

**BEFORE THE HON'BLE NATIONAL GREEN
TRIBUNALSOUTHERN ZONE, CHENNAI**

IN

ORIGINAL APPLICATION NO. 100 of 2021

Petitioner : Tribunal on its own motion Suo Motu based on the News item published in The Hindu Newspaper, Chennai Edition Dt.09.04.2021, “ Dumping of garbage foiled near Anamalai, trucks Seized”.

Versus

Respondent(s) : Chief Secretary to Govt. of Tamil Nadu, & Others

**REPORT FILED BY THE ENVIRONMENTAL ENGINEER,
REGIONAL OFFICE, ERNAKULAM FOR AND ON BEHALF OF
THE KERALA STATEPOLLUTION CONTROL BOARD**

Adv.Remam Smrithi.

ADDITIONAL STANDING COUNSEL FOR THE RESPONDENT:

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

IN

ORIGINAL APPLICATION NO. 100 of 2021

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Dated this the 6th day of December 2021

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI
APPLICATION NO 100 of 2021(SZ)
[SUO MOTO]

Applicant : The Tribunal on its own motion Suo Motu based on the News item published in The Hindu Newspaper, Chennai Edition Dt. 09.04.2021, "Dumping of garbage foiled near Anamalai, trucks Seized."

Respondents : Chief Secretary to Govt. of Tamil Nadu, & Others

**REPORT FILED BY THE ENVIRONMENTAL ENGINEER, REGIONAL OFFICE, ERNAKULAM
 FOR AND ON BEHALF OF THE KERALA STATE POLLUTION CONTROL BOARD**

- 1) I, Mini Mary Sam, aged 54 years, W/o Ranjan Jacob, Environmental Engineer do here by submit that I am authorised to represent the Kerala State Pollution Control Board, and that I am conversant with the facts of the above case and I may state as follows.
- 2) The Hon'ble NGT vide order dated 01/11/2021 directed as follows:- *"The Chief Secretary, State of Kerala is directed to look into the issues as dumping of waste including the Bio- Medical Waste without disposing the same in the scientific manner as provided under the respective Waste Management Rules, including the Bio-Medical Waste Management Rules, 2016 the neighbouring State, without discharging their responsibility for providing necessary facility within their State, cannot be encouraged. This is a matter to be seriously gone into by the Chief Secretary and necessary steps will have to be taken against the local bodies, who are responsible for the same instead of merely issuing a Circular for carrying out the guidelines. So, we direct the Chief Secretary, State of Kerala to file a detailed report regarding these aspects mentioned above and the effective steps were taken by them against the erring Municipal Corporation and the local bodies for violating the Waste Management Rules, instead of taking steps to dispose of the same within their jurisdiction illegally transporting the same to the neighbouring districts in Tamil Nadu and the disposing the same in an unscientific manner projecting health hazards to the people in that locality. The Kerala State Pollution Control Board (KAPCB) is also directed to enquire about the matter and to file a detailed report in this regard"*.
- 3) The Thrissur Office of the Board earnestly enquired about the matter, contacted the District Collector and Thrissur Corporation. It is learned that Thrissur Corporation had entered into a contract with one Mr. Raghunath to segregate and process both biodegradable and non-biodegradable waste dumped in different parts of the city, but the contractor collected the waste, transported it and dumped it on a land near Annamalai, Tamil Nadu.




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- 4) The agreement between the contractor Mr. Raghunath and Thrissur Corporation which was executed on 14.09.2020 was that the contractor would transport, segregate, and process the partially burnt and unsegregated waste generated in the Corporation. As per the agreement, the processing and recycling facility had to be set up on the land owned/taken on lease by the Contractor. He had also submitted an affidavit stating that suitable facilities for processing the waste depending on its type will be provided. According to the report submitted by the Secretary to the District Collector, 1225840 kg of waste has already been removed by the contractor during the period 03/2020 to 11/2020
- 5) From the records it is learned that the Contractor had submitted an application for Consent in the District Office of the Board at Palakkad, for establishing a solid waste treatment and disposal facility. The application was returned for want of some clarifications and Consent has not been issued yet.
- 6) The Environmental Engineer of District office, Thrissur issued a letter dated 10.06.2021 to the Secretary of Thrissur Corporation to offer explanation for the following violations
- i. The Corporation authorities failed to verify whether the waste was being handled as per the provisions of the Solid Waste Management, Rules, 2016 and whether the Contractor has established any processing facility as he stated in the affidavit.
 - ii. The Corporation authorities violated the rules 15 (r) and 15 (zh) of the Solid Waste Management Rules, 2016, by not being responsible for the transport of their waste to the processing facility and for ensuring adequate processing of the waste.
- 7) In the reply to the letter, the Thrissur Corporation claimed that as per the agreement, concessionaire Sri. Reghunath had been approved as the operator of the facility/service provider. The conditions entered and agreed between concessionaire clearly specify and mandate the conditions on which the entire agreement lies. According to them, the legal exclusionary clause clearly states that the concessionaire shall show utmost caution and due diligence while handling transporting and processing the solid waste as per the agreement and hence the Corporation cannot be legally held responsible for the breach of contract done by the concessionaire. They also claimed that, the name of Thrissur Municipal Corporation is mentioned nowhere in the FIR. It is also reported that they have cancelled the agreement with Sri. Reghunath and took adequate legal steps to address the issue in an effective manner.
- 8) It is submitted that the explanation offered by the Secretary of Thrissur Corporation was not satisfactory. Further action will be taken based on the reply submitted.
- 9) It is further submitted that the status of the management of the solid waste and biomedical waste generated in Thrissur district and the border district Palakkad are as follows:

THRISSUR DISTRICT

There are seven municipalities and a municipal corporation in Thrissur District.



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A. Status of Solid Waste Management

1. Guruvayoor Municipality

The population of the municipality is 70012 (as per 2011 census). Total quantity of waste generated is 24.5 TPD of which 13.47 TPD is biodegradable waste and 11.03 TPD is non biodegradable waste. Quantity of other wastes is 0.5 TPD. Wet waste is treated by windrow composting process and dry leaves from street sweeping is disposed of through Thumbourmuzhi aerobic system.

2370 households are being provided with decentralized system such as pipe compost, biogas plants, biocomposters, biobinsetc for treating their wet waste. The remaining households are having sufficient land for the disposal of wet waste. Sanitary waste are not at present collected by municipality, however they are planning for an incinerator for its disposal.

40 Haritha Karma Sena members are collecting non biodegradable waste generating in the municipality. Provided MCF (ITPD) and RRF (ITPD) for storing the non biodegradable waste collected. The collected dry waste is handed over to Clean Kerala Company. 40% door to door collection of waste is achieved by the municipality. The municipality has submitted application for authorization under SWM Rules, 2016, along with an affidavit stating the action plan and time bound proposal for additional facility and the same is under processing.

2. Chalakkudy Municipality

The total population of the municipality is 49525. The total municipal solid waste generated is reported as 19.8TPD. The quantity of biodegradable waste is 10.1TPD and that of non biodegradable waste is 9.7TPD. The capacity of centralized facility provided by the municipality for treating bio degradable waste from shops, vegetable market etc is 3.95TPD and decentralized facility is used for treating 6.15TPD. Leachate from the centralized system is treated through septic tank soak pit facility. For storage of non biodegradable waste, MCFis provided . A team of 38 members of Haritha Karma Sena collects around 9.71TPD of segregated dry waste and is being handed over to Clean Kerala Company. Door to Door collection arrangement is provided for almost 80% of dry waste. Data regarding decentralized facility is being uploaded in Envicleanapp. For disposing of sanitary waste, they have a proposal to install an incinerator and is included in 2021-2022 projects. As per the action plan submitted, 4 MCF units have been proposed to be setup in the municipality. For biomining of legacy waste, tendering process is in progress.

Authorisation under SWM Rules, 2016 has been issued for one year with validity up to 27/07/2022 and the validity will be further extended for another four years after implementing the additional facilities proposed in the action plan submitted by the municipality .

3. Thrissur Municipal Corporation

The population of the city is 317546 (as per 2011 census). Total quantity of waste generated in the corporation is 127 TPD. The quantity of wet waste generated is 97.79 TPD, non biodegradable waste is 26.67 TPD and the quantity of other wastes is 2.54 TPD. The corporation has provided 3 waste collection centers, installed biogas plants at 6 locations,



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Thumboormuzhi projects at different points etc for the collection and disposal of biodegradable waste. Total quantity of biodegradable waste processed using centralized system is 19.65 TPD. Using decentralized facilities, 71.39 TPD of biodegradable waste is being processed. For this purpose biogas plants, biobins, pipe composting system etc at household and institutional levels are being used. 6.75 TPD is disposed of through pig farms. Non bio degradable waste collected and disposed of per day is about 22.17 tons. A team of 143 Haritha Karma Sena members is collecting the waste. The non biodegradable waste including domestic hazardous waste collected is handed over to Clean Kerala Company. Door to door collection of non biodegradable waste has achieved 62% for households and 77 % for institutions. The gap in the collection and treatment of non bio degradable waste is due to the unwillingness of some households to hand over the waste to corporation. This is being addressed through various awareness programs. Regarding disposal of legacy waste, the work has been awarded to an agency for biomining. The corporation has submitted the application for authorization under SWM Rules, 2016 and is under processing. An affidavit with action plan and time bound proposal for additional facilities, to reduce the gap has also been submitted.

4. Kodungalloor Municipality

The population of the municipality is 71440. The total quantity of waste generated per day is 22 tons. The quantity of bio degradable waste is 13 TPD and that of non biodegradable waste is 9 TPD. One windrow composting plant of 4TPD capacity is in operation and has provided a Thumboormuzhi model at 40 locations for processing the biodegradable waste. 1 RRF of 2 TPD capacity and 44 temporary MCFs are provided for the collection and storage of non biodegradable waste. A team of 73 Haritha Karma Sena members is collecting the waste. The non biodegradable waste including domestic hazardous waste e-waste etc collected is handed over to Clean Kerala Company. An affidavit with time bound proposal for additional facilities to reduce the gap has also been submitted along with application for authorisation.

5. Chavakkad Municipality

The population of the municipality is 39093. The total quantity of waste generated is approximately 0.8 TPD- 1 TPD and the dry waste is approximately 0.3 TPD and wet waste approximately 0.5 TPD. 56% households and 50% commercial institutions are brought under door to door collection system. They have installed windrow composting facility with 2 TPD capacity and vermi composting facility of 3TPD for treating wet waste under centralized system of waste management. In the case of dry waste disposal, one MCF cum RRF is provided for waste management and the segregated waste is disposed of through approved agency and Clean Kerala Company.

6. Irinjalakuda Municipality

The population of the municipality is 64497. Total quantity of waste generated is 22.5 TPD of which 12.5 TPD is biodegradable waste and 10 TPD is non biodegradable waste. Quantity of other wastes is 1 TPD. Centralised facilities provided for bio degradable waste of total 6.6 TPD capacity are windrow compost plant of 4 TPD, 2 units of biomethanation and 17 numbers of Thumboormuzhi model aerobic compost units. Decentralised facilities provided to households include Ring compost facility- 1993 numbers, Kitchen bin - 906 numbers and Biogas plant - 700 numbers. There is about



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5.5 TPD of biodegradable waste from households which are left untreated. The municipality has submitted an action plan in which there is a proposal to supply decentralised facilities to households and is included in the 21-22 plan. In the case of non biodegradable waste almost 4 tare not collected by the municipality. The action plan to cover these houses is submitted by the Municipality and they are also proposing an additional MCF of 2000 sqft and mini MCFs in each ward.

In the case of door to door collection of non biodegradable waste, Municipality has achieved 65 % compliance. In the case of biodegradable waste, 56% of the waste generated are collected and treated. The biodegradable waste collected and treated in the centralised facility is from the market and commercial institutions. The street sweepings are disposed of through the 'Thumboormuzhi model' aerobic bins.

The Municipality has submitted an action plan to reduce the gap with time bound proposal for the management of biodegradable, non biodegradable , C&D and sanitary waste.

7. Kunnankulam Municipality

The population of the municipality is 54071. The total quantity of waste generated is 15.197 TPD. Dry waste segregated is 3.197 TPD. There are 37 wards in the Municipality. The door to door collection achieved is 54.7% for households and 31.8% for commercial and other establishment. The municipality has installed windrow composting facility of 9 TPD for treating wet waste. They have also provided 1 MCF and 1 RRF for managing the dry solid waste collected. The segregated dry waste is disposed of through approved agency and Clean Kerala Company.

8. Wadakkancherry Municipality

The total population of the municipality is 61341. The total quantity of wastegenerated is 22.68 TPD of which dry waste is 3.39 TPD, wet waste 17.91 TPD and other waste 0.85 TPD. Door to door collection achieved by the municipality is 70%. A biogas plant of 2 TPD capacity has been installed for treating the biodegradable waste collected from markets, bulk generators etc. 1 MCF and 1 RRF are provided for managing the dry waste collected and is disposed of through approved agency and Clean Kerala Company. Action has been initiated for biomining of legacy waste and a committee has been constituted for evaluation of tenders.

B. Status of Biomedical Waste Management

Six hospitals in the district have captive facility for the treatment and disposal of biomedical waste and the waste from all other hospitals are managed by IMAGE (IMA Goes Eco-friendly) initiative of IMA Kerala State Branch, in the Common Biomedical Waste Treatment and Disposal Facility (CBMWTF) established at Kanjikode, Palakkad. The biomedical waste segregated at source is collected, transported, and scientifically treated by IMAGE as per the Rules and Regulations stipulated in the Biomedical Waste Management Rules 2016 (Amended in 2018).

The segregation of BMW in these institutions is carried out as per the colour code prescribed in the rules. It is verified that every nursing station of the wards and other major waste generation areas such as casualty, operation theaters, laboratory etc., have dedicated colour coded containers for the segregation and an enclosed final collection point where it can be kept securely.



[Signature]
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Whenever defects were noticed, actions were taken immediately to rectify the same. Serious violations have not come to the notice of the Board. In addition to this, regular in-house training by the CBWTDF is given for this. So there are no chances of mixing of bio-medical waste with general solid wastes in these health care facilities. All the segregated bags taken by the CBWTDF are provided with the QR code which is used for tracing while in transit by both the occupiers and authorities of CBWTDF. In addition to this the vehicles of CBWTDF are provided with GPS. In the case of hospitals having captive facilities the biomedical wastes are disposed of via incinerators conforming to the standards specified in the rules. Needles after autoclaving are disposed of in concrete pits and non biodegradable wastes are autoclaved, shredded and sent to recyclers. It is also verified that these hospitals have system for the management and disposal of general solid waste.

PALAKKAD DISTRICT

Palakkad district have total number of seven Municipalities

A. Status of Solid Waste Management

1. Palakkad Municipality

The population of the municipality is 131019 (as per 2011 census). The estimated quantity of waste generation is 39.13 TPD. Door to door collection is 59%. One centralized windrow composting facility which can process 2-5 Tons per day of waste is provided in the municipality. The municipality has supplied pipe composting and other source level units for processing wet waste. There are 7 Thumboormuzhi units of 1 T capacity each in 7 divisions of the municipality Also decentralized facility is utilized for treating wet waste in the municipality. At present there is no gap in the treatment and disposal of wet waste. The municipality has already provided 7 MCFs for the management of dry waste. 52 nos of mini MCFs are under consideration for reducing the gap. Leachate from the composting yard is treated using septic tank soak pit facility. About 1.5 TPD plastic waste is processed daily and handed over to Clean Kerala Company. An incinerator with 30ft chimney is used for incinerating sanitary napkins.

2. Ottapalam Municipality

The population of the municipality is 53755 (as per 2011 census). The estimated quantity of waste generation is 16.13 TPD. The door to door collection achieved is 72%. They have proposed one windrow composting facility of 1 TPD capacity to clear the gap in the treatment and disposal of wet waste. The municipality is having 2 MCF's and 1 RRF for the management of dry waste. Provided 2100 composting units to households for the treatment of biodegradable waste. There are 43 Haritha Karma Sena members in the municipality at present. For biomining of the legacy waste at Panamanna plant an amount of Rs. 70 lakhs has been included in the annual plan 2021-2022. A KIIFB project of Rs.11.40 crores has been approved for setting up a Sewage Treatment Plant.

3. Shornur Municipality

The population of the municipality is 43528(as per 2011 census). The estimated quantity of waste



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is 13.05 TPD. Door to door collection is 87.05%. The municipality has supplied biobins for composting the wet waste to the households and there is no gap in treating the wet waste. The municipality has provided 1 MCF and 1 RRF for the handling of dry waste. The Haritha Karma Sena members collect and segregate the waste generated in the municipality. Wet waste is managed by 22 numbers of Bio-bins (5 TPD) installed in the premises of MCF/RRF facility. 80% of wet waste is managed at source by composting at households. Waste pickers and recyclers are linked. Dry waste collected by the municipality is handed over to Clean Kerala Company. Processed plastic waste is used for road construction.

4. Pattambi Municipality

The population of the municipality is 28632 (as per 2011 census). The estimated quantity of waste generation is 8.58 TPD. Door to door collection is 50% of the total waste generated. One number windrow composting facility has been provided for treating the wet waste and there is no gap in the treatment and disposal of wet waste. 1 to 1.5 TPD of wet waste is being collected and processed in this plant per day. Leachate from the composting plant is disposed of through septic tank soak pit facility. Above 1 TPD dry waste is processed and stored in the MCF and being transferred to Clean Kerala Company.

5. Mannarkad Municipality

The population of the municipality is 34839 (as per 2011 census) and total waste generation is 10.45 TPD. Door to door collection is 67.5% of the total waste generated. They have installed 1 MCF for the management of collected dry waste. 46 composting units and 26 biogas plants are being issued to households under decentralized system for the proper disposal of biodegradable waste. The municipality is having 23 nos of Haritha Karma Sena members.

6. Cherpulassery Municipality

The population of the municipality is 45730 (as per 2011 census). The estimated quantity of waste generation is 15.2 TPD. Door to door collection achieved is 77 %. Provided 1 MCF of 1500 sqft area for the management of material recovery and disposal of dry waste. The municipality is having a team of Harithakarma Sena with 23 members for door to door collection of waste. The segregated dry waste is disposed of by external agencies. Thumboor Mozhi system of composting is practiced for the treatment of dry biodegradable waste. Source level disposal also is carried out for biodegradable waste.

7. Chittoor Thathamangalam Municipality

The population of the municipality is 33825 (as per 2011 census). The quantity of waste generation as estimated is 10.15 TPD. The door to door collection of waste achieved is 90%. Installed one windrow composting facility of 1.2 TPD capacity for segregation and disposal of wet waste. Provided 3 MCF for storage of dry waste. They have supplied 1200 bucket compost units, 295 ring compost units and 43 biogas plants. 2 nos. community level Thumboormuzhi systems are functioning for the treatment of biodegradable waste.




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B. Status of Biomedical Waste Management

There are 838 healthcare facilities (HCFs) in Palakkad district. All have valid Authorisation of the Board including 19 AYUSH HCFs. All the other 819 HCFs are treating the BMW generated as per Rules 3 units are having captive BMW treatment and disposal facility. All the remaining 816 are affiliated to IMAGE, the common biomedical waste treatment and disposed facility CBWTDF. It is ensured by periodic inspections in bedded HCFs that the BMW is segregated at source as per the Rules. It is ensured through the annual reports submitted by the HCFs as well as the annual report filed by the IMAGE that all the BMW generated has been transferred to the CBWTDF. As and when any complaint is received from the CBWTDF of failure of HCFs to transfer their waste to them, strict directions are given and compliance to the conditions of Authorisation is ensured.

Whenever defects were noticed, actions were taken immediately to rectify the same. Serious violations have not come to the notice of the Board. In addition to this, regular in-house training by the CBWTDF is given for this. So there are no chances of mixing of bio-medical waste with general solid waste in health care facilities. All the segregated bags taken by the CBWTDF are provided with the QRcode which is used for the tracing while in transit by both the occupiers and authorities of CBWTDF. In addition to this the vehicles of CBWTDF are provided with GPS. In the case of hospitals having captive facilities the biomedical waste are disposed of via incinerators conforming to the standards specified in the rules. Needles after autoclaving are disposed in concrete pits and non biodegradable wastes are autoclaved, shredded and sent to recyclers. It is also verified that these hospitals have system for the management and disposal of general solid waste.

All that is stated above are true to the best of my knowledge information and belief.

Dated this 6th day of December 2021




Environmental Engineer
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 Environmental Engineer(HG)