liquid waste treatment facility at a cost of **Rs.1054.00 lakh**. This fund is proposed to be tied up with Infrastructure gap filling fund 2019-20 and is expected to be completed by **October 2019**.

Name of the ULB : Pallipalayam

- ✓ Population:44120
- ✓ MSW Generation:12 TPD
- ✓ Households:12471
- ✓ Wet Waste: 7TPD
- ✓ Dry Waste : 5 TPD
- ✓ Door to Door Collection: 100%
- ✓ Segregation: 100%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 2.95 MLD

Wet Waste of 7 TPD is processed as below:

- ✓ Micro Composting Plant – 1 Nos. of 2 TPD (Will be completed before June 2019-SBM funds)
- ✓ Bio-Methanation– 1 no. of 5TPD (Completed and functioning). Gas used for street lighting

Dry waste – 5 TPD

- ✓ Saleable waste of 3TPD sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 1.40 TPD is stored in the RRC at Avathipalayam
- ✓ Inert & Silt -0.60TPD Stored along with C&D waste. Used for Filling Low Lying Areas

Liquid Waste Management

- Pallipalayam Municipality generates 2.95MLD of wastewater daily.
- The **blackwater** is collected in septic tanks by individual households.

- In order to treat the black water, it is proposed to **cluster with Erode STP** and co-treated.
- To handle the **sullage water** discharged through **7 nos. of major channel** which confluence with the river stretch, it is proposed to provide **in-situ treatment** methodology by providing Screen, Grit followed by Horizontal planted gravel filter.
- The ULB has prepared detailed estimate for establishing liquid waste treatment facility at a cost of **Rs.413.00lakh.** The fund is proposed to be tied up with **Infrastructure gap filling fund 2019-20** and is expected to be completed by **October 2019.**

Name of the ULB : Kulithalai

- ✓ Population:29580
- ✓ MSW Generation:7 TPD
- ✓ Households:8412
- ✓ Wet Waste: 4TPD
- ✓ Dry Waste : 3 TPD
- ✓ Door to Door Collection: 100%
- ✓ Segregation: 100%
- ✓ Liquid waste Generation : 2.06 MLD

Wet Waste of 4 TPD are processed as below:

- ✓ Micro Composting Plant – 2 Nos. of 4 TPD (Will be completed before April 2019-SBM Funds)
- ✓ Vermi composting – 1 nos. of 4TPD (Completed and functioning)
- ✓ On – Site Composting – 5 nos. of 1.0 TPD (Completed and functioning)

Dry waste – 3TPD

- ✓ Saleable waste of 1.5TPD sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 1 TPD is stored in the RRC at Thanneerpalli

(191)

- ✓ Inert & Silt -0.5TPD Stored along with C&D waste. Used for Filling Low Lying Areas

Liquid Waste Management

- Kulithalai Municipality generates **2.06MLD** of wastewater daily
- The **blackwater** is collected in septic tanks by individual households.
- In order to treat the black water, construction of **20kld Focal Sludge Treatment Plant** work is taken up and is in progress at an estimated cost of Rs.2.85Crore and it will be completed before **31.12.2019** under IUDM 2018-19 fund.
- To handle the **sullage water** discharged through **3 no. of major channels** which confluence with the river stretch, it is proposed to provide **in-situ treatment** methodology by providing Screen, Grit followed by Horizontal planted gravel filter which will treat the sullage and discharge the treated water into the water course.
- The ULB has prepared detailed estimate for establishing liquid waste treatment facility at a cost of **Rs.13.00 lakh**. This fund is proposed to be tied up with **Capital Grant fund 2019-20** and is expected to be completed by **October 2019.**

Name of the ULB : Bhavani

- ✓ Population:40270
- ✓ MSW Generation: 15 TPD
- ✓ Households:10949
- ✓ Wet Waste: 9 TPD
- ✓ Dry Waste : 6 TPD
- ✓ Door to Door Collection: 95%
- ✓ Segregation: 80%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 3.36 MLD

Wet Waste of 9 TPD are processed as below:

- ✓ Micro Composting Plant – 2 Nos. of 10 TPD (Completed and functioning)

Dry waste – 6 TPD

- ✓ Saleable waste of 3.5TPD sold out to the identified vendors & registers are being maintained.

- ✓ The Non saleable Non Biodegradable waste of 1.50TPD is stored in the RRC at Varnapuram & Periodically disposed to Ultra Tech cement
- ✓ Inert & Silt- 1TPD Stored along with C&D waste. Used for Filling Low Lying Areas

Liquid Waste Management

- Bhavani Municipality generates **3.36MLD** of wastewater daily.
- The **blackwater** is collected in septic tanks by individual households.
- In order to treat the black water, it is proposed to **cluster with Erode STP** and co-treated.
- To handle the sullage water discharged through **6 nos. of major channels** which confluence with the river stretch, it is proposed to provide **in-situ treatment** methodology by providing Screen, Grit followed by Horizontal planted gravel filter.
- The ULB has prepared detailed estimate for establishing liquid waste treatment facility at a cost of **Rs.37.00lakh**. This fund is proposed to be tied up with **Infrastructure gap filling fund 2019-20** and is excepted to completed by **October 2019.**

Name of the ULB : Kumbakonam

- ✓ Population:142143
- ✓ MSW Generation: 70 TPD
- ✓ Households:36105
- ✓ Wet Waste: 41 TPD
- ✓ Dry Waste : 29 TPD
- ✓ Door to Door Collection: 95%
- ✓ Segregation: 80%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 12.80 MLD

Wet Waste of 41 TPD is processed as below:

- ✓ Micro Composting Plant – 5 Nos. of 20 TPD (Will be completed before April 2019-SBM Funds)
- ✓ On – Site Composting – 41 nos. of 17 TPD (Will be completed before April 2019)

(191)

- ✓ Bio Methanation Plant -1No of 5TPD – Functioning

Dry waste – 29 TPD

- ✓ Saleable waste of 17TPD sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 9 TPD is stored in the RRC at Karikulam and periodically disposed to M/s Ultra tech Cement.
- ✓ Inert & Silt-3TPD Stored along with C&D waste. Used for Filling Low Lying Areas
- ✓ **Biomining** – Completed - Total garbage removed 2,00,000 Cum and Land reclaimed 12 Acres at Karikulam

Liquid Waste Management

- Kumbakonam Municipality generates **12.80 MLD** of wastewater daily.
- To treat the waste water, **Under Ground Sewerage scheme work is completed** in 45 wards with 1 no. of **17.00 MLD** capacity **STP** and the treated sewage water is let out as per GOI norms.
- To cover the **leftout portions** of all **45 wards**, under **AMRUT scheme** Under Ground Sewerage scheme work is in progress with rehabilitation of STP is also under progress and it will be completed before **June 2020**.

Name of the ULB : Mayiladuthurai

- ✓ Population: 90112
- ✓ MSW Generation: 32 TPD
- ✓ Households:21867
- ✓ Wet Waste: 18 TPD
- ✓ Dry Waste : 14 TPD
- ✓ Door to Door Collection: 100%
- ✓ Segregation: 60%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 5.58 MLD

194

Wet Waste of 18 TPD is processed as below:

- ✓ Micro Composting Plant – 3 Nos. of 15 TPD (Will be completed before April 2019-SBM Funds)
- ✓ On – Site Composting – 8 nos. of 4.5 TPD (Will be completed before April 2019-ULB General funds)

Dry waste – 14 TPD

- ✓ Saleable waste of 7TPD sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 4.0 TPD is stored in the RRC at Ananthadhandavapuram Road & periodically disposed to Ultra tech Cement
- ✓ Inert & Silt-3 TPD Stored along with C&D waste. Used for Filling Low Lying Areas

Liquid Waste Management

- ➢ Mayiladuthurai Municipality generates **5.58 MLD** of wastewater daily.
- ➢ To treat the waste water, **Under Ground Sewerage scheme work** is completed **fully in 22 wards** and **partially in 7 wards** with 1 no. of **5.80 MLD** capacity **STP** and treated sewage water let out as per GOI norms.
- ➢ To cover the **remaining 14 wards** (7 wards fully & 7 wards partially) the process of preparing Detailed project report is under progress.
- ➢ Once the DPR is ready by September 2019, after the fund tie-up under appropriate schemes, implementation will commence and expected to be **completed by May 2022.**

Name of the ULB : Trichy Corporation

- ✓ Population: 1054859
- ✓ MSW Generation: 390TPD
- ✓ Households: 235576
- ✓ Wet Waste: 222TPD
- ✓ Dry Waste : 168TPD
- ✓ Door to Door Collection:100%
- ✓ Segregation: 92%
- ✓ 100% will be achieved before 31.05.19
- ✓ Liquid waste Generation : 105.24 MLD

Wet Waste of 222TPD is processed as below:

- ✓ Micro Composting Plant – 34 Nos. of 168TPD (29 MCCs put to use and 5 MCCs will be completed before April 2019-SBM funds)
- ✓ Bio Methanation Plant – 2Nos. Of 7 TPD - Functioning Gas used in Community kitchen & Crematorium
- ✓ On – Site Composting – 28 Nos of 10 TPD (Completed and put to use)
- ✓ Windrow Composting – 50 TPD - Functioning

Dry waste – 168 TPD

- ✓ Other saleable waste (Plastic, Rubber, Metal etc.,) of 101 Tonne sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable, Non Biodegradable waste of 50 TPD is stored in the RRC at all MCCs in 31Locations & Periodically disposed to Ultra Tech Ariyalur
- ✓ Inert and Silt 17 TPD Stored along with C&D waste. Used for Filling Low Lying Areas
- ✓ Bio mining of Ariyamangalam Dump yard –SMART City funds-will be completed in June 2021

Liquid Waste Management

- ✓ Trichy Corporation generates **105.24 MLD** of wastewater daily.
- ✓ To treat the waste water, **Under Ground Sewerage scheme work** is completed **fully in 24 wards** and **partially in 25 wards** with an **STP** capacity of 58MLD and treated sewage water let out as per GOI norms.
- ✓ To cover the remaining **41 wards** (16 wards fully & 25 wards partially) under **AMRUT** scheme **Under Ground Sewerage scheme work** in **2 phases** were taken up for implementation. Of which one phase will have a **37MLD capacity STP** and it is expected to be completed by June 2021 and **Phase-II** will be completed by **June 2022.**

III.Name of the River: Sarabanga

Name of the stretch: Thathayampatti to T.Konagapadi

Name of The ULB :Idappadi

- ✓ Population: 56193

196

- ✓ MSW Generation: 16TPD
- ✓ Households: 14615
- ✓ Wet Waste: 9 TPD
- ✓ Dry Waste : 7 TPD
- ✓ Door to Door Collection:100%
- ✓ Segregation: 86%
- ✓ 100% will be achieved before 31.05.19
- ✓ Liquid waste Generation : 4MLD

Wet Waste of 9TPD is processed as below:

1. Micro Composting Plant – 5 Nos. of 15 TPD (Completed and put in use)
2. On – Site Composting – 2 locations – 0.5 TPD (Completed and put in use)

Dry waste – 6 TPD

- ✓ Other saleable waste (Plastic, Rubber, Metal etc.,) of 4 Tonne sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 2.3 TPD is stored in the RRC at all MCCs
- ✓ Inert & Silt – 0.7 TPD Stored along with C&D waste. Used in Filling Low Lying Areas

Liquid Waste Management

- Idappadi Municipality generates **5.20 MLD** of wastewater daily.
- The **blackwater** is collected in septic tanks by individual households.
- In order to treat the black water, construction of **30kld Fecal Sludge Treatment Plant** work is taken up and is in progress at an estimated cost of Rs.4.0 Crore and it will be completed before **31.12.2019** under **IUDM 2018-19** fund
- To handle the **sullage water** discharged through 22 nos. of major channel which confluence with the river stretch. It is proposed to provide in-situ treatment methodology by providing Screen, Grit followed by Horizontal planted gravel filter which will treat the sullage and discharge the treated water into the water course.
- The ULB has prepared detailed estimate for establishing liquid waste treatment facility at a cost of **Rs.250.00 lakh**. This fund is proposed to be tied up with **Capital Grant Fund 2019-20** and is expected to be completed by **December** 2019.

(197)

IV. Name of the River : Tamirabarani

Name of the stretch: Pappankuppam to Arumuganeri

Name of the ULB : Ambasamudram

- ✓ Population: 38850
- ✓ MSW Generation: 15TPD
- ✓ Households: 15176
- ✓ Wet Waste: 9 TPD
- ✓ Dry Waste : 6 TPD
- ✓ Door to Door Collection 100%
- ✓ Segregation: 80%
- ✓ 100% will be achieved before 31.05.19
- ✓ Liquid waste Generation : 2.98MLD

Wet Waste of 9TPD is processed as below:

3. Micro Composting Plant – 3 Nos. of 9 TPD (Will be completed before April 2019)
4. On – Site Composting – 5 locations – 1 TPD (Completed and put in use)

Dry waste – 6 TPD

- ✓ Other saleable waste (Plastic, Rubber, Metal etc.,) of 3.6 Tonne sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 1.8 TPD is stored in the RRC at vagaikulam & Periodically disposed to Ultra tech cement, Ariyalur

Inert & Silt – 0.6 TPD Stored along with C&D waste. Used in Filling Low Lying Areas

Liquid Waste Management

- ➢ Ambasamudram Municipality generates **2.98 MLD** of wastewater daily.
- ➢ The **blackwater** is collected in septic tanks by individual households.
- ➢ In order to treat the black water, construction of **30kld Fecal Sludge Treatment Plant** work is taken up and is in progress at an estimated cost of Rs.3.15Crore and it will be completed before **31.12.2019** under **IUDM 2018-19** fund
- ➢ To handle the **sullage water** discharged through 7 nos. of major channel which confluence with the river stretch. It is proposed to provide in-situ treatment methodology by providing Screen, Grit followed by Horizontal planted gravel filter.

198

- The ULB has prepared detailed estimate for establishing liquid waste treatment facility at a cost of **Rs.77.00 lakh**. This fund is proposed to be tied up with **Infrastructure gap filling fund 2019-20** and is expected to be completed by **October 2019.**

Name of the ULB : Vickramasingampuram

- ✓ Population: 47163
- ✓ MSW Generation: 21TPD
- ✓ Households: 19370
- ✓ Wet Waste: 12.60 TPD
- ✓ Dry Waste : 8.40 TPD
- ✓ Door to Door Collection: 100%
- ✓ Segregation: 80%
- ✓ 100% will be achieved before 31.05.19
- ✓ Liquid waste Generation : 3.52 MLD

Wet Waste of 12.6 TPD is processed as below:

- ✓ Windrow Composting Plant – 1No. Of 3 TPD (Completed and put in use)
- ✓ Micro Composting Plant – 4 Nos. of 13 TPD (Will be completed before April 2019)

Dry waste – 8.40 TPD

- ✓ Other saleable waste (Plastic, Rubber, Metal etc.,) of 5 Tonne sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 2.5 TPD is stored in the RRC at Dhobi Colony & Periodically disposed to India cements, Tirunelveli.
- ✓ Inert & Silt – 0.9 TPD Stored along with C&D waste. Used in Filling Low Lying Areas

Liquid Waste Management

- Vickrama singampuram Municipality generates **3.52 MLD** of wastewater daily.
- The **blackwater** is collected in septic tanks by individual households.
- In order to treat the black water, construction of **30kld Fecal Sludge Treatment Plant** work is taken up and is in progress at an estimated cost of Rs.3.00Crore and it will be completed before **31.12.2019** under **IUDM 2018-19** fund

199

- To handle the **sullage water** discharged through 12 nos. of major channel which confluence with the river stretch. It is proposed to provide in-situ treatment methodology by providing Screen, Grit followed by Horizontal planted gravel filter.
- The ULB has prepared detailed estimate for establishing liquid waste treatment facility at a cost of **Rs.1.20crore**. This fund is proposed to be tied up with **Infrastructure gap filling fund 2019-20** and is expected to be completed by **October 2019.**

Name of the ULB : Tirunelveli Corporation

- ✓ Population: 513284
- ✓ MSW Generation: 170 TPD
- ✓ Households: 159628
- ✓ Wet Waste: 97 TPD
- ✓ Dry Waste : 73 TPD
- ✓ Door to Door Collection: 95%
- ✓ Segregation: 80%
- ✓ 100% will be achieved before 31.05.19
- ✓ Liquid waste Generation : 56.46MLD

Wet Waste of 97TPD is processed as below:

- ✓ Micro Composting Plant – 41 Nos. of 97 TPD (Completed and put in use)
- ✓ On – Site Composting – 4 locations – 7.5 TPD (Completed and put in use)
- ✓ Bio-Methanation Plant -1No of 5TPD – Functioning

Dry waste – 73 TPD

- ✓ Other saleable waste (Plastic, Rubber, Metal etc.,) of 43 Tonne sold out to the identified vendors & registers are being maintained
- ✓ The Non saleable Non Biodegradable waste of 21 TPD is stored in the RRC at all MCCs in 41 Locations & Periodically disposed to India cements, Tirunelveli. Inert & Silt – 9 TPD Stored along with C&D waste. Used in Filling Low Lying Areas

Liquid Waste Management

- Tirunelveli Corporation generates **56.46 MLD** of wastewater daily.

- To treat the waste water, **Under Ground Sewerage scheme work** is completed and functional in **10 wards(fully)** and **12 wards(partially)** with an **STP** capacity of **24.20MLD** and treated sewage water let out as per GOI norms.
- To cover the remaining **wards** (33 wards fully & 12 wards partially) **Under Ground Sewerage scheme work** in **2 phases** were taken up for implementation at an estimated cost of Rs.729.20crore with financial assistance of AMRUT & ADB. Of which phase-II sewage generated will be treated in Phase-I STP and Phase-III will have a **34.00MLD capacity STP. The scheme is** expected to be completed by **December 2021**.

V. Name of the River: Thirumanimutharu

Name of the stretch: Salem to Papparapatti

Name of the ULB : Salem Corporation

- ✓ Population: 913188
- ✓ MSW Generation: 370 TPD
- ✓ Households: 234624
- ✓ Wet Waste: 215 TPD
- ✓ Dry Waste : 155 TPD
- ✓ Door to Door Collection:100%
- ✓ Segregation: 74%
- ✓ 100% will be achieved before 30.06.19

Liquid waste Generation: 100.03 MLD

Wet Waste of 215 TPD is processed as below:

- ✓ Micro Composting Plant – 30 Nos. of 150 TPD (Will be completed before April 2019 SBM Funds and
- ✓ Additional 10 Nos MCC of 50 TPD will be established before October 2019 utilizing Corp Revenue fund
- ✓ Bio Methanation Plant – 2Nos. – 8 TPD (Completed and functioning)
- ✓ On – Site Composting – 86 locations – 20 TPD (Will be completed before April 2019)

Dry waste – 155 TPD

- ✓ Other saleable waste(Plastic, Rubber, Metal etc.,) of 93 TPD sold out to the identified vendors & registers are being maintained.

101

- ✓ The Non saleable Non Biodegradable waste of 47 TPD is stored in the RRC at all MCCs
- ✓ Inert & Silt – 15 TPD Stored along with C&D waste at Chetti Chavdi which 16 Km away from town. Used for Filling Low Lying Areas

Liquid Waste Management

- Salem Corporation generates **100.03MLD** of wastewater daily.
- To treat the waste water, the implementation of **Under Ground Sewerage scheme work** was taken up and is under implementation at an estimated cost of **Rs.149.39 crore** with **4 nos. of STPs** with a total capacity of **98.00 MLD**
- As on date in Packages –I & III , out of **40000 connections**, 2530 no. of Houses service connections were effected and the remaining connections will be effected before **December 2019.**
- Package II work will be completed by December 2020
- After the completion of this scheme work, Outfalls in the River Thirumanimutharu will be stopped permanently.

VI. Name of the River: Vassita

Name of the stretch: Manivilundhan to Thiyaganur

Name of the ULB : Attur

- ✓ Population: 65200
- ✓ MSW Generation: 18TPD
- ✓ Households: 15446
- ✓ Wet Waste: 10TPD
- ✓ Dry Waste : 8 TPD
- ✓ Door to Door Collection:90%
- ✓ Segregation: 84%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 4.45 MLD

Wet Waste of 10 TPD are proposed as below:

- ✓ Micro Composting Plant – 5Nos. of 15TPD (Will be completed before April 2019-SBM Funds)

Dry waste – 8 TPD

- ✓ Other saleable waste(Plastic, Rubber, Metal etc.,) of 4.8 Tonne sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 2.4 TPD is stored in the earmarked location at Thennakudipalayam .
- ✓ Inert and Silt 0.8 TPD stored along with C&D waste. Used for Filling Low Lying Areas

Liquid Waste Management

- Attur Municipality generates **4.45MLD** of wastewater daily.
- The blackwater is collected in septic tanks by individual households.
- In order to treat the black water, construction of **40kld Fecal Sludge Treatment Plant** work is taken up and is in progress at an estimated cost of **Rs. 4.41 Crore** and it will be completed before **31.12.2019** under **IUDM 2018-19 fund.**
- To handle the **sullage water** discharged through **3 no. of major channels** which confluence with the river stretch, it is proposed to provide **in-situ treatment** methodology by providing Screen, Grit followed by Horizontal planted gravel filter which will treat the sullage and discharge the treated water into the water course.
- The ULB has prepared detailed estimate for establishing liquid waste treatment facility at a cost of Rs.165.70 lakh. This fund is proposed to tied up with **Capital grant fund 2019-20** and is expected to be completed by **October 2019.**

Name of the ULB : Narasingapuram

- ✓ Population: 26000
- ✓ MSW Generation: 7 TPD
- ✓ Households: 7316
- ✓ Wet Waste: 4TPD
- ✓ Dry Waste : 3TPD
- ✓ Door to Door Collection:94%
- ✓ Segregation: 87%
- ✓ 100% will be achieved before 30.06.19
- ✓ Liquid waste Generation : 1.28 MLD

(203)

Wet Waste of 4 TPD are proposed as below:

- ✓ Micro Composting Plant – 3Nos. of 8 TPD (Will be completed before April 2019-SBM Funds)

Dry waste – 3 TPD

- ✓ Other saleable waste (Plastic, Rubber, Metal etc.,) of 1.8 Tonne sold out to the identified vendors & registers are being maintained.
- ✓ The Non saleable Non Biodegradable waste of 0.9 TPD is stored in the earmarked location at MCC, Appamasamudhram.
- ✓ Inert and Silt 0.3 TPD stored along with C&D waste. Used for Filling Low Lying Areas

Liquid Waste Management

- Narasingapuram Municipality generates **1.28MLD** of wastewater daily.
- The blackwater is collected in septic tanks by individual households.
- In order to treat the black water, it is proposed to **cluster with Attur** FSTP and co-treated.
- To handle the **sullage water** discharged through **3 no. of major channels** which confluence with the river stretch, it is proposed to provide in-situ treatment methodology by providing Screen, Grit followed by Horizontal planted gravel filter which will treat the sullage and discharge the treated water into the water course.
- The ULB has prepared detailed estimate for establishing liquid waste treatment facility at a cost of **Rs100.45lakh**. This fund is proposed to be tied up with **Capital grant fund** 2019-20 and is expected to be completed by **October 2019.**

Directorate of Town Panchayats

Action taken report for Solid Waste Management and liquid waste management on Polluted river stretches

1. **Name of the river : Cauvery**

   Name of the stretch: Cauvery River - Mettur Stretch

- ✓ Name of the ULB : Musiri
- ✓ Population:28727
- ✓ MSW Generation:10.50 TPD
- ✓ Households: 7764
- ✓ Wet Waste: 6.35 TPD
- ✓ Dry Waste : 4.15 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 0.800 MLD

- ➢ Wet Waste of 6.350 TPD are processed by Windrow Compost method.
- ➢ Dry Waste – 4.150 TPD
- ➢ Recycable waste (plastic, metal, rubber etc., 1.700 TPD sold out to the identified vendors.
- ➢ The Non Recycable waste of 0.270 TPD periodically disposed to Ariyalur Cement Factory
- ➢ Inerts & Silt -2.180 TPD Used in Filling Low Lying Areas.

Plan of action:

- ➢ Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.
- ➢ Work Order Issued at an Estimate Cost of Rs.113.53 Lakhs for Disposal of Historical Waste by Bio-Mining Method.
- ➢ Work will be completed by 31.12.2019

Liquid Waste Management

I. Musiri Town Panchayat is having 28727 population and generates **0.800 MLD** of wastewater daily through 4 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Mettu Vaikal.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 570.00 Lakhs for treatment and disposal of sullage water by Eco Ozotex Technology under IUDM for the year 2019-20 and will be completed by March 2020.

After the completion of this scheme work, Outfalls in the River Cauvery will be stopped permanently and only treated water will be discharged

2. Name of the river : Cauvery

Name of the stretch: Cauvery River - Mettur Stretch

- ✓ Name of the ULB : Sirugamani
- ✓ Population:10743
- ✓ MSW Generation:2.76 TPD
- ✓ Households: 2801
- ✓ Wet Waste: 1.29 TPD
- ✓ Dry Waste : 1.47 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 0.440 MLD
- ➢ Wet Waste of 1.29 TPD are processed by Windrow Compost method.
- ➢ Dry Waste – 1.47TPD
- ➢ Recycable waste (plastic, metal, rubber etc.0.25TPD sold out to the identified vendors.
- ➢ The Non Recycable waste of 0.940 TPD periodically disposed.
- ➢ Inerts & Silt -0.28 TPD Used in Filling Low Lying Areas.
- ➢ Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.

Liquid Waste Management

I. Sirugamani Town Panchayat is having 10743 population and generates **0.440 MLD** of wastewater daily through 8 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

2.6

III. **Sullage water** generated from the town is discharged to puttu ayyanar Vaikal, Kallu vaikal and periya vaikal.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 525.00 Lakhs for treatment and disposal of sullage water by Eco Ozotex Technology and dry land process technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Cauvery will be stopped permanently and only treated water will be discharged.

3. Name of the river : Cauvery

Name of the stretch: Cauvery River - Mettur Stretch – Raja Vaikal

- ✓ Name of the ULB : Mohanur
- ✓ Population:15174
- ✓ MSW Generation:3.05 TPD
- ✓ Households: 3890
- ✓ Wet Waste: 1.453 TPD
- ✓ Dry Waste : 0.697 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 0.550 MLD
- ✓ Wet Waste of 1.453 TPD are processed as manure by Windrow & Vermi Compost method and then sold to Farmers.
- ✓ Dry Waste – 0.697 TPD
- ➢ Recycable waste (plastic, metal, rubber etc., 0.240 TPD sold out to the identified vendors.
- ➢ The Non-Recycable waste of 0.457 TPD periodically disposed.
- ➢ Inerts & Silt 0.900 TPD used for filling pre-identified low lying areas.
- ➢ Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.

Liquid Waste Management

I. Mohanur Town Panchayat is having 15174 population and generates **0.550 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Raja vaikal.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 160.00 Lakhs for treatment and disposal of sullage water by Reed Bed filter Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Cauvery will be stopped permanently and only treated water will be discharged.

4. **Name of the river : Cauvery**

Name of the stretch: Cauvery River - Mettur Stretch – Raja Vaikal

- ✓ Name of the ULB : Velur
- ✓ Population:25012
- ✓ MSW Generation:8.37 TPD
- ✓ Households: 7055
- ✓ Wet Waste: 5.33 TPD
- ✓ Dry Waste : 1.78 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 1.196 MLD
- ✓ Wet Waste of 5.33 TPD are processed as manure by Windrow & Vermi Compost method and then sold to Farmers.
- ✓ Dry Waste – 1.78 TPD Recycable waste (plastic, metal, rubber etc., 0.270 TPD sold out to the identified vendors.
- ✓ The Non-Recycable waste of 1.510 TPD periodically disposed. Inerts & Silt 1.260 TPD used for filling pre-identified low lying areas.
- ✓ Work order issued for Bio mining and construction of Compound wall at an estimated cost of Rs 47.50 Lakhs and will be completed by 30.09.19.

Liquid Waste Management

I. Velur Town Panchayat is having 25012 population and generates **1.196 MLD** of wastewater daily through 4 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Raja vaikal.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 150.00 Lakhs for treatment and disposal of sullage water by Reed Bed filter Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Cauvery will be stopped permanently and only treated water will be discharged.

5. Name of the river : Cauvery

Name of the stretch: Cauvery River - Mettur Stretch – Raja Vaikal

- ✓ Name of the ULB : Punjaipigalur
- ✓ Population:25935
- ✓ MSW Generation:7.20 TPD
- ✓ Households: 6783
- ✓ Wet Waste: 3.70 TPD
- ✓ Dry Waste : 2.95 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 90%
- ✓ 100% will be achieved by 30.09.2019
- ✓ Liquid waste Generation : 1.600 MLD
- ➢ Wet Waste of 3.70 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 2.95 TPD
- ➢ Recycable Waste (Plastic, Metal, Rubber etc., 0.55 TPD sold out to the identified vendors.
- ➢ The Non Recycable waste of 2.40 TPD periodically disposed.
- ➢ Inerts & Silt - 0.55 TPD Used in Filling Low Lying Areas.
- ✓ Work under progress at an estimate cost of RS.32 Lakh for Construction of Compound Wall and 0.5 Km Approach Road at Existing Resource Recovery Park and will be completed by 30.09.19.

Liquid Waste Management

I. Punjai Pugalur Town Panchayat is having 25935 population and generates **1.600 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Raja vaikal.

IV. To handle this sullage water, Detailed 150.00 Lakhs for treatment and disposal of sullage water by Reed Bed filter Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Cauvery will be stopped permanently and only treated water will be discharged.

6. Name of the river : Bhavani

Name of the stretch: Sirumugai to Kalingarayan Stretch

- ✓ Name of the ULB : Bhavanisagar
- ✓ Population:7710
- ✓ MSW Generation:1.72 TPD
- ✓ Households: 2134
- ✓ Wet Waste: 1.00 TPD
- ✓ Dry Waste : 0.720 TPD
- ✓ Door to Door Collection:100%
- ✓ Segregation: 90%
- ✓ 100% will be achieved by 30.09.2019
- ✓ Liquid waste Generation : 0.900 MLD.
- ✓ Wet Waste of 1.00 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 0.420 TPD
- ✓ Recycable waste (plastic, metal, rubber etc., 0.005 TPD sold out to the identified vendors.
- ➢ The Non Recycable waste of 0.415 TPD periodically disposed.
- ➢ Inerts & Silt -0.300 TPD Used in Filling Low Lying Areas.
- ➢ Work under progress at an estimate cost of Rs.36.00 lakhs for Construction of compound wall work and will be completed by 31.05.2019.

Liquid Waste Management

I. Bhavanisagar Town Panchayat is having 7710 population and generates **0.900 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Bhavani river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 60.00 Lakhs for treatment and disposal of

sullage water by Nano Bio Ozolyte Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Bhavani will be stopped permanently and only treated water will be discharged.

7. Name of the river : Bhavani

Name of the stretch: Sirumugai to Kalingarayan Stretch

- ✓ Name of the ULB : Sirumugai
- ✓ Population:18323
- ✓ MSW Generation:3.10 TPD
- ✓ Households: 5294
- ✓ Wet Waste: 1.81 TPD
- ✓ Dry Waste : 1.29 TPD
- ✓ Door to Door Collection:78%
- ✓ Source Segregation: 69%
- ✓ 100% will be achieved by 30.09.2019
- ✓ Liquid waste Generation : 0.835 MLD.
- ➢ Wet Waste of 1.81 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 1.29 TPD
- ➢ Recycable waste (plastic, metal, rubber etc., 0.50 TPD sold out to the identified vendors.
- ➢ The Non Recycable waste of 0.51 TPD periodically disposed.
- ➢ Inerts & Silt -0.28 TPD Used in Filling Low Lying Areas.
- ✓ Solid waste Collected Door to Door and the waste are processed as manure in decentrelized method at three places. Action taken to Procured Land for Resource Recovery Park.

Liquid Waste Management

I. Sirumugai Town Panchayat is having 18323 population and generates **0.835 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Bhavani river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 200.00 Lakhs for treatment and disposal of

sullage water by Nano Bio Ozolyte Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Bhavani will be stopped permanently and only treated water will be discharged.

8. **Name of the river : Amaravathi**

Name of the stretch: Amaravathi to Madathukulam Stretch

- ✓ Name of the ULB : Madathukulam
- ✓ Population:20620
- ✓ MSW Generation:5.29 TPD
- ✓ Households: 5761
- ✓ Wet Waste: 3.17 TPD
- ✓ Dry Waste : 2.12 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 0.504 MLD.
- ➢ Wet Waste of 3.17 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 2.12 TPD
- ➢ Recycable waste (plastic, metal, rubber etc., 0.50 TPD sold out to the identified vendors.
- ➢ The Non Recycable waste of 1.12 TPD periodically disposed.
- ➢ Inerts & Silt -0.5 TPD Used in Filling Low Lying Areas.
- ✓ Work under progress at an estimate cost of RS.23.90 Lakh for Construction of Compound Wall and Windrow roof work and will be completed by 31.08.19

Liquid Waste Management

I. Madathukulam Town Panchayat is having 20620 population and generates **0.504 MLD** of wastewater daily through 5 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to west side of Amaravathy river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 100.00 Lakhs for treatment and disposal of

sullage water by Nano Bio Ozolyte Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Amaravathi will be stopped permanently and only treated water will be discharged.

9. Name of the river : Sarabanga

Name of the stretch: Thathayampatty to T.Gonagapadi Stretch

- ✓ Name of the ULB : Omalur
- ✓ Population:16279
- ✓ MSW Generation:5.84 TPD
- ✓ Households: 4229
- ✓ Wet Waste: 3.212 TPD
- ✓ Dry Waste : 2.628 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 80%
- ✓ 100% will be achieved by 30.09.2019
- ✓ Liquid waste Generation : 0.900 MLD.
- ✓ Wet Waste of 3.212 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 2.628 TPD
- ✓ Recycable waste (plastic, metal, rubber etc., 0.300 TPD sold out to the identified vendors.
- ✓ The Non Recycable waste of 1.828 TPD periodically disposed.
- ✓ Inerts & Silt 0.500 TPD Used in Filling Low Lying Areas.
- ✓ Work under progress at an estimate cost of RS.110 Lakh for Providing Protection Wall, Compound Wall, additional Windrow Platform with Shed, and Bio Mininig for disposal of Historical waste and work will be completed by 31.12.2019

Liquid Waste Management

I. Omalur Town Panchayat is having 16279 population and generates **1.160 MLD** of wastewater daily through 11 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Sarabanga river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 300.00 Lakhs for treatment and disposal of sullage water by Reed Bed Filter / Eco Ozotex Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Sarabanga will be stopped permanently and only treated water will be discharged.

10. Name of the river : Sarabanga

Name of the stretch: Thathayampatty to T.Gonagapadi Stretch

- ✓ Name of the ULB : Poolampatty
- ✓ Population:10047
- ✓ MSW Generation:1.52 TPD
- ✓ Households: 2698
- ✓ Wet Waste: 1.10 TPD
- ✓ Dry Waste : 0.40 TPD
- ✓ Door to Door Collection:69%
- ✓ Source Segregation: 60%
- ✓ 100% will be achieved by 31.12.2019
- ✓ Liquid waste Generation : 0.162 MLD.
- ✓ Out of 15 wards, 6 wards are rural in nature. Many of the households are doing home composting
- ✓ Wet Waste of 1.10 TPD are processed by Windrow Composting (De-Centralised)
- ✓ Dry Waste – 0.40 TPD
- ✓ Recyclable waste (plastic, metal, rubber etc., 0.300 TPD sold out to the identified vendors.
- ✓ The Non Recyclable waste of 0.10 TPD periodically disposed.
- ✓ Inerts & Silt 0.02 TPD used in Filling Low Lying Areas.
- ✓ Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.

Liquid Waste Management

I. Poolampatty Town Panchayat is having 10047 population and generates **0.162 MLD** of wastewater daily through 5 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to private agriculture land.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 50.00 Lakhs for treatment and disposal of sullage water by Reed Bed Filter Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Sarabanga will be stopped permanently and only treated water will be discharged.

11. Name of the river : Vasista

Name of the stretch: Vasista Stretch

- ✓ Name of the ULB : Pethanaikanpalayam
- ✓ Population:17678
- ✓ MSW Generation:2.83 TPD
- ✓ Households: 4611
- ✓ Wet Waste: 1.330 TPD
- ✓ Dry Waste : 0.916 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 80%
- ✓ 100% will be achieved by 30.09.2019
- ✓ Liquid waste Generation : 0.520 MLD.
- ✓ Wet Waste of 1.330 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 0.916 TPD
- ✓ Recycable waste (plastic, metal, rubber etc., 0.150 TPD sold out to the identified vendors.
- ✓ The Non Recycable waste of 1.330 TPD periodically disposed.
- ✓ Inerts & Silt -0.580 TPD Used in Filling Low Lying Areas.
- ✓ Work under progress at an estimate cost of RS.60 Lakh for Providing Protection Compound Wall and additional Windrow Platform with Shed and work will be completed by 31.12.2020.

Liquid Waste Management

(27)

I. Pethanaikanpalayam Town Panchayat is having 17678 population and generates **0.520 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to vasista river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 120.00 Lakhs for treatment and disposal of sullage water by Reed Bed Filter under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Vasista will be stopped permanently and only treated water will be discharged.

12. **Name of the river : Vasista**

Name of the stretch: Vasista Stretch

- ✓ Name of the ULB : Yethapur
- ✓ Population:11626
- ✓ MSW Generation:2.90 TPD
- ✓ Households: 2866
- ✓ Wet Waste: 1.670 TPD
- ✓ Dry Waste : 1.010 TPD
- ✓ Door to Door Collection:81%
- ✓ Source Segregation: 78%
- ✓ 100% will be achieved by 31.12.2019
- ✓ Liquid waste Generation : 0.490 MLD.
- ➢ Wet Waste of 1.670 TPD are processed by Windrow Compost method.
- ➢ Dry Waste – 1.010 TPD
- ➢ Recycable waste (plastic, metal, rubber etc., 0.24 TPD sold out to the identified vendors.
- ➢ Inerts & Silt -0.420 TPD Used in Filling Low Lying Areas.
- ➢ Work under progress at an estimate cost of RS.100 Lakh for Providing Protection Wall, Compound Wall, additional Windrow Platform with Shed, and Bio Mininig for disposal of Historical waste and the work will be completed by 31.12.2019.

Liquid Waste Management

216

I. Yethapur Town Panchayat is having 11626 population and generates **0.490 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to vasista river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 100.00 Lakhs for treatment and disposal of sullage water by Reed Bed Filter under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Vasista will be stopped permanently and only treated water will be discharged.

13. Name of the river : Vasista

Name of the stretch: Vasista Stretch

- ✓ Name of the ULB : Belur
- ✓ Population:9260
- ✓ MSW Generation:1.75 TPD
- ✓ Households: 2290
- ✓ Wet Waste: 1.400 TPD
- ✓ Dry Waste : 0.350 TPD
- ✓ Door to Door Collection:88%
- ✓ Source Segregation: 80%
- ✓ 100% will be achieved by 30.09.2019
- ✓ Liquid waste Generation : 0.460 MLD.
- ✓ Wet Waste of 1.75 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 0.300 TPD
- ✓ Recycable waste (plastic, metal, rubber etc., 0.075 TPD sold out to the identified vendors.
- ✓ The Non Recycable waste of 0.225 TPD periodically disposed.
- ✓ Inerts & Silt 0.410 TPD Used in Filling Low Lying Areas.
- ✓ Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.

Liquid Waste Management

(217)

I. Belur Town Panchayat is having 9260 population and generates **0.460 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to vasista river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 100.00 Lakhs for treatment and disposal of sullage water by Reed Bed Filter Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Vasista will be stopped permanently and only treated water will be discharged.

14. **Name of the river : Thamirabharani**

Name of the stretch: Thamirabarani River Stretch (North Canal)

- ✓ Name of the ULB : Srivaikundam
- ✓ Population:15847
- ✓ MSW Generation:4.20 TPD
- ✓ Households: 4159
- ✓ Wet Waste: 1.500 TPD
- ✓ Dry Waste : 2.500 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 0.700 MLD.
  - ➢ Wet Waste of 1.50 TPD are processed by Vermi Compost method.
  - ➢ Dry Waste – 2.50 TPD
  - ➢ Recycable waste (plastic, metal, rubber etc., 1.00 TPD sold out to the identified vendors.
  - ➢ The Non Recycable waste of 1.50 TPD periodically disposed.
  - ➢ Inerts & Silt -0.20 TPD Used in Filling Low Lying Areas.
  - ➢ Work under progress at an estimate cost of RS.27.90 Lakh for infra facility and will be completed by 31.08.2019.

Liquid Waste Management

(218)

I. Srivaikundam Town Panchayat is having 15847 population and generates **0.700 MLD** of wastewater daily through 2 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to North canal of Tamirabharani river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 53.00 Lakhs for treatment and disposal of sullage water by Reed Bed Filter Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Thamirabharani will be stopped permanently and only treated water will be discharged.

15. Name of the river : Thamirabharani

Name of the stretch: Thamirabarani River Stretch

- ✓ Name of the ULB : Authoor
- ✓ Population:10138
- ✓ MSW Generation:2.00 TPD
- ✓ Households: 2555
- ✓ Wet Waste: 1.500 TPD
- ✓ Dry Waste : 0.500 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 0.500 MLD.
- ✓ Wet Waste of 1.50 TPD are processed by Vermi Compost method.
- ✓ Dry Waste – 0.500 TPD
  - ➢ Recycable waste (plastic, metal, rubber etc., 0.20 TPD sold out to the identified vendors.
  - ➢ The Non Recycable waste of 0.30 TPD periodically disposed.
  - ➢ Inerts & Silt -0.00 TPD Used in Filling Low Lying Areas.
  - ➢ Work under progress at an estimate cost of RS.95.30 Lakh for Construction of Compound wall, Retaining wall, Shed, Watch man Shed, Roads, Lighting and Toilet facilities and will be completed by 31.08.19

Liquid Waste Management

VI. Authoor Town Panchayat is having 10138 population and generates **0.500 MLD** of wastewater daily through 1 Outfall Channel.

VII. The blackwater is collected in septic tanks by individual households.

I. **Sullage water** generated from the town is discharged to Tamirabharani river.

II. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 30.00 Lakhs for treatment and disposal of sullage water by Aeriation Technology under IUDM for the year 2019-20 and will be completed by March 2020.

III. After the completion of this scheme work, Outfalls in the River Thamirabharani will be stopped permanently and only treated water will be discharged.

16. **Name of the river : Thamirabharani**

Name of the stretch: Thamirabarani River Stretch

- Name of the ULB : Eral
- Population:10599
- MSW Generation:2.85 TPD
- Households: 2388
- Wet Waste: 1.710 TPD
- Dry Waste : 0.760 TPD
- Door to Door Collection:97%
- Source Segregation: 55%
- 100 % will be achieved by 31.12.2019
- Liquid waste Generation : 0.600 MLD.
- Wet Waste of 1.71 TPD are processed by Vermi Compost method.
- Dry Waste – 0.760 TPD
- Recycable waste (plastic, metal, rubber etc., 0.300 TPD sold out to the identified vendors.
- The Non Recycable waste of 0.460 TPD periodically disposed.
- Inerts & Silt -0.38 TPD Used in Filling Low Lying Areas.

- Work under progress at an estimate cost of RS.15.00 Lakh for Construction of Compound wall, Water Supply and Vermi Compost and will be completed by 31.08.19

Liquid Waste Management

I. Eral Town Panchayat is having 10599 population and generates **0.600 MLD** of wastewater daily through 2 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to North canal of Tamirabharani river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 60.20 Lakhs for treatment and disposal of sullage water by Reed Bed Filter Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Thamirabharani will be stopped permanently and only treated water will be discharged.

17. Name of the river : Thamirabharani

Name of the stretch: Thamirabarani River Stretch

- Name of the ULB : Alwarthirunagari
- Population:9500
- MSW Generation:1.57 TPD
- Households: 2375
- Wet Waste: 0.840 TPD
- Dry Waste : 0.560 TPD
- Door to Door Collection:94%
- Source Segregation: 90 %
- 100 % will be achieved by 30.09.2019
- Liquid waste Generation : 0.164 MLD.
- Wet Waste of 0.84 TPD are processed by Vermi Compost method.
- Dry Waste – 0.56 TPD
- Recycable waste (plastic, metal, rubber etc., 0.20 TPD sold out to the identified vendors.

221

- The Non Recycable waste of 0.36 TPD periodically disposed.
- Inerts & Silt -0.17 TPD Used in Filling Low Lying Areas.
- Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.

Liquid Waste Management

I. Alwarthirunagari Town Panchayat is having 9500 population and generates **0.164 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to South canal of Tamirabharani river.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 76.20 Lakhs for treatment and disposal of sullage water by Eco Ozotex Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Thamirabharani will be stopped permanently and only treated water will be discharged.

18. Name of the river ; Thamirabharani

Name of the stretch: Thamirabarani River Stretch

- Name of the ULB : Thenthiruperai
- Population:4934
- MSW Generation:0.750 TPD
- Households: 1276
- Wet Waste: 0.340 TPD
- Dry Waste : 0.310 TPD
- Door to Door Collection:100%
- Source Segregation: 100 %
- Liquid waste Generation : 0.400 MLD.
- Nearly 30 to 40% of of Household are practicing home composting process. Town panchayats are also encouraging the home composting. Wet Waste of 0.340 TPD are processed by Vermi Compost method.
- Dry Waste – 0.310 TPD

222

- Recycable waste (plastic, metal, rubber etc., 0.100 TPD sold out to the identified vendors.
- The Non Recycable waste of 0.250 TPD periodically disposed.
- Inerts & Silt -0.10 TPD Used in Filling Low Lying Areas.
- Work under progress at an estimate cost of RS.41.40 Lakh for Construction of Windrows platform , water supply and Vermi shed are in progress

Liquid Waste Management

I. Thenthiruperal Town Panchayat is having 4934 population and generates **0.400 MLD** of wastewater daily through 1 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Town Panchayat own land and private land.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 30.20 Lakhs for treatment and disposal of sullage water by Eco Ozotex Technology under IUDM for the year 2019-20 and **will be completed by March 2020.**

V. After the completion of this scheme work, Outfalls in the River Thamirabharani will be stopped permanently and only treated water will be discharged.

19. Name of the river : Thamirabharani

Name of the stretch: Thamirabarani River Stretch

- Name of the ULB : Mukkudal
- Population:16755
- MSW Generation:4.30 TPD
- Households: 4137
- Wet Waste: 2.58 TPD
- Dry Waste : 1.72 TPD
- Door to Door Collection:100%
- Source Segregation: 85 %
- 100% will be achieved by 31.10.2019
- Liquid waste Generation : 0.070 MLD.

(223)

- Wet Waste of 2.58 TPD are processed by Windrow Compost method.
- Dry Waste – 1.72 TPD
- Recycable waste (plastic, metal, rubber etc., 0.50 TPD sold out to the identified vendors.
- The Non Recycable waste of 0.50 TPD periodically disposed.
- Inerts & Silt 0.50 TPD Used in Filling Low Lying Areas.
- Work under progress at an estimate cost of RS.128 Lakh for Providing Construction of Windrows Platform, Store Room, Watchman Shed, Mahinery Room, Vermi Compost Cubical And Providing Fencing ,Interlocking paver block road And Water Supply Toilet Arrangement At Compost Yard and the work will be completed by 31.08.2019.

Liquid Waste Management

I. Mukkudal Town Panchayat is having 16755 population and generates **0.070 MLD** of wastewater daily through 2 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Velladai Channel.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 30.00 Lakhs for treatment and disposal of sullage water by Eco Ozotex Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Thamirabharani will be stopped permanently and only treated water will be discharged.

20. Name of the river : Thamirabharani

Name of the stretch: Thamirabarani River Stretch

- Name of the ULB : Gopalasamudram
- Population:11228
- MSW Generation:1.42 TPD

- Households: 2890
- Wet Waste: 0.310 TPD
- Dry Waste : 0.400 TPD
- Door to Door Collection:100%
- Source Segregation: 85 %
- 100% will be achieved by 31.10.2019
- Liquid waste Generation : 0.500 MLD.
- Nearly 30 to 40% of of Household are practicing home composting process. Town panchayats are also encouraging the home composting. Wet Waste of 0.310 TPD are processed by Windrow Compost method.
- Dry Waste – 0.400 TPD - Recycable waste (plastic, metal, rubber etc., 0.180 TPD sold out to the identified vendors. The Non Recycable waste of 0.220 TPD periodically disposed. Inerts & Silt -0.710 TPD Used in Filling Low Lying Areas.
- Work under progress at an estimate cost of RS.6.00 Lakh for Road, Water Supply, Light & Toilet and the work will be completed by 31.08.2019.

Liquid Waste Management

I. Gopalasamudram Town Panchayat is having 11228 population and generates **0.500 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to vagaikulam kanmai.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 41.00 Lakhs for treatment and disposal of sullage water by Eco Ozotex Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the River Thamirabharani will be stopped permanently and only treated water will be discharged.

21. **Name of the river : Canadian Irrigation supply channel**

Name of the stretch: Canadian Irrigation supply channel

295

- Name of the ULB : Kallidaikuruchi
- Population:26398
- MSW Generation:8.10 TPD
- Households: 7364
- Wet Waste: 4.600 TPD
- Dry Waste : 3.500 TPD
- Door to Door Collection:100%
- Source Segregation: 100 %
- Liquid waste Generation : 0.350 MLD.
- Wet Waste of 4.600 TPD are processed by Windrow Compost method.
- Dry Waste – 2.000TPD
- Recycable waste (plastic, metal, rubber etc., 1.00 TPD sold out to the identified vendors.
- The Non Recycable waste of **1.00** TPD periodically disposed.
- Inerts & Silt -1.50 TPD Used in Filling Low Lying Areas.
- Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.

Liquid Waste Management

I. Kallidaikuruchi Town Panchayat is having 26398 population and generates 0.**350 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Canadian Irrigation channel.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 105.00 Lakhs for treatment and disposal of sullage water by Eco Ozotex and Aeriation Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the Canadian irrigation channel will be stopped permanently and only treated water will be discharged.

22. **Name of the river : Canadian Irrigation supply channel**

Name of the stretch: Canadian Irrigation supply channel

- Name of the ULB : Cheranmahadevi

226

- ✓ Population:18327
- ✓ MSW Generation:4.50 TPD
- ✓ Households: 4756
- ✓ Wet Waste: 3.00 TPD
- ✓ Dry Waste : 0.900 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 87%
- ✓ 100% will be achieved by 30.09.2019
- ✓ Liquid waste Generation : 0.110 MLD.
- ✓ Wet Waste of 3.000 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 0.900 TPD
- ✓ Recycable waste (plastic, metal, rubber etc., 0.30 TPD sold out to the identified vendors.
- ✓ The Non Recycable waste of 0.600 TPD periodically disposed.
- ✓ Inerts & Silt -0.600 TPD Used in Filling Low Lying Areas.
- ✓ Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.

Liquid Waste Management

I. Cheranmahadevi Town Panchayat is having 18327 population and generates **0.110 MLD** of wastewater daily through 4 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Canadian Irrigation channel.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 45.00 Lakhs for treatment and disposal of sullage water by Eco Ozotex Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the Canadian irrigation channel will be stopped permanently and only treated water will be discharged.

23. **Name of the river : Canadian Irrigation supply channel**

Name of the stretch: Canadian Irrigation supply channel

- ✓ Name of the ULB : Veeravanallur
- ✓ Population:19585
- ✓ MSW Generation:3.23 TPD
- ✓ Households: 5317
- ✓ Wet Waste: 2.092 TPD
- ✓ Dry Waste : 0.940 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 0.250 MLD.
- ➢ Wet Waste of 2.092 TPD are processed by Windrow Compost method.
- ➢ Dry Waste – 0.940 TPD
- ➢ Recycable waste (plastic, metal, rubber etc., 0.440 TPD sold out to the identified vendors.
- ➢ The Non Recycable waste of 0.500 (Inerts & Silt)TPD periodically disposed.
- ➢ Inerts & Silt -0.20 TPD Used in Filling Low Lying Areas.
- ➢ Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.

Liquid Waste Management

I. Veeravanallur Town Panchayat is having 19585 population and generates 0.**250 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Canadian Irrigation channel.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 49.00 Lakhs for treatment and disposal of sullage water by Eco Ozotex Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the Canadian Irrigation channel will be stopped permanently and only treated water will be discharged.

24. **Name of the river : Canadian Irrigation supply channel**

Name of the stretch: Canadian Irrigation supply channel

226

- ✓ Name of the ULB : Pathamadai
- ✓ Population:17456
- ✓ MSW Generation:2.62 TPD
- ✓ Households: 4166
- ✓ Wet Waste: 1.720 TPD
- ✓ Dry Waste : 0.700 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 85%
- ✓ 100% will be achieved by 30.09.2019
- ✓ Liquid waste Generation : 0.250 MLD.
- ➢ Wet Waste of 1.72 TPD are processed by Windrow Compost method.
- ✓ Dry Waste - 0.70 TPD
- ➢ Recycable waste (plastic, metal, rubber etc., 0.20 TPD sold out to the identified vendors.
- ➢ The Non Recycable waste of 0.50 TPD periodically disposed.
- ➢ Inerts & Silt -0.20 TPD Used in Filling Low Lying Areas.
- ➢ Work under progress at an estimate cost of RS.51.00 Lakh for Construction Compound Wall, and Providing Paver Block road and the work will be completed by 31.08.2019

Liquid Waste Management

I. Pathamadai Town Panchayat is having 17456 population and generates **0.250 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Canadian Irrigation channel.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 39.00 Lakhs for treatment and disposal of sullage water by Eco Ozotex Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the Canadian irrigation channel will be stopped permanently and only treated water will be discharged.

229

25. **Name of the river : Canadian Irrigation supply channel**

Name of the stretch: Canadian Irrigation supply channel

- ✓ Name of the ULB : Melaseval
- ✓ Population:8435
- ✓ MSW Generation:1.38 TPD
- ✓ Households: 2181
- ✓ Wet Waste: 0.412 TPD
- ✓ Dry Waste : 0.894 TPD
- ✓ Door to Door Collection:69%
- ✓ Source Segregation: 65 %
- ✓ 100% will be achieved by 31.12.2019
- ✓ Liquid waste Generation : 0.020 MLD.
- ✓ Wet Waste of 0.412 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 0.894 TPD
- ✓ Recycable waste (plastic, metal, rubber etc., 0.400 TPD sold out to the identified vendors.
- ✓ The Non Recycable waste of 0.494 TPD periodically disposed.
- ✓ Inerts & Silt -0.069 TPD Used in Filling Low Lying Areas.
- ✓ Work under progress at an estimate cost of RS.65.72 Lakh for Construction Compound Wall, and Providing Paver Block road and the work will be completed by 31.08.2019.

Liquid Waste Management

I. Melaseval Town Panchayat is having 8435 population and generates **0.020 MLD** of wastewater daily through 3 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Canadian Irrigation channel.

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 32.00 Lakhs for treatment and disposal of

sullage water by Eco Ozotex Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the Canadian irrigation channel will be stopped permanently and only treated water will be discharged.

26. Name of the river : Kuthalam Irrigation channel

Name of the stretch: Kuthalam Irrigation channel

- ✓ Name of the ULB : Kuthalam
- ✓ Population:16125
- ✓ MSW Generation:4.00 TPD
- ✓ Households: 4059
- ✓ Wet Waste: 2.880 TPD
- ✓ Dry Waste : 1.120 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 0.106 MLD.
- ✓ Wet Waste of 2.880 TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 1.120 TPD
- ✓ Recycable waste (plastic, metal, rubber etc., 0.030 TPD sold out to the identified vendors.
- ✓ The Non Recycable waste of 0.690 TPD periodically disposed.
- ✓ Inerts & Silt -0.40 TPD Used in Filling Low Lying Areas.
- ✓ Work under progress at an estimate cost of RS.15.60 Lakh for Providing Compound wall and toilet facilities and the work will be completed by 30.06.19.

Liquid Waste Management

I. Kuthalam Town Panchayat is having 16125 population and generates **0.106 MLD** of wastewater daily through 6 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. **Sullage water** generated from the town is discharged to Kuthalam Irrigation channel.

(231)

IV. To handle this sullage water, Detailed project report have been prepared at an estimated cost of Rs 50.00 Lakhs for treatment and disposal of sullage water by Eco Ozodation and Wet land Technology under IUDM for the year 2019-20 and will be completed by March 2020.

V. After the completion of this scheme work, Outfalls in the Kuthalam irrigation channel will be stopped permanently and only treated water will be discharged.

27. **Name of the river : Cauvery**

Name of the stretch: Cauvery River (Not connected directly to River Stretch)

- ✓ Name of the ULB : Thiruvaiyaru
- ✓ Population:16164
- ✓ MSW Generation:5.30 TPD
- ✓ Households: 3.40.00 TPD
- ✓ Dry Waste : 1.90 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Liquid waste Generation : 0.001 MLD.
- ➢ Wet Waste of 3.40TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 1.90 TPD
- ➢ Recycable waste (plastic, metal, rubber etc., 0.15 TPD sold out to the identified vendors.
- ➢ The Non Recycable waste of 0.95TPD periodically disposed.
- ➢ Inerts & Silt -0.80 TPD Used in Filling Low Lying Areas.
- ➢ Work under progress at an estimat cost of RS.151 Lakh for Bio Mininig for disposal of Historical waste, Providing 2/3 roof Windrow Shed, Compound Wall and Watch Man Shed and the work will be completed by 30.09.2019.

Liquid Waste Management

I. Thiruvaiyaru Town Panchayat is having 16164 population and generates 0.001 **MLD** of wastewater daily through 1 Outfall Channel.

II. The blackwater is collected in septic tanks by individual households.

III. 1000 Litre of Sullage water is treated by sand filteration method and treated water disposed in to Raja nagar B2 PWD Irrigation cannal.

28. **Name of the river : Kudamurithi**

Name of the stretch: Kudamurithi River

- ✓ Name of the ULB : Thirukattupalli
- ✓ Population:12972
- ✓ MSW Generation:5.30 TPD
- ✓ Households: 3304
- ✓ Wet Waste: 3.40 TPD
- ✓ Dry Waste : 1.90 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Wet Waste of 3.40TPD are processed by Windrow Compost method.
- ✓ Dry Waste – 1.90 TPD
- ✓ Recycable waste (plastic, metal, rubber etc., 0.15 TPD sold out to the identified vendors.
- ✓ The Non Recycable waste of 0.95TPD periodically disposed.
- ✓ Inerts & Silt -0.80 TPD Used in Filling Low Lying Areas.
- ✓ Estimate preprared at an estimated cost of Rs 70.00 Lakhs for disposal of Dumped waste under Bio mining method. The fund will be dovetailed under SBM for the year 2019-2020.
- ✓ Work under progress at an estimat cost of RS.52.30 Lakh for Providing 2/3 roof of Windrow Shed and Compound Wall and the work will be completed by 31.12.2019.

Liquid Waste Management

I. Thirukattupalli Town Panchayat is having 12972 population.
II. No sullage water let out from the households.

29. **Name of the river : -**

Name of the stretch: No discharge of sewage in River

- ✓ Name of the ULB : Arumuganeri
- ✓ Population:27266

(231)

- ✓ MSW Generation:4.98 TPD
- ✓ Households: 6968
- ✓ Wet Waste: 3.88 TPD
- ✓ Dry Waste : 1.10 TPD
- ✓ Door to Door Collection:100%
- ✓ Source Segregation: 100%
- ✓ Wet Waste of 3.88 TPD are processed by Vermi Compost method.
- ✓ Dry Waste – 1.10 TPD
- ✓ Recycable waste (plastic, metal, rubber etc., 0.50 TPD sold out to the identified vendors.
- ✓ The Non Recycable waste of 0.60 TPD periodically disposed.
- ✓ Work under progress at an estimate cost of RS.41.00 Lakh for Windrow platform, Vermi Compost and Paver Block Road and the work will be completed by 31.12.2019.

Name of the ULB : Arumuganeri

I. Arumuganeri Town Panchayat is having 27266 population.

II. No sullage water let out from the households.

OA 673 /2018

Identification of Polluted river stretches in Tamil Nadu

Sl. No.	River	Stretches			BOD in mg/l	Source	Priority
		From	To	Distance			
1	Sarabanga	Thathayampatti	T.Konagapadi	15	78	Domestic Sewage	I
2	Thirumani mutharu	Salem	Papparapatti	15	190	Domestic Sewage	I
3	Vasista	Manivilundhan	Thiyaganur	10	675	Domestic Sewage	I
4	Cauvery	Mettur	Mayiladuthurai	200	3.3 - 32	Domestic Sewage	I
5	Bhavani	Sirumugai to	Kalingarayan	60	3.3-6.6	Domestic Sewage	IV
6	Tamirabarani	Pappankulam	Arumuganeri	80	3.1 - 4	Domestic Sewage	V

Action Taken on Handling Solid Waste - CMA

Sl.No	Name of the River	Name of the ULB	Population	Total Garbage generation TPD	Door to Door Collection (%)	Source Segregation(%)	Wet Waste In TPD	Dry Waste (TPD)	Facility Created		Probable date of completion
									Wet waste	Dry Waste	
1	Bhavani	Gobichettipalayam	63633	20	100	83	11.00	9.00	11.00	Saleable : 5TPD Cement Factory :3TPD Inert & Silt : 1TPD	May-19
2		Mettupalayam	80217	24	95	70	12.00	12.00	12.00	Saleable : 8TPD Cement Factory :3TPD Inert & Silt : 1TPD	May-19
3		Sathiyamangalam	38194	12	92	66	7.00	5.00	8.00	Saleable : 6TPD Cement Factory :0.5TPD Inert & Silt : 1TPD	May-19
4		Erode Corporation	547933	170	87	49	85.00	85.00	85.00	Saleable : 35TPD Cement Factory :30TPD Inert & Silt : 20TPD	Aug-19
5	Cauvery	Mettur	55200	15	87	52	9.00	6.00	14.50	Saleable : 4TPD Cement Factory :1.5TPD Inert & Silt : 0.5TPD	Jun-19
6		Komarapalayam	76120	22	100	100	14.00	8.00	15.00	Saleable : 4.5TPD Cement Factory :3.5TPD Inert & Silt : 0.5TPD	Completed
7		Pallipalayam	44120	12	100	100	7.00	5.00	7.00	Saleable : 3TPD Cement Factory :1.4TPD Inert & Silt : 0.6TPD	Jun-19
8		Kulithalai	29580	7	100	100	4.00	3.00	9.00	Saleable : 1.5TPD RRC :1TPD Inert & Silt : 0.5TPD	Completed
9		Bhavani	40270	15	95	80	9.00	6.00	10.00	Saleable : 3.5TPD Cement Factory :1.5TPD Inert & Silt : 1TPD	Completed
10		Kumbakonam	142143	70	95	80	41.00	21.00	42.00	Saleable : 17TPD Cement Factory :9TPD Inert & Silt : 3TPD	Completed

Action Taken on Handling Solid Waste - CMA

Sl.No	Name of the River	Name of the ULB	Population	Total Garbage generation TPD	Door to Door Collection (%)	Source Segregation(%)	Wet Waste in TPD	Dry Waste (TPD)	Facility Created		Probable date of completion
									Wet waste	Dry Waste	
11	Cauvery	Mayiladuthurai	90112	32	100	60	18.00	14.00	20.00	Saleable : 7TPD Cement Factory :4TPD Inert & Silt : 3TPD	Apr-19
12		Trichy Corporation	1054859	390	100	92	222.00	168.00	235.00	Saleable : 101TPD Cement Factory :50TPD Inert & Silt : 17TPD	Apr-19
13	Tamirabarani	Ambasamudram	38850	15	100	80	9.00	6.00	10.00	Saleable : 3.6TPD Cement Factory :1.8TPD Inert & Silt : 0.6TPD	Apr-19
14		Vickaramasingapuram	47163	21	100	80	12.60	8.40	16.00	Saleable : 5TPD Cement Factory :2.5TPD Inert & Silt : 0.9TPD	Completed
15		Tirunelveli Corporation	513284	170	95	80	97.00	73.00	110.00	Saleable : 43TPD Cement Factory :21TPD Inert & Silt : 9TPD	Completed
16	Thirumanimuthaaru	Salem	913188	370	100	74	215.00	155.00	228.00	Saleable : 93TPD RRC :47TPD Inert & Silt : 15TPD	May-19
17	Vassista	Attur	65200	18	90	84	10.00	8.00	15.00	Saleable : 4.8TPD RRC :2.4TPD Inert & Silt : 0.8TPD	Apr-19
18		Narasingapuram	26000	7	94	87	4.00	3.00	8.00	Saleable : 1.8TPD Cement Factory :0.9TPD Inert & Silt : 0.3TPD	Apr-19
19	Sarabanga	Idapaddi	56193	16	100	86	9.00	7.00	15.00	Saleable : 4TPD Cement Factory :2.3TPD Inert & Silt : 0.7TPD	Completed

Action Taker on Handling Liqui ' Waste - CMA

S.No	Name of the River	Name of the ULB	Number of Outfalls	Whether sullage water (or) sewage	Quantity in MLD	Action plan proposed	Approxima te Project cost Rs.(in crore)	Whether fund Tied-up	Probable date of completion
1	2	3	4	5	6	7	8	9	10
1	Bhavani	Gobichettipalayam	7	Sullage water	4.90	Proposed to rejunuvate the odai & construct a STP of 5MLD	12.96	NABARD (Will be executed by PWD)	Dec-20
2		Mettupalayam		Sewage		UGSS town		Kfw	Jun-20
3		Sathiyamangalam		Sewage		UGSS town		IUDM	Dec-19
4		Erode Corporation		Sewage		UGSS town		Kfw	Dec-19
5	Cauvery	Mettur		Sewage		UGSS town		IUDM	Completed
6		Komarapalayam	5	Sullage water	5.60	In-situ treatment (Screen, Grit followed by Horizontal planted gravel filter)	10.54	IUDM 2019-20	Oct-19
7		Pallipalayam	7	Sullage water	4.26		4.13	IUDM 2019-20	Oct-19
8		Kulithalai	3	Sullage water	0.29		0.13	CGF 2019-20	Dec-19
9		Bhavani	6	Sullage water	1.35		0.37	IUDM 2019-20	Oct-19
10		Kumbakonam		Sewage		UGSS town		NRCP	Completed
11		Mayiladuthurai		Sewage		UGSS town		NRCP	Completed
12		Trichy Corporation		Sewage		UGSS town		AMRUT	Jun-22

Action Taken on Handling Liquid Waste - CMA

Sl.No	Name of the River	Name of the ULB	Number of Outfalls	Whether sullage water (or) sewage	Quantity in MLD	Action plan proposed	Approximate Project cost Rs.(in crore)	Whether fund Tied-up	Probable date of completion
1	2	3	4	5	6	7	8	9	10
13	Tamirabarani	Ambasamudram	6	Sullage water	2.00	In-situ treatment	0.77	IUDM 2019-20	Dec-19
14		Vickaramasingapuram	12	Sullage water	2.47		1.20	IUDM 2019-20	Dec-19
15		Tirunelveli Corporation		Sewage		UGSS town		AMRUT	Dec-21
16	Thirumanimutharu	Salem		Sewage		UGSS town		TNUDP-3	Package 1 & 3 Dec 19 Package 2 Dec 20
17	Vassista	Attur	3	Sullage water	0.09	In-situ treatment	1.65	CGF 2019-20	Dec-19
18		Narasingapuram	3	Sullage water	0.09		1.00	CGF 2019-20	Dec-19
19	Sarabanga	Idapaddi	22	Sullage water	2.80	In-situ treatment	2.50	CGF 2019-20	Dec-19
						Total Cost	**35.60**		

Action Taken on Handling Liquid Waste-DTP

Sl. No.	Name of the District	No of Sewage Outfall Identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of sewage generated in MLD	Details of under ground drainage sewerage system with STP facility	Status of sewage treatment plant	Mode of disposal of sewage	Plan of Action	Time frame for Completion
1	Trichy	4	Musiri	Cauvery River - Mettur Stretch	28727	0.800	Nil	Nil	Sullage Water Let out in to Mettu Vaikal.	Detailed project report have been prepared at an estimated cost of **Rs 570.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex Technology.**	March 2020
2	Trichy	8	Sirugamani	Cauvery River - Mettur Stretch	10743	0.440	Nil	Nil	Sullage Water Let out in to PuttuAiyanar Vaikal, Kallu vaikkal & Periya Vaikkal.	Detailed project report have been prepared at an estimated cost of **Rs 525.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex / Dry Land process Technology.**	March 2020
3	Namakkal	3	Mohanur	Cauvery River - Mettur Stretch Raja Vaikal	15174	0.550	Nil	Nil	Sullage water Let out in to Raja Vaikal.	Detailed project report have been prepared at an estimated cost of **Rs 160.00 Lakhs** for treatment and disposal of sullage water by **Reed Bed Filter Technology.**	March 2020
4	Namakkal	4	Velur	Cauvery River - Mettur Stretch Raja Vaikal	25012	1.196	Nil	Nil	Sullage water Let out in to Raja Vaikal.	Detailed project report have been prepared at an estimated cost of **Rs 150.00** Lakhs for treatment and disposal of sullage water by **Reed Bed Filter Technology.**	March 2020
5	Karur	3	Punjai Pugalur	Cavery river Mettur Stretch (Raja Vaikal)	25935	1.600	Nil	Nil	Sullage water Let out in to Raja Vaikal	Detailed project report have been prepared at an estimated cost of **Rs 150.00 Lakhs** for treatment and disposal of sullage water by **Reed Bed Filter Technology.**	March 2020

Action Taken on Handling Liquid Waste-DTP

Sl. No.	Name of the District	No of Sewage Outfall Identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of sewage generated in MLD	Details of under ground drainage sewerage system with STP facility	Status of sewage treatment plant	Mode of disposal of sewage	Plan of Action	Time frame for Completion
6	Erode	3	Bhavani sagar	Bhavani river Sirumugai to Kalingarayan stretch	7710	0.900	Nil	Nil	Sullage water Let out in to Bhavani river	Detailed project report have been prepared at an estimated cost of Rs **60.00 Lakhs** for treatment and disposal of sullage water by **Nano Bio Ozolyte Technology.**	March 2020
7	Coimbatore	12	Sirumugai	Bhavani river Sirumugai to Kalingarayan stretch	18323	0.835	Nil	Nil	Sullage water Let out in to Bhavani river	Detailed project report have been prepared at an estimated cost of Rs **200.00 Lakhs** for treatment and disposal of sullage water by **Nano Bio Ozolyte Technology.**	March 2020
8	Tirupur	5	Madathukulam	Amaravathi River - Madathukulam Stretch	20620	0.504	Nil	Nil	Sullage water Let out in to West side of Amaravathi river	Detailed project report have been prepared at an estimate cost of Rs **100.00 Lakhs** for treatment and disposal of sullage water by **Nano Bio Ozolyte Technology.**	March 2020
9	Salem	11	Omalur	Sarabanga River - Thathayampatty to T Gonagapadi Stretch	16279	1.160	Nil	Nil	Sullage water Let out in to Sarrabanga river	Detailed project report have been prepared at an estimated cost of Rs **300.00 Lakhs** for treatment and disposal of sullage water by **Reed Bed Filter Technology / Eco Ozotex.**	March 2020
10	Salem	5	Poallampatty	Sarabanga River - Thathayampatty to T Gonagapadi Stretch	10047	0.162	Nil	Nil	Sullage water Let out in to private Agriculture land	Detailed project report have been prepared at an estimated cost of Rs **50.00 Lakhs** for treatment and disposal of sullage water by **Reed Bed Filter Technology**	March 2020

Action Taken on Handling Liquid Waste-DTP

Sl. No.	Name of the District	No of Sewage Outfall identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of sewage generated in MLD	Details of under ground drainage sewerage system with STP facility	Status of sewage treatment plant	Mode of disposal of sewage	Plan of Action	Time frame for Completion
11	Salem	3	Pethanaikapalayam	Vasista River	17678	0.520	Nil	Nil	Sullage water Let out in to Vasista river	Detailed profect report have been prepared at an estimated cost of Rs **120.00 Lakhs** for treatment and disposal of sullage water by **Reed Bed Filter Technology.**	March 2020
12	Salem	3	Yethapur	Vasista River	11626	0.490	Nil	Nil	Sullage water Let out in to Vasista river	Detailed project report have been prepared at an estimated cost of Rs **100.00 Lakhs** for treatment and disposal of sullage water by **Reed Bed Filter Technology.**	March 2020
13	Salem	3	Belur	Vasista River	9260	0.460	Nil	Nil	Sullage water Let out in to Vasista river	Detailed project report have been prepared at an estimated cost of Rs **100.00 Lakhs** for treatment and disposal of sullage water by **Reed Bed Filter Technology.**	March 2020
14	Tuticorin	2	Srivaikundam	Thamiraparani River Stretch (North Canal)	15847	0.700	Nil	Nil	Sullage water Let out in to North canal of Thamirabarani river	Detailed project report have been prepared at an estimated cost of Rs **53.00 Lakhs** for treatment and disposal of sullage water by **Reed Bed Filter Technology.**	March 2020
15	Tuticorin	1	Authoor	Thamiraparani River Stretch	10138	0.500	Nil	Nil	Sullage water Let out in to Thamirabarani river	Detailed project report have been prepared at an estimated cost of Rs **30.00 Lakhs** for treatment and disposal of sullage water by **Aeriation Technology.**	March 2020

Action Taken on Handling Liquid Waste-DTP

Sl. No.	Name of the District	No of Sewage Outfall Identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of sewage generated in MLD	Details of under ground drainage sewerage system with STP facility	Status of sewage treatment plant	Mode of disposal of sewage	Plan of Action	Time frame for Completion
16	Tuticorin	2	Eral	Thamiraparani River Stretch	10599	0.600	Nil	Nil	Sullage water Let out in to Thamirabarani river	Detailed project report have been prepared at an estimated cost of Rs **60.20 Lakhs** for treatment and disposal of sullage water by **Reed Bed Filter Technology.**	March 2020
17	Tuticorin	3	Alwarthirunagari	Thamiraparani River Stretch	9500	0.164	Nil	Nil	Sullage water Let out in to south canal of Thamirabarani river	Detailed project report have been prepared at an estimated cost of Rs **76.20 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex Technology.**	March 2020
18	Tuticorin	1	Then Thiruperai	Thamiraparani River Stretch	4934	0.400	Nil	Nil	Sullage water Let out in to Town Panchayat own land and Private Land	Detailed project report have been prepared at an estimated cost of Rs **30.20 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex Technology.**	March 2020
19	Tirunelveli	2	Mukkudal	Thamiraparani River Stretch	16755	0.070	Nil	Nil	Sullage water Let out in to Velodai Channel	Detailed project report have been prepared at an estimated cost of Rs **30.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex Technology.**	March 2020
20	Tirunelveli	3	Gopalasamudram	Thamiraparani River Stretch	11228	0.500	Nil	Nil	Sullage water Let out in to Vagaikulam Kanmai	Detailed project report have been prepared at an estimated cost of Rs **41.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex Technology.**	March 2020

Action Taken on Handling Liquid Waste-DTP

Sl. No.	Name of the District	No of Sewage Outfall Identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of sewage generated in MLD	Details of under ground drainage sewerage system with STP facility	Status of sewage treatment plant	Mode of disposal of sewage	Plan of Action	Time frame for Completion
21	Tirunelveli	3	Kallidaikurichi	Cannadian Irrigation supply channel	26398	0.350	Nil	Nil	Sullage water Let out in to Canadian Irrigation Channel	Detailed project report have been prepared at an estimated cost of Rs **105.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex / Aeriation Technology.**	March 2020
22	Tirunelveli	4	Cheranmahadevi	Cannadian Irrigation supply channel	18327	0.110	Nil	Nil	Sullage water Let out in to Canadian Irrigation Channel	Detailed project report have been prepared at an estimated cost of Rs **45.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex Technology.**	March 2020
23	Tirunelveli	3	Veeravanallur	Cannadian Irrigation supply Channel	19585	0.250	Nil	Nil	Sullage water Let out in to Canadian Irrigation Channel	Detailed project report have been prepared at an estimated cost of Rs **49.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex Technology.**	March 2020
24	Tirunelveli	3	Pathamadai	Cannadian Irrigation supply Channel	17456	0.250	Nil	Nil	Sullage water Let out in to Canadian Irrigation Channel	Detailed project report have been prepared at an estimated cost of Rs **39.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex Technology.**	March 2020
25	Tirunelveli	3	Melaseval	Cannadian Irrigation supply Channel	8435	0.020	Nil	Nil	Sullage water Let out in to Canadian Irrigation Channel	Detailed project report have been prepared at an estimated cost of Rs **32.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozotex Technology.**	March 2020

Action Taken on Handling Liquid Waste-DTP

Sl. No.	Name of the District	No of Sewage Outfall Identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of sewage generated in MLD	Details of under ground drainage sewerage system with STP facility	Status of sewage treatment plant	Mode of disposal of sewage	Plan of Action	Time frame for Completion
26	Nagapatinam	6	Kuthalam	Kuthalam Irrigation channel	16125	0.106	Nil	Nil	Sullage water Let out in to Kuthalam Irrigation Channel	Detailed project report have been prepared at an estimated cost of **Rs 50.00 Lakhs** for treatment and disposal of sullage water by **Eco Ozodation / Wet land Technology.**	March 2020
27	Thanjavur	1	Thiruvaiyaru	Cauvery River (Not connected directly to River Stretch)	16164	0.001	Nil	Nil	1000 Litre of Sullage water is treated by sand filteration method and treated water disposed in to Raja nagar B2 PWD Irrigation cannal		
28	Thanjavur	0	Thirukattupalli	Kudamurthi River	12972	0.000	Nil	Nil	No sewage water let out from the households.		
29	Tuticorin	0	Arumuganeri	No discharge of sewage in river stretch	27266	0.000	Nil	Nil	No sewage water let out from the households.		

Action Tal n on Handling Sol l Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
1	Trichy	Nil	Musiri	Cauvery River - Mettur Stretch	28727	10.50	Yes	Windrow composting and Vermi composting	> Wet Waste of 6.350 TPD are processed by Windrow Compost method. (Per Day) Dry Waste – 4.150 TPD > Recycable waste (plastic, metal, rubber etc., 1.700 TPD sold out to the identified vendors. > The Non Recycable waste of 0.270 TPD periodically disposed to Ariyalur Cement Factory > Inerts & Silt -2.180 TPD Used in Filling Low Lying Areas.	1. Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016. 2. Work Order Issued at an Estimate Cost of Rs.113.53 Lakhs for Disposal of Historical Waste by Bio-Mining Method.	31.12.2019
2	Trichy	Nil	Sirugamani	Cauvery River - Mettur Stretch	10743	2.76	Yes	Windrow composting and Vermi composting	> Wet Waste of 1.29 TPD are processed by Windrow Compost method. (Per Day) Dry Waste – 1.47TPD > Recycable waste (plastic, metal, rubber etc.0.25TPD sold out to the identified vendors. > The Non Recycable waste of 0.940 TPD periodically disposed. > Inerts & Silt -0.28 TPD Used in Filling Low Lying Areas.	Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.	

Action Taken on Handling Solid Waste-DTP

SL No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
3	Namakkal	Nil	Mohanur	Cauvery River - Mettur Stretch Raja Vaikal	15174	3.05	Yes	Windrow composting	Wet Waste of 1.453 TPD are processed as manure by Windrow & Vermi Compost method and then sold to Farmers. Dry Waste – 0.697 TPD > Recycable waste (plastic, metal, rubber etc., 0.240 TPD sold out to the identified vendors. > The Non-Recycable waste of 0.457 TPD periodically disposed. > Inerts & Silt 0.900 TPD used for filling pre-identified low lying areas.	Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.	
4	Namakkal	Nil	Velur	Cauvery River - Mettur Stretch Raja Vaikal	25012	8.37	Yes	Windrow composting	Wet Waste of 5.33 TPD are processed as manure by Windrow & Vermi Compost method and then sold to Farmers. Dry Waste – 1.78 TPD Recycable waste (plastic, metal, rubber etc., 0.270 TPD sold out to the identified vendors. The Non-Recycable waste of 1.510 TPD periodically disposed. Inerts & Silt 1.260 TPD used for filling pre-identified low lying areas	Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016. Work order issued for Bio mining and construction of Compound wall at an estimated cost of Rs 47.50 Lakhs.	30.09.2019

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
5	Karur	Nil	Punjai Pugalur	Cavery river Mettur Stretch (Raja Vaikal)	25935	7.20	Yes	Windrow composting and Vermi composting	> Wet Waste of 3.70 TPD are processed by Windrow Compost method. Dry Waste – 2.95 TPD > Recycable Waste (Plastic, Metal, Rubber etc., 0.55 TPD sold out to the identified vendors. > The Non Recycable waste of 2.40 TPD periodically disposed. > Inerts & Silt - 0.55 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.32 Lakh for Construction of Compound Wall and 0.5 Km Approach Road at Existing Resource Recovery Park.	30.09.19
6	Erode	Nil	Bhavani sagar	Bhavani river Sirumugai to Kalingarayan stretch	7710	1.72	yes	Windrow Composting	> Wet Waste of 1.00 TPD are processed by Windrow Compost method. Dry Waste – 0.420 TPD > Recycable waste (plastic, metal, rubber etc., 0.005 TPD sold out to the identified vendors. > The Non Recycable waste of 0.415 TPD periodically disposed. > Inerts & Silt -0.300 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of Rs.36.00 lakhs for Construction of compound wall work	31.05.2019

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
7	Coimbatore	Nil	Sirumugai	Bhavani river Sirumugai to Kalingarayan stretch	18323	3.10	yes	Windrow composting and Vermi composting	> Wet Waste of 1.81 TPD are processed by Windrow Compost method. Dry Waste – 1.29 TPD > Recycable waste (plastic, metal, rubber etc., 0.50 TPD sold out to the identified vendors. > The Non Recycable waste of 0.51 TPD periodically disposed. > Inerts & Silt -0.28 TPD Used in Filling Low Lying Areas.	Solid waste Collected Door to Door and the waste are processed as manure in decentrelized method at three places. Action taken to Procured Land for Resource Recovery Park.	31.12.19
8	Tiruppur	Nil	Madathukulam	Amaravathi River - Madathukulam Stretch	20620	5.29	Yes	Windrow composting and Vermi composting	> Wet Waste of 3.17 TPD are processed by Windrow Compost method. Dry Waste – 2.12 TPD > Recycable waste (plastic, metal, rubber etc., 0.50 TPD sold out to the identified vendors. > The Non Recycable waste of 1.12 TPD periodically disposed. > Inerts & Silt -0.5 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.23.90 Lakh for Construction of Compound Wall and Windrow roof work.	31.08.19

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
9	Salem	Nil	Omalur	Sarabanga River - Thathayampatty to T.Gonagapadi Stretch	16279	5.84	Yes	Windrow composting and Vermi composting	Wet Waste of 3.212 TPD are processed by Windrow Compost method. Dry Waste – 2.628 TPD 1) Recycable waste (plastic, metal, rubber etc., 0.300 TPD sold out to the identified vendors. 2) The Non Recycable waste of 1.828 TPD periodically disposed. 3) Inerts & Silt 0.500 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.110 Lakh for Providing Protection Wall, Compound Wall, additional Windrow Platform with Shed, and Bio Mininig for disposal of Historical waste	31.12.2019
10	Salem	Nil	Poallampatty	Sarabanga River - Thathayampatty to T.Gonagapadi Stretch	10047	1.52	yes	De-Centralised windrow composting method	> Out of 15 wards, 6 wards are rural in nature. Many of the households are doing home composting > Wet Waste of 1.10 TPD are processed by Micro Composting (De-Centralised) Dry Waste – 0.40 TPD > Recyclable waste (plastic, metal, rubber etc., 0.300 TPD sold out to the identified vendors. > The Non Recyclable waste of 0.10 TPD periodically disposed. > Inerts & Silt 0.02 TPD used in Filling Low Lying Areas.	Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.	

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
11	Salem	Nil	Pethanaikapalayam	Vasista River	17678	2.83	yes	Windrow composting	> Wet Waste of 1.330 TPD are processed by Windrow Compost method. > Dry Waste – 0.916 TPD > Recycable waste (plastic, metal, rubber etc., 0.150 TPD sold out to the identified vendors. > The Non Recycable waste of 1.330 TPD periodically disposed. > Inerts & Silt -0.580 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.60 Lakh for Providing Protection Compound Wall and additional Windrow Platform with Shed	31.12.2020
12	Salem	Nil	Yethapur	Vasista River	11626	2.90	Yes	Windrow composting and Vermi composting	> Wet Waste of 1.670 TPD are processed by Windrow Compost method. Dry Waste – 1.010 TPD > Recycable waste (plastic, metal, rubber etc., 0.24 TPD sold out to the identified vendors. > Inerts & Silt -0.420 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.100 Lakh for Providing Protection Wall, Compound Wall, additional Windrow Platform with Shed, and Bio Mininig for disposal of Historical waste	31.12.19

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
13	Salem	Nil	Belur	Vasista River	9260	1.75	yes	Windrow composting	Wet Waste of 1.75 TPD are processed by Windrow Compost method. Dry Waste – 0.300 TPD 1) Recycable waste (plastic, metal, rubber etc., 0.075 TPD sold out to the identified vendors. 2) The Non Recycable waste of 0.225 TPD periodically disposed. 3) Inerts & Silt 0.410 TPD Used in Filling Low Lying Areas.	Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.	-
14	Tuticorin	Nil	Srivaikundam	Thamiraparani River Stretch (North Canal)	15847	4.20	yes	Windrow composting and Vermi composting	> Wet Waste of 1.50 TPD are processed by Vermi Compost method. Dry Waste – 2.50 TPD > Recycable waste (plastic, metal, rubber etc., 1.00 TPD sold out to the identified vendors. > The Non Recycable waste of 1.50 TPD periodically disposed. > Inerts & Silt -0.20 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.27.90 Lakh for infra facility.	31.08.19

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
15	Tuticorin	Nil	Authoor	Thamiraparani River Stretch	10138	2.00	yes	Windrow composting and Vermi composting	> Wet Waste of 1.50 TPD are processed by Vermi Compost method. Dry Waste – 0.500 TPD > Recycable waste (plastic, metal, rubber etc., 0.20 TPD sold out to the identified vendors. > The Non Recycable waste of 0.30 TPD periodically disposed. > Inerts & Silt -0.00 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.95.30 Lakh for Construction of Compound wall, Retaining wall, Shed, Watch man Shed, Roads, Lighting and Toilet facilities	31.08.19
16	Tuticorin	Nil	Eral	Thamiraparani River Stretch	10599	2.85	yes	Windrow composting and Vermi composting	> Wet Waste of 1.71 TPD are processed by Vermi Compost method. Dry Waste – 0.760 TPD > Recycable waste (plastic, metal, rubber etc., 0.300 TPD sold out to the identified vendors. > The Non Recycable waste of 0.460 TPD periodically disposed. > Inerts & Silt -0.38 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.15.00 Lakh for Construction of Compound wall, Water Supply and Vermi Compost.	31.08.19

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
17	Tuticorin	Nil	Alwarthirunagari	Thamiraparani River Stretch	9500	1.57	yes	Vermi composting	> Wet Waste of 0.84 TPD are processed by Vermi Compost method. Dry Waste – 0.56 TPD > Recycable waste (plastic, metal, rubber etc., 0.20 TPD sold out to the identified vendors. > The Non Recycable waste of 0.36 TPD periodically disposed. > Inerts & Silt -0.17 TPD Used in Filling Low Lying Areas.	Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.	-
18	Tuticorin	Nil	Then Thiruperai	Thamiraparani River Stretch	4934	0.75	yes	Vermi composting	Nearly 30 to 40% of Household are practicing home composting process. Town panchayats are also encouraging the home composting. > Wet Waste of 0.340 TPD are processed by Vermi Compost method. Dry Waste – 0.310 TPD > Recycable waste (plastic, metal, rubber etc., 0.100 TPD sold out to the identified vendors. > The Non Recycable waste of 0.250 TPD periodically disposed. > Inerts & Silt -0.10 TPD Used in Filling Low Lying Areas	Work under progress at an estimate cost of RS.41.40 Lakh for Construction of Windrows platform , water supply and Vermi shed are in progress	31.08.19

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
19	Tirunelveli	Nil	Mukkudal	Thamiraparani River Stretch	16755	4.30	yes	Windrow composting and Vermi composting	> Wet Waste of 2.58 TPD are processed by Windrow Compost method. Dry Waste – 1.72 TPD > Recycable waste (plastic, metal, rubber etc., 0.50 TPD sold out to the identified vendors. > The Non Recycable waste of 0.50 TPD periodically disposed. > Inerts & Silt 0.50 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.128 Lakh for Providing Constrution of Windrows Platform,Store Room, Watchman Shed,Mahinery Room,Vermi Compost Cubical And Providing Fencing ,Interlocking paver block road And Water Supply Toilet Arrangement At Compost Yard	31.08.19
20	Tirunelveli	Nil	Gopalasamudram	Thamiraparani River Stretch	11228	1.42	yes	Windrow composting and Vermi composting	Nearly 30 to 40% of of Household are practicing home composting process. Town panchayats are also encouraging the home composting. > Wet Waste of 0.310 TPD are processed by Windrow Compost method. Dry Waste – 0.400 TPD > Recycable waste (plastic, metal, rubber etc., 0.180 TPD sold out to the identified vendors. The Non Recycable waste of 0.220 TPD periodically disposed. Inerts & Silt -0.710 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.6.00 Lakh for Road, Water Supply, Light & Toilet	31.08.19

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
21	Tirunelveli	Nil	Kallidaikurichi	Cannadian Irrigation supply channel	26398	8.10	yes	Windrow composting and Vermi composting	> Wet Waste of 4.600 TPD are processed by Windrow Compost method. Dry Waste – 2.000TPD > Recycable waste (plastic, metal, rubber etc., 1.00 TPD sold out to the identified vendors. > The Non Recycable waste of 1.00 TPD periodically disposed. > Inerts & Silt -1.50 TPD Used in Filling Low Lying Areas.	Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.	
22	Tirunelveli	Nil	Cheranmahadevi	Cannadian Irrigation supply channel	18327	4.50	yes	Windrow composting and Vermi composting	> Wet Waste of 3.000 TPD are processed by Windrow Compost method. Dry Waste – 0.900 TPD > Recycable waste (plastic, metal, rubber etc., 0.30 TPD sold out to the identified vendors. > The Non Recycable waste of 0.600 TPD periodically disposed. > Inerts & Silt -0.600 TPD Used in Filling Low Lying Areas.	Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.	

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
23	Tirunelveli	Nil	Veeravanallur	Cannadian Irrigation supply Channel	19585	3.23	yes	Windrow composting and Vermi composting	> Wet Waste of 2.092 TPD are processed by Windrow Compost method. Dry Waste – 0.940 TPD > Recyclable waste (plastic, metal, rubber etc., 0.440 TPD sold out to the identified vendors. > The Non Recyclable waste of 0.500 (Inert & Silt)TPD periodically disposed. > Inert & Silt -0.20 TPD Used in Filling Low Lying Areas.	Collection, segregation, treatment, disposal are under implementation in accordance with Municipal Solid Waste management Rules 2016.	-
24	Tirunelveli	Nil	Pathamadai	Cannadian Irrigation supply Channel	17456	2.62	yes	Windrow composting and Vermi composting	> Wet Waste of 1.72 TPD are processed by Windrow Compost method. Dry Waste – 0.70 TPD > Recycable waste (plastic, metal, rubber etc., 0.20 TPD sold out to the identified vendors. > The Non Recycable waste of 0.50 TPD periodically disposed. > Inerts & Silt -0.20 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.51.00 Lakh for Construction Compound Wall, and Providing Paver Block road	31.08.19

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
25	Tirunelveli	Nil	Melaseval	Cannadian Irrigation supply Channel	8435	1.38	yes	Windrow composting ard Vermi composting	> Wet Waste of 0.412 TPD are processed by Windrow Compost method. Dry Waste – 0.894 TPD > Recycable waste (plastic, metal, rubber etc., 0.400 TPD sold out to the identified vendors. > The Non Recycable waste of 0.494 TPD periodically disposed. > Inerts & Silt -0.069 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.65.72 Lakh for Construction Compound Wall, and Providing Paver Block road	31.08.19
26	Nagapatinam	Nil	Kuthalam	Kuthalam Irrigation channel	16125	4.00	yes	Windrow composting and Vermi composting	> Wet Waste of 2.880 TPD are processed by Windrow Compost method. Dry Waste – 1.120 TPD > Recycable waste (plastic, metal, rubber etc., 0.030 TPD sold out to the identified vendors. > The Non Recycable waste of 0.690 TPD periodically disposed. > Inerts & Silt -0.40 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.15.60 Lakh for Providing Compound wall and toilet facilities	30.06.19

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
27	Thanjavur	Nil	Thiruvaiyaru	Cauvery River (Not connected directly to River Stretch)	16164	5.30	yes	Windrow composting and Vermi composting	> Wet Waste of 3.40TPD are processed by Windrow Compost method. Dry Waste – 1.90 TPD > Recycable waste (plastic, metal, rubber etc., 0.15 TPD sold out to the identified vendors. > The Non Recycable waste of 0.95TPD periodically disposed. > Inerts & Silt -0.80 TPD Used in Filling Low Lying Areas.	Work under progress at an estimate cost of RS.151 Lakh for Bio Mining for disposal of Historical waste, Providing 2/3 roof Windrow Shed, Compound Wall and Watch Man Shed.	30.09.19
28	Thanjavur	1	Thirukattupalli	Kudamurthi River	12972	5.30	yes	Windrow composting	Wet Waste of 3.40TPD are processed by Windrow Compost method. Dry Waste – 1.90 TPD > Recycable waste (plastic, metal, rubber etc., 0.15 TPD sold out to the identified vendors. > The Non Recycable waste of 0.95TPD periodically disposed. > Inerts & Silt -0.80 TPD Used in Filling Low Lying Areas.	Estimate preprared at an estimated cost of Rs 70.00 Lakhs for disposal of Dumped waste under Bio mining method. The fund will be dovetailed under SBM for the year 2019-2020. Work under progress at an estimat cost of RS.52.30 Lakh for Providing 2/3 roof of Windrow Shed and Compound Wall.	31.12.19

Action Taken on Handling Solid Waste-DTP

Sl. No.	Name of the District	No of MSW dumping Points identified	Name of Town Panchayat	Name of the River Stretchs	Present Population	Quantity of MSW generated in Tonnes / day	Whether MSW segregated at source	Treatment method	Present mode of MSW disposal	Plan of Action	Time frame for Completion
29	Tuticorin	Nil	Arumuganeri	No discharge of sewage in river stretch	27266	4.98	yes	Windrow composting	> Wet Waste of 3.88 TPD are processed by Vermi Compost method. Dry Waste – 1.10 TPD > Recycable waste (plastic, metal, rubber etc., 0.50 TPD sold out to the identified vendors. > The Non Recycable waste of 0.60 TPD periodically disposed.	Work under progress at an estimate cost of RS.41.00 Lakh for Windrow platform, Vermi Compost and Paver Block Road	31.12.19

260

AIR QUALITY MONITORING COMMITTEE FOR PREPARATION AND IMPLEMENTATION OF ACTION PLAN FOR IMPROVING THE AMBIENT AIR QUALITY IN NON-ATTAINED CITY

261

ABSTRACT

Environment – Constitution of Air Quality Monitoring Committee (AQMC) for preparation and implementation of action plan for improving the ambient air quality in non-attained city (Thoothukudi) as per the orders of Hon'ble National Green Tribunal in O.A.No.681/2018, dated 08.10.2018 – Orders – Issued.

Environment and Forests (EC.2) Department

G.O.(D).No.20

Dated : 10.01.2019
விளம்பி, மார்கழி 26
திருவள்ளுவர் ஆண்டு -2049

Read :

Orders of Hon'ble National Green Tribunal, Principal Bench, New Delhi, in O.A.No.681/2018, dated: 08.10.2018.

* * * * * *

ORDER

The Central Pollution Control Board (CPCB) in association with the State Pollution Control Boards is executing Nationwide programme of Ambient Air Quality Monitoring Programme (NAMP). The objectives of the NAMP are to determine the status and trends of ambient air quality to ascertain whether the prescribed ambient air quality standards are violated; to identify non-attainment cities' to obtain knowledge and understanding necessary for developing, preventive and corrective measures. In Tamil Nadu, Thoothukudi has been identified as Non-attainment City based on the parameter PM_{10} which exceeds the National Ambient Air Quality Standards (NAAQS) namely 100 $\mu g/m^3$ for 24 hours based on the five years (2011-2015) data.

2. Action plans for the non attainment city (Thoothukudi) are to be prepared for bringing the air quality within the prescribed norms within six months from date of finalization of the action plans.

3. Based on the above, the Government after careful examination have decided to Constitute the Air Quality Monitoring Committee (AQMC) under the chairmanship of the Principal Secretary to Government, Environment and Forests Department with the following members for preparation and implementation of action plan for improving the ambient air quality in Thoothukudi :-

1.	Principal Secretary to Government, Environment and Forests Department	Chairman
2.	The Director of Environment, Department of Environment	Member
3.	Commissioner, Transport Department	Member

(P.T.O.)

(262)

4.	Commissioner / Director Industries and Commerce	Member
5.	Commissioner Municipal Administration Department	Member
6.	Director, Agriculture Department	Member
7.	The Member Secretary Tamil Nadu Pollution Control Board	Member/Convener

(BY ORDER OF THE GOVERNOR)

SHAMBHU KALLOLIKAR
PRINCIPAL SECRETARY TO GOVERNMENT

To
The Chairman,
Tamil Nadu Pollution Control Board, Guindy, Chennai-32.
The Director of Environment,
Department of Environment, Saidapet,Chennai -15.
The Commissioner, Transport Department, Chepauk, Chennai-5.
The Commissioner / Director,
Department of Industries and Commerce, Guindy, Chennai – 32
The Commissioner of Municipal Administration, Chepauk, Chennai-5
The Director, Agriculture Department, Chennai -5
The Member Secretary, Tamil Nadu Pollution Control Board, Guindy, Chennai 32.

Copy to:
The Additional Chief Secretary to Government,
Industries Department, Secretariat, Chennai-9
The Principal Secretary to Government,
Transport Department, Secretariat, Chennai-9
The Principal Secretary to Government,
Municipal Administration and Water Supply Department, Secretariat, Chennai-9
The Principal Secretary to Government,
Agriculture Department, Secretariat, Chennai – 9.
The District Collector, Thoothukudi District
The Special Personal Assistant to Hon'ble Minister (Environment),
Secretariat, Chennai-9.
The Private Secretary to Principal Secretary to Government,
Environment and Forests Department, Secretariat, Chennai-9.
SF/SC.

// Forwarded by Order //

Section Officer

(263)

MINUTES OF THE MEETING TO DISCUSS THE ACTION PLAN FOR ABATEMENT OF POLLUTION FOR THOOTHUKUDI TOWN-NON-ATTAINEMENT TOWN HELD ON 6.12.2018 AT 12.00 NOON AT SECRETARIAT, CHENNAI-9

PRESENT:

Sl. NO	Designation	Department
1	The Principal Secretary to Government.	Environment and Forest Department.
2	The Joint Secretary to Government.	Municipal Administration and Water Supply Department
3	Additional Secretary to Government.	Transport Department
4	The Deputy Secretary to Government.	Environment and Forest Department.
5	The Deputy Secretary to Government.	Industries Department.
6	The Deputy Secretary to Government.	Agriculture Department.
7	The Member Secretary	TNPC Board,Chennai-32
8	The Assistant Executive Engineer.	O/o Director of Environment, Chennai-15
9	Deputy Director(Labs)-I.	TNPC Board,Chennai-32
10	Deputy Director (Labs)-II.	TNPC Board,Chennai-32

The Principal Secretary to Government, Environment and Forest Department welcomed the representative members of the Air Pollution Monitoring Committee formed to discuss the action plan for the abatement of Air Pollution in Thoothukudi city and instructed the Deputy Director (Labs)-I to present the power point presentation.

The Deputy Director (Labs),TNPC Board made the power point presentation to the members on proposed Action Plan for the abatement of air pollution in Thoothukudi city based and the direction issued by Hon`ble NGT in its original application No 681 of 2018 dated 8.10.2018.

The salient features of the presentations are as follows.

- In India there are 691 manually operated Air Quality monitoring stations in 303 cities under National Air Quality Monitoring (NAMP) project sponsored by CPCB are in operation. Of the above 28 NAMP monitoring stations are in the state of TamilNadu. These stations are located in the cities of Chennai, Coimbatore, Cuddalore, Trichy, Salem, Mettur, Madurai and Thoothukudi.
- The above stations are operated on 24 hours basis for criteria pollutants twice a week regularly and the results are uploaded in CPCB website.

- Based on the analytical results for the period 2011-2015 the CPCB, Delhi has identified the Thoothukudi city as a non attainment city based on the Particulate matter of size less than10 microns (PM_{10}) values.
- The general profile and the demography of the Thoothukudi city were presented.
- Major activities of the Thoothukudi city namely industrial, Port activities, Food industries, Commercial and Tourism activities were presented.
- Origin of Non Attainment city and sources of activities which contributes to the PM_{10} values were discussed.

- A six member committee "Air Quality Monitoring Committee (AQMC)" comprising of the following

    1. Director of Environment.
    2. Transport Department.
    3. Industries Department.
    4. Urban Development Department.
    5. Agriculture Department.
    6. The Member Secretary, State Pollution Control Board.

is formed based on the orders of the National Green Tribunal (PB) Delhi to discuss the action plan for Thoothukudi city.

- The present air environment in the Thoothukudi city and the annual average values of the PM_{10} values were presented.
- Sources of Air Pollution and inventory of vehicles based on the data of TNPCB and the State transport Authority data base were presented.
- Present Activities to reduce Air Pollution level in Thoothukudi town was discussed.
- Installation of pipe lines by oil companies to transport fuels reduces the transport of the same in vehicles was presented.
- Technological intervention to reduce pollution level was presented.
- Action plan for abating the pollution level in Thoothukudi city. Short term action points (up to one year including the ongoing activities) were presented.
- Action plan for abating the pollution level in Thoothukudi city Long term action points (One year and above including the ongoing activities)

Based on the presentation the Principal Secretary to Government, Environment and Forest Department has stated the followings.

- The reasons may be explored for the high value for PM_{10} in Thoothukudi city and also for the specific reasons behind classifying the Thoothukudi city as non attainment city
- The Activities of the Port trust in the handling of items exported and imported are to be closely monitored to reduce pollution from non point sources.
- The inventory of the vehicles which are not registered in Thoothukudi city but entering the city may be arrived utilizing the data from Highways tollgates.
- The performance of the Air Pollution Control measures employed in Thermal Power plants and also in other Industries and the available data on industries may be compiled and report should be drawn.
- The Principal Secretary to Government, Environment and Forest Department enquired about the status of previous action plan submitted to CPCB.
- The time limit for the implementation of the action plan to be specifically mentioned.
- The Principal Secretary to Government, Environment and Forest Department enquired about the Ambient Air Quality monitoring survey report of Port Trust.
- The Infrastructural development like construction of flyovers, widening of roads, six lane of Highways in Thoothukudi city is a long drawn process and instructed to draw necessary short term plan for reducing the PM_{10} value.
- The development of green belt in the industrial area and in Thoothukudi city is minimal and the green cover area has to be increased.
- It is also observed that vehicular pollution is a part in contributing the dust level in the Thoothukudi city and others also contributes to the pollution level.
- It is also emphasized that the stations which are issuing the Pollution Under Control (PUC) certificate in the state of Tamil Nadu are not sufficient and has to be increased. Letter in this regard has to be sent to the Transport Department.

The Member Secretary, TNPCB has also insisted that the present compliance status to the Air act by the industries is to be prepared and time limit to be fixed to ensure the compliance.

Based on the above clarifications and suggestions raised by the Principal Secretary to Government, Environment and Forest Department, the concerned officials has answered the followings

- The Joint Secretary, MA&WS has informed that the Corporation of Thoothukdi city will be advised to increase the number of road sweeping machines in the city to reduce suspended road dust.
- The Deputy Secretary, Industries department informed that the wind pattern in the Thoothukudi town is the main cause of air pollution and informed that the number of industries which are in operation will be obtained from SIPCOT.

266

- The Deputy Secretary, Industries department has also pointed that the APC measures available in the Industries and their compliance report shall be evolved.
- The Deputy Secretary, Agriculture department informed that the open burning of biomass was not in practice in Thoothukudi city and necessary action will be taken to prevent the same.
- The Deputy Director (Labs), TNPCB, Chennai has informed that all the suggestions and the instructions will be included in the revised action plan to be submitted to CPCB.

After the detailed discussions the following decisions were arrived.

- The Action plan has to include the action points in green belt development in the Thoothukudi town

- Time limit specifying the month and year of completion of action points are to be prescribed in the Action Plan.

With the thanks to the participants, the meeting came to an end.

(Sd)/-Principal Secretary,
Environment and Forest Department
Tamil Nadu.

/Forwarded by Order/

Deputy Director (Labs)-II
TNPCB, Chennai-32