

## BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL

## BENCH, NEW DELHI

## Original Application No. 606/2018

IN THE MATTER OF:

Compliance of Municipal Solid Waste Management  
Rules, 2016 and Other environmental issues. .... Petitioner  
VS

| SL NO. | PARTICULARS  | PAGE NOS.    |
|--------|--|--------------|
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**Solid and Liquid Waste Management**  
**Report for the hearing on 17-02-2026**

**O.A. No. 606/2018**

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## 1. INTRODUCTION

In compliance with the directions issued by the Hon'ble National Green Tribunal in OA No. 606/2018, the State of Kerala continues to strengthen and expand its solid and liquid waste management systems through focused policy, institutional, and infrastructure interventions. Building on earlier actions, the State has further mobilized financial resources and advanced integrated projects aimed at addressing persisting gaps and emerging challenges in the sector.

In its judgment dated 29.07.2025 in OA No. 606 of 2018, the Hon'ble National Green Tribunal sought additional clarifications on specific issues raised in the earlier submissions of the State. In response, the present report is submitted to place on record the updated status, clarifications, and progress achieved as of January 2026.

This report presents a consolidated overview of the ongoing transformation of Kerala's waste management framework, which is steadily evolving from a compliance-oriented model to a system anchored in structural reforms and long-term sustainability. Emphasis has been placed on capacity building, accountability mechanisms, continuous monitoring, and comprehensive implementation across the entire waste management chain, ranging from collection and segregation to processing and final disposal or reuse, within all Urban Local Bodies. The continued guidance of the Hon'ble NGT has contributed significantly to strengthening governance and enforcement, and the initiatives undertaken by the State represent important steps toward a resilient and sustainable waste management system.

As a result of these sustained efforts, Alappuzha, Shornur, and Pattambi achieved the 3-Star Garbage Free City (GFC) rating, while 20 other municipalities secured the 1-Star GFC rating. In total, 23 Urban Local Bodies from Kerala attained GFC star ratings for the first time in the State's history.



## 2. SOLID WASTE MANAGEMENT

The State has continued to strengthen its waste management framework through focused regulatory enforcement and system-level improvements aimed at enhancing overall operational effectiveness. In response to the growing demand for sustainable waste management, an integrated approach has been adopted that emphasizes infrastructure augmentation, awareness generation among stakeholders, and the implementation of clear and enforceable policy measures.

All institutions and commercial establishments are required to maintain clean and litter-free premises and to ensure the safe and scientific management of the waste they generate. The State's policy on biodegradable waste promotes decentralized treatment, with priority given to processing waste at source. To supplement source-level systems and to manage waste arising from institutions and other bulk generators, community-level and cluster-based processing facilities have been established. Management of non-biodegradable waste from households and institutions is oriented towards segregation, material recovery, and maximum reuse, thereby reducing the quantity of waste requiring final disposal.

In the previous report submitted, waste generation estimates were based on the population figures as of 2024. In the present report, the quantities have been revised using updated population projections for 2026. Accordingly, the total quantity of waste generated has increased from 10076.17 TPD to 10182.91 TPD. Correspondingly, the quantities of biowaste and non-biodegradable waste have been revised from 7398.64 TPD and 2173.72 TPD to 7477.05 TPD and 2196.71 TPD, respectively.

The details of the quantities of legacy waste processed at dump sites, and with district-wise data on waste generation in the State and the processing status of each waste component, are provided in the prescribed NGT formats in **Annexure 1 and 2**, respectively.



## 2.1 Biodegradable Waste Management

In Kerala, an effective wet-waste management system is being implemented with mandatory source segregation into wet (biodegradable) and dry (non-biodegradable) fractions. The wet waste generated in the state is managed by a three tier system.

Through Household Level Devices: Kerala has successfully implemented household-level management of biodegradable waste through the widespread adoption of decentralized solutions such as compost bins. Recent data shows 23,98,843 numbers of composting bins and 68,973 numbers of household-level biogas plants are functioning effectively across the State. As a promotion for using sourcelevel waste management devices, the state is providing 90% subsidy to the beneficiaries for purchase of household level biomethanation/composting devices, through the LSGIs. In addition to that, Fifty percent of the estimated project cost, up to a maximum of one lakh rupees is given to the private sector institutions, hostels and hotels for setting up waste management plants in their premises. Workshops and campaign activities are also conducted to inform the Bulk Waste Generators and institutions about source-level waste management.

At present, 186 agencies are empanelled statewide for various services like supply of bio waste management devices, supply of quality inoculum for efficient composting and translation of technologies etc. in biodegradable waste management.

To ensure sustainability and to support households in the effective implementation and operation of these systems, (address user queries and to provide technical assistance) more than 5000 Green Technicians have been deployed across Kerala. Overall, this decentralized approach has proven to be highly effective in reducing the overflow of waste from households and thereby reducing requirements of centralized plants



Through Community Level Facilities: To manage waste generated from markets and other institutions, Local bodies collect biodegradable waste through Haritha Karma Sena members or sanitation workers and process it at community-level facilities such as composting units, biogas plants, and windrow composting facilities.

Regional Level Facilities: Some rapidly urbanizing areas where the overflow of biowaste is sufficient enough to make a commercially viable CBG plant, State has proposed establishment of regional-level compressed biogas (CBG) plants to make the system future proof.

Details of biodegradable waste Management Facilities in the state are given in Table 1.

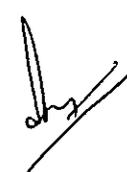
| <b>District Name</b> | <b>Total BDW Generation (TPD) based on 2026 population</b> | <b>Total capacity of Compost Facilities (TPD)</b> | <b>Total capacity of Bio methanation Facilities (TPD)</b> | <b>Total Rendering Facilities (TPD)</b> | <b>Total BDW Processing Capacity (TPD)</b> |
|----------------------|--|---|---|---|--|
| Thiruvananthapuram   | 778.04   | 789.05  | 70.25   | 61.40                                   | 920.69                                     |
| Kollam               | 569.34   | 578.89  | 55.94   | 70.94                                   | 705.77                                     |
| Pathanamthitta       | 223.58   | 205.32  | 19.70   | 16.73                                   | 241.75                                     |
| Alappuzha            | 424.90   | 405.86  | 31.16   | 43.17                                   | 480.19                                     |
| Kottayam             | 394.15   | 380.76  | 28.01   | 43.82                                   | 452.59                                     |
| Idukki               | 207.63   | 205.19  | 16.24   | 11.99                                   | 233.43                                     |
| Ernakulam            | 788.23   | 716.32  | 49.81   | 115.28                                  | 881.42                                     |
| Thrissur             | 698.76   | 672.11  | 59.03   | 52.22                                   | 783.36                                     |
| Palakkad             | 610.67   | 646.63  | 36.26   | 72.18                                   | 755.07                                     |

|              |                |                |               |               |                |
|--------------|----------------|----------------|---------------|---------------|----------------|
| Malappuram   | 994.93         | 935.26         | 121.77        | 127.98        | 1185.01        |
| Kozhikode    | 754.90         | 769.50         | 55.56         | 74.57         | 899.62         |
| Wayanad      | 172.17         | 185.03         | 6.70          | 21.92         | 213.65         |
| Kannur       | 570.17         | 587.60         | 38.07         | 54.80         | 680.46         |
| Kasaragod    | 289.58         | 294.39         | 18.59         | 25.53         | 338.51         |
| <b>Total</b> | <b>7477.05</b> | <b>7371.91</b> | <b>607.08</b> | <b>792.55</b> | <b>8771.53</b> |

The quantity of biowaste generated in the State is approximately 7477.05 TPD, while the existing processing facilities including household, institutional, and community-level systems have a combined installed capacity of about 8771.53 TPD. While accounting for each ULB, a capacity gap exists, a significant portion of the remaining biowaste is productively utilized as livestock feed. A substantial share of biowaste generated originates from Bulk Waste Generators such as hotels, restaurants, and catering establishments, primarily in the form of food waste. The food waste collected from these sources is generally of good quality and can be used as livestock feed with minimal pre-processing. Farm owners often collect food waste directly from these establishments and utilize it as animal feed, thereby ensuring the productive reuse of a considerable quantity of food waste.

To establish a sustainable and long-term system for biowaste management and to address the existing processing capacity gap, the State has proposed the development of regional-level Compressed Biogas (CBG) plants. The status of the projects are given in Table 2.

| Sl. No. | Location of the plant | Capacity of Plant (TPD) | Implementation status                                  |
|---------|-----------------------|-------------------------|--|
| 1       | Palakkad Municipality | 110                     | 85% work completed                                     |
| 2       | Kochi Corporation     | 150                     | Trial run completed. Inauguration proposed on 27.02.26 |

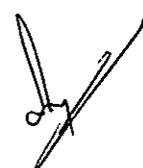


|   |                                |            |  |
|---|--------------------------------|------------|--|
| 3 | Thrissur Corporation           | 30         | Construction going on                            |
| 4 | Thiruvananthapuram Corporation | 150        | Land could not be procured                       |
| 5 | Kollam Corporation             | 150        | Project approved. Agreement execution on 11.2.26 |
| 6 | Kozhikode Corporation          | 150        | Agreement executed. Land preparation going on.   |
| 7 | Changanassery Municipality     | 30         | Tendering stage                                  |
|   | <b>Total</b>                   | <b>770</b> |  |

## 2.2 Non Biodegradable Waste

Dry waste generated from households and institutions is collected and transported to Material Collection Facilities (MCFs) or Resource Recovery Facilities (RRFs), where it is segregated into recyclable and non-recyclable waste. The recyclable waste is sent to recycling units, while non-recyclable waste is directed to co-processing facilities, such as cement plants. Table 3 gives the details of non biodegradable waste collection and segregation facilities.

| Facility Type                             | July 2025            | Jan 2026              |
|---|----------------------|-----------------------|
| Mini MCF                                  | 19808 Nos            | 20051 Nos             |
| Containers for temporary storage          | 148 Nos              | 158 Nos.              |
| MCF                                       | 1272 Nos             | 1350 Nos              |
| RRF                                       | 167 Nos              | 192 Nos               |
| Clean Kerala Company + Private Facilities | 73 Nos<br>685.64 TPD | 80 Nos.<br>715.64 TPD |



The state is handling non-bio waste through collection, storage & handling, segregation and processing through facilities established by local bodies and private agencies. The details are shown in table 4.

| <b>Table 4. Non-bio waste generation and processing capacity</b> |   |                                  |                                  |                            |                                      |
|--|---|----------------------------------|----------------------------------|----------------------------|--------------------------------------|
| District Name  | Total NBDW Generation based on <b>2026</b> population | Facilities in Local Bodies (TPD) | Pvt agency Godown facility (TPD) | CKCL Godown Facility (TPD) | Total NBDW processing Capacity (TPD) |
| Thiruvananthapuram   | 240.67  | 164.75                           | 68.26                            | 12.20                      | 245.21                               |
| Kollam   | 166.94  | 127.83                           | 23.94                            | 22.20                      | 173.97                               |
| Pathanamthitta   | 63.04   | 64.16                            | 0.00                             | 5.00                       | 69.16                                |
| Alappuzha  | 121.26  | 138.00                           | 11.62                            | 39.06                      | 188.68                               |
| Kottayam   | 112.02  | 109.93                           | 15.33                            | 22.84                      | 148.10                               |
| Idukki   | 57.38   | 59.68                            | 6.04                             | 9.79                       | 75.51                                |
| Ernakulam  | 242.19  | 213.29                           | 69.63                            | 7.00                       | 289.93                               |
| Thrissur   | 205.77  | 215.05                           | 13.52                            | 0.00                       | 228.57                               |
| Palakkad   | 171.57  | 133.01                           | 49.26                            | 4.50                       | 186.77                               |
| Malappuram   | 285.61  | 168.48                           | 128.21                           | 2.50                       | 299.18                               |
| Kozhikode  | 229.90  | 187.16                           | 80.67                            | 5.60                       | 273.42                               |
| Wayanad  | 48.88   | 30.30                            | 54.28                            | 6.07                       | 90.65                                |
| Kannur   | 170.04  | 169.68                           | 17.81                            | 10.00                      | 197.50                               |
| Kasaragod  | 81.44   | 87.60                            | 18.59                            | 11.73                      | 117.92                               |
| <b>Total</b>   | <b>2196.71</b>  | <b>1868.93</b>                   | <b>557.16</b>                    | <b>158.49</b>              | <b>2584.57</b>                       |
| <b>Kerala Enviro Infrastructure Ltd (KEIL)</b>                   |   |                                  |                                  |                            | <b>16.00</b>                         |
| <b>Grand Total (TPD)</b>   |   |                                  |                                  |                            | <b>2600.57</b>                       |

### 2.3 RDF Plants

To facilitate easier transportation and enhance calorific value, the conversion of reject waste into Refuse Derived Fuel (RDF) is being promoted. In this



regard, seven RDF plants have been established across the State, while six additional plants are at various stages of implementation, with a combined capacity of 730 tonnes per day. The details are given in Table 5.

| <b>Table 5. Status of RDF Plants</b> |                       |                             |                     |
|--------------------------------------|-----------------------|-----------------------------|---------------------|
| <b>Sl No</b>                         | <b>Plant Location</b> | <b>Plant Capacity (TPD)</b> | <b>Status</b>       |
| 1                                    | Thiruvananthapuram    | 100                         | Ongoing             |
| 2                                    | Kollam                | 80                          | Planning stage      |
| 3                                    | Ernakulam             | 40                          | Completed           |
| 4                                    | Ernakulam             | 40                          | Completed           |
| 5                                    | Ernakulam             | 60                          | Planning stage      |
| 6                                    | Ernakulam             | 60                          | Planning stage      |
| 7                                    | Ernakulam             | 60                          | Completed           |
| 8                                    | Palakkad              | 40                          | 80 % work completed |
| 9                                    | Palakkad              | 100                         | Completed           |
| 10                                   | Malappuram            | 40                          | Completed           |
| 11                                   | Kozhikkode            | 40                          | Completed           |
| 12                                   | Kannur                | 60                          | Ongoing             |
| 13                                   | Kasaragod             | 10                          | Completed           |
|                                      |                       | <b>730 TPD</b>              |                     |

#### **2.4 Sanitary Waste Management**

Sanitary waste is collected separately at the source, based on demand, and is disposed of using double-chambered incinerators. In addition to the

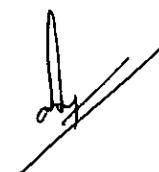
double-chambered sanitary incinerators established at the local body level and the common biomedical waste management facility (KEIL), four regional sanitary waste treatment plants, each with a capacity of 20 TPD, have been proposed in four regions to address existing gaps in the sanitary waste management sector (Given in Table 6). Agreements for the implementation of these projects have been executed.

| <b>Table 6. Regional Level Sanitary Waste Incinerators in the State</b> |                 |                       |  |
|---|-----------------|-----------------------|--|
| <b>Sl. No</b>   | <b>Location</b> | <b>Capacity (TPD)</b> | <b>Districts in the cluster</b>            |
| 1   | Kollam          | 20                    | Thiruvananthapuram, Kollam, Pathanamthitta |
| 2   | Ernakulam       | 20                    | Alappuzha, Ernakulam, Kottayam, Idukki     |
| 3   | Palakkad        | 20                    | Thrissur, Palakkad, Malappuram             |
| 4   | Kannur          | 20                    | Kozhikode, Wayanad, Kannur, Kasaragod      |

### **2.5 Legacy Waste Management**

Legacy dump sites in the State are being remediated through biomining, a scientific process that employs microorganisms and natural methods to excavate, treat, segregate, and recover useful materials from long-accumulated waste. These legacy wastes, comprising organic matter, plastics, metals, and other materials compacted over several years, are segregated into fractions and systematically processed.

Across the State, a total of 59 legacy dump sites have been identified, biomining and bioremediation activities have been completed at 24 sites, while remediation work is currently in progress at 21 sites. The process is



scheduled to commence at the remaining 14 sites. Details of the quantities of processed and unprocessed legacy waste are presented in the table 7 below.

| <b>Table 7. Progress of Biomining projects</b> |                  |                      |                    |                      |                      |                    |
|--|------------------|----------------------|--------------------|----------------------|----------------------|--------------------|
|  | <b>June 2025</b> |                      |                    | <b>December 2025</b> |                      |                    |
|  | <b>No</b>        | <b>Quantity (MT)</b> |                    | <b>No</b>            | <b>Quantity (MT)</b> |                    |
|  |                  | <b>Processed</b>     | <b>unprocessed</b> |                      | <b>Processed</b>     | <b>unprocessed</b> |
| Completed Sites                                | 24               | 358278.55            | 0                  | 24                   | 369978.33            | 0                  |
| Ongoing Sites                                  | 19               | 962389.14            | 396970.58          | 21                   | 1008764.85           | 433601.79          |
| To be started                                  | 16               | 0                    | 173719.29          | 14                   | 0                    | 142369.46          |
| <b>Total</b>                                   | <b>59</b>        | <b>1320667.69</b>    | <b>570689.87</b>   | <b>59</b>            | <b>1378743.18</b>    | <b>575971.24</b>   |

## 2.6 Monitoring System

A total of 254 agencies have been empanelled for solid waste management activities in the State, of which 186 agencies are engaged in the management of biodegradable waste and 68 agencies are involved in non-biodegradable waste management. These empanelled agencies, in coordination with Clean Kerala Company Limited and 37,722 Haritha Karma Sena members, have contributed to the establishment of a robust and decentralized solid waste management system across the State. The activities of these agencies are being systematically monitored to ensure the effective, efficient, and timely management of solid waste throughout Kerala.

The Harithamitram app is a smart garbage monitoring application introduced by the Government of Kerala to digitally coordinate and monitor solid waste management activities across the state. This app provides a real-time database on waste management from door-to-door collection to transportation and management at Material Collection Facilities (MCFs),

mini-MCFs and Resource Recovery Facilities (RRFs). It supports monitoring from ward level up to state level, enabling officials to track performance, identify gaps and ensure timely service delivery. The system has helped improve door-to-door collection performance, strengthen data tracking, and streamline service operations in line with scientific SWM norms embedded in state policy.

### **3. OBSERVATIONS BY HON'BLE NGT**

*i. Details with regard to wet waste collection, segregation, composting and disposal of the compost and other residues be provided ULB Wise.*

The major portion of the wet waste generated in the urban areas is managed at source by the household and institutional devices and the remaining portion is either processed through the community level facilities or used as feed to the livestock. For community-level facilities, biodegradable waste is collected by local bodies through Haritha Karma Sena members or sanitation workers and processed using composting units, biogas plants, and windrow composting facilities.

Compost generated through household-level systems is mainly utilized in kitchen and flower gardens. To ensure the safety and effectiveness of the compost, six agencies have been approved for the supply of quality inoculum. Compost produced at community level facilities is typically distributed to farmer groups either free of cost or at subsidized rates by the local bodies, depending on demand.

Residual fractions from the composting process are shredded and incorporated back into the compost, improving its application efficiency by functioning as a soil conditioner. Over the past several decades, the State has consistently promoted organic farming as a preferred agricultural practice, resulting in a strong demand for compost manure among individual farmers and farmer groups. To further enhance the quality and uniformity of



compost generated at community-level facilities, proposals for setting up regional-level compost enrichment units have been invited, and project formulation for these units is currently in progress. The details of collection, segregation and processing of bio waste is shown in **Annexure 3**.

**ii. Operational details pertaining to compressed bio-gas (CBG plants) of 790 TPD be provided. The quantity of gas produced by the CBG plants and its distribution to be indicated.**

The compressed biogas (CBG) plants proposed at Kochi, Kollam, and Kozhikode are being implemented by Bharat Petroleum Corporation Limited (BPCL), while the remaining projects are being executed with the support of private agencies. These facilities require highly segregated organic waste as the primary feedstock to ensure efficient and reliable operation, and they produce compressed biogas along with fermented organic manure as end products. A 150 TPD CBG plant can generate 5.6 TPD of CBG, 100 TPD of Liquid Fermented Organic Manure (LFOM) and 28 TPD of Fermented Organic Manure (FOM). The plant comprises major operational components such as pre-treatment, gas generation, gas purification, gas compression, and transportation systems. Proposed quantity of gas generation and its distribution is given in Table 8.

| Sl. No. | Location of the plant             | Estimated quantity of gas | Distribution                               |
|---------|-----------------------------------|---------------------------|--|
| 1       | Palakkad Municipality             | 3.3 TPD                   | Linked with Indian Oil Adani Gas pipe line |
| 2       | Kochi Corporation                 | 5.6 TPD                   | Linked with BPCL Gas pipe line             |
| 3       | Thrissur Corporation              | 1 TPD                     | *Cascading                                 |
| 4       | Thiruvananthapuram Corporation ** | 5.6 TPD                   | Cascading                                  |

|   |                            |         |           |
|---|----------------------------|---------|-----------|
| 5 | Kollam Corporation         | 5.6 TPD | Cascading |
| 6 | Kozhikode Corporation      | 5.6 TPD | Cascading |
| 7 | Changanassery Municipality | 1 TPD   | Cascading |

\* CBG is stored in cylinders with multiple pressure level with high storage capacity which is ideal for primary storage

\*\* Delayed due to non availability of land

The expected yields from the plants vary by feedstock but municipal organics typically produce 20–40 m<sup>3</sup> biogas per tonne of wet waste and it is upgraded to 0.5 – 1.5 kg CBG per tonne of input depending on composition and conversion efficiency. The compressed biogas produced at these plants is either directly injected into existing gas pipelines, wherever such infrastructure is available, or stored in cascades for use as a fuel.

***iii. Details of various component of the MSW ULB-wise be provided including the final disposal of each of the components***

At the ULBs in Kerala, Municipal Solid Waste (MSW) generated from households, institutions, markets, and commercial areas is systematically classified into key components such as biodegradable (wet) waste, non-biodegradable (dry) waste, sanitary waste. ULBs ensure segregation at source.

The wet waste, comprising food waste and other biodegradable organics, is processed through source level composting, biogas units and community level processing plants. The dry waste, mainly plastics, paper, glass, metals, and e-waste, is collected by Haritha Karma Sena and routed through Material Collection Facilities (MCFs) and Resource Recovery Facilities (RRFs) at ULB level, where it is segregated into recyclables and rejects and sent for recycling or for co-processing in cement kilns through authorised agencies.



Each ULB maintains a solid waste management chain linking collection, segregation, processing, and scientific final disposal, ensuring compliance with the Solid Waste Management Rules, 2016 and Kerala's decentralized waste management framework. The details of disposal of each component of MSW generated for the ULBs are given in **Annexure 4**.

The details of existing processing facilities in the urban local bodies for biodegradable and non biodegradable waste are given in **Annexure 5**.

***iv. Information be provided with regard to the actual legacy waste and the daily addition to such existing legacy waste. Clearing of the Legacy waste ULB wise and the area recovered by the clearing such legacy waste including the geo-code of the area be provided.***

100 percent source segregation is ensured at source level. As the state promotes decentralized wet waste management, for the time being, no fresh waste is added at the existing legacy dumpsite, instead the same is processed with household bins, community composting facilities, and extended usage as feed to livestock. The quantity of ULB wise legacy waste is attached as **Annexure 6**.

The State's concerted efforts to scientifically process waste at source and through appropriate treatment facilities have substantially reduced the accumulation of unprocessed waste, effectively preventing the creation of new dumpsites and the addition of fresh waste to existing dump sites.



#### **4. LIQUID WASTE MANAGEMENT**

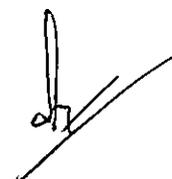
This section presents the progressive status of actions undertaken in Liquid Waste Management during the past six months, updated format given by the Hon'ble National Green Tribunal vide order dated 08.04.2024, responses to the queries and observations raised by the Hon'ble Tribunal vide order dated 29/07/2025, and other initiatives undertaken by the State to further strengthen Liquid Waste Management systems.

#### **5. PROGRESSIVE STATUS IN LIQUID WASTE MANAGEMENT**

##### **5.1. Sewage Treatment Plants**

The comparative assessment indicates that the overall sewage management capacity has increased from 432.282 MLD (July 2025) to 435.826 MLD (February 2026), reflecting a net capacity addition of about 3.544 MLD, despite marginal variations in the number of plants in certain categories. This improvement clearly demonstrates a shift towards capacity consolidation, optimisation, and commissioning of higher-capacity systems, rather than a mere increase in the number of plants.

The existing STP infrastructure has remained stable, with no reduction in either capacity or number of plants, indicating sustained operational performance. The ongoing projects segment shows positive momentum, with total capacity increasing from 15.19 MLD to 15.295 MLD and the number of plants rising from 4 to 5, indicating steady project execution and commissioning progress. Although a slight reduction is observed in the proposed category both in capacity (from 176.057 MLD to 173.452 MLD) and number of plants (from 53 to 51) this is attributable to project restructuring, merging of smaller proposals, and movement of select schemes into ongoing or implementation-ready stages, reflecting improved planning maturity rather than stagnation.



A significant and noteworthy improvement is seen in institutional and establishment-level treatment systems, where capacity increased from 99.26 MLD to 105.304 MLD, accompanied by a substantial rise in the number of units (from 1,813 to 2,195). This highlights enhanced compliance and adoption of on-site sewage treatment solutions by institutions and commercial establishments rather than septic tanks and soak pits.

In summary, despite a reduction in the number of plants in select segments, the data clearly demonstrates capacity enhancement, system consolidation, improved institutional participation, and sustained progress towards environmentally sound sewage management, in alignment with the directions of the Hon'ble NGT. Thus the total existing STP capacity, including establishment facilities, is 247.049 MLD. As the state is facing severe land constraints for the construction of network-based STP, the focus is to set up FSTPs at available land for effective sewage management. The detailed comparison of projects for the period between July 2025 and Jan 2026 is tabulated as Table 9 below.

**Table 9 : Comparison of Treatment Capacity of STP's wrt July'25 & Jan'26**

| <b>Comparison of Treatment Capacity of STP's wrt July'25 &amp; Jan'26</b> |              |                       |               |                       |               |
|---|--------------|-----------------------|---------------|-----------------------|---------------|
| <b>Sewage Treatment Capacity (MLD) &amp; No. of Plants</b>                |              |                       |               |                       |               |
| <b>Stage</b>  | <b>Area</b>  | <b>July -2025</b>     |               | <b>Jan- 2026</b>      |               |
|   |              | <b>Capacity (MLD)</b> | <b>Number</b> | <b>Capacity (MLD)</b> | <b>Number</b> |
| 1. Existing   | Urban        | 133.055               | 25            | 133.055               | 25            |
|   | Rural        | 8.72                  | 6             | 8.72                  | 6             |
|   | <b>Total</b> | <b>141.775</b>        | <b>31</b>     | <b>141.775</b>        | <b>31</b>     |
| 2. Ongoing  | Urban        | 14.6                  | 3             | 14.705                | 4             |
|   | Rural        | 0.59                  | 1             | 0.59                  | 1             |
|   | <b>Total</b> | <b>15.19</b>          | <b>4</b>      | <b>15.295</b>         | <b>5</b>      |

|  |              |                |             |                |             |
|--|--------------|----------------|-------------|----------------|-------------|
| 3. Proposed  | Urban        | 174.137        | 18          | 171.532        | 16          |
|  | Rural        | 1.92           | 35          | 1.92           | 35          |
|  | <b>Total</b> | <b>176.057</b> | <b>53</b>   | <b>173.452</b> | <b>51</b>   |
| 4. Institutional & Establishments Treatment Capacity | Urban        | 99.26          | 1813        | 105.304        | 2195        |
|  | <b>Total</b> | <b>99.26</b>   | <b>1813</b> | <b>105.304</b> | <b>2195</b> |
| Total Sewage management Capacity                     | Urban        | 421.052        | 1859        | 424.596        | 2240        |
|  | Rural        | 11.23          | 42          | 11.23          | 42          |
|  | <b>Total</b> | <b>432.282</b> | <b>1901</b> | <b>435.826</b> | <b>2282</b> |

### 5.2. Faecal Sludge Treatment Plants and STP with Co-Treatment

The progress achieved in Faecal Sludge Treatment Plants (FSTPs) and STPs with co-treatment facilities between July 2025 and January 2026, based on the six-month comparative assessment, is discussed below.

A comparison of the two reference periods indicates overall positive progress in treatment capacity and system coverage, even in instances where the number of plants shows rationalisation or marginal variation. The data reflects a conscious shift towards enhancing effective treatment capacity, strengthening rural coverage, and optimising project configurations, rather than merely increasing the count of facilities.

The existing FSTP infrastructure has remained stable, with no reduction in capacity or number of plants, indicating sustained operational performance and system reliability. In the ongoing category, there is a notable increase in total treatment capacity from 433 KLD to 634 KLD, along with an increase in the number of facilities, particularly in rural areas. This demonstrates accelerated implementation and scaling-up of projects under execution.

In the proposed category, while certain urban capacities have been marginally rationalised, the overall proposed capacity has increased from

3163 KLD to 3227 KLD, with a corresponding rise in the number of facilities, especially in rural areas. This reflects improved planning, prioritisation of demand-based projects, and enhanced focus on underserved regions.

Importantly, the total sewage and faecal sludge management capacity through FSTPs and co-treatment facilities has increased from 4666 KLD in July 2025 to 4931 KLD in January 2026, representing a significant net gain. The increase is accompanied by expanded rural coverage, underscoring progress towards decentralised and inclusive sanitation solutions. The detailed comparison of projects for the period between July 2025 and January 2026 is tabulated as Table 10 below.

**Table 10 : Comparison of Treatment Capacity of FSTP's and STP with CoTreatment wrt July'25 & Jan' 26**

| <b>Comparison of Treatment Capacity of FSTP's and STP with CoTreatment wrt July'25 &amp; Jan' 26</b> |              |                       |               |                       |               |
|--|--------------|-----------------------|---------------|-----------------------|---------------|
| <b>FSTP Capacity in KLD &amp; No. of Plants</b>  |              |                       |               |                       |               |
| <b>Stage</b>   | <b>Area</b>  | <b>July -2025</b>     |               | <b>Jan - 2026</b>     |               |
|  |              | <b>Capacity (KLD)</b> | <b>Number</b> | <b>Capacity (MLD)</b> | <b>Number</b> |
| 1. Existing  | Urban        | 1070                  | 7             | 1070                  | 7             |
|  | Rural        | 0                     | 0             | 0                     | 0             |
|  | <b>Total</b> | <b>1070</b>           | <b>7</b>      | <b>1070</b>           | <b>7</b>      |
| 2. Ongoing   | Urban        | 345                   | 5             | 345                   | 5             |
|  | Rural        | 88                    | 2             | 289                   | 5             |
|  | <b>Total</b> | <b>433</b>            | <b>7</b>      | <b>634</b>            | <b>10</b>     |
| 3. Proposed  | Urban        | 2093                  | 22            | 2092                  | 23            |
|  | Rural        | 1070                  | 20            | 1135                  | 25            |
|  | <b>Total</b> | <b>3163</b>           | <b>42</b>     | <b>3227</b>           | <b>48</b>     |
| Total Sewage management through FSTP's and Cotreatment Facilities                                    | Urban        | 3508                  | 34            | 3507                  | 35            |
|  | Rural        | 1158                  | 22            | 1424                  | 30            |
|  | <b>Total</b> | <b>4666</b>           | <b>56</b>     | <b>4931</b>           | <b>65</b>     |

### 5.3. Mobile Treatment Units

A comparative review of the status of Mobile Treatment Units (MTUs) between July 2025 and January 2026 indicates tangible and positive progress in overall sewage management coverage, notwithstanding a reduction in the number of ongoing and proposed units.

As per the compiled data, the number of existing MTUs has increased substantially, from 7 units in July 2025 to 20 units in January 2026, reflecting operationalisation during the intervening period. This increase is evident across both urban areas (from 5 to 11 units) and rural areas (from 2 to 9 units).

While the number of ongoing and proposed MTUs has reduced from 32 to 25, this reduction is attributable to the transition of several projects from the planning/implementation stage to the existing (operational) category, rather than any dilution of efforts. Importantly, rural ongoing/proposed units have been fully retained (17 units), underscoring continued focus on decentralised sanitation in non-urban areas.

Most significantly, the overall sewage management through MTUs has improved, with the total number of MTUs contributing to sewage treatment increasing from 39 in July 2025 to 45 in January 2026. Rural coverage shows marked improvement, rising from 19 to 26 units, indicating enhanced service delivery in previously underserved regions. The detailed comparison of projects for the period between July 2025 and January 2026 is tabulated as Table 11 below.



**Table 11: Comparison of procurement of MTU's wrt July'25 & Jan' 26**

| <b>Comparison of procurement of MTU's wrt July'25 &amp; Jan' 26</b> |              |                   |                  |
|---|--------------|-------------------|------------------|
| <b>Mobile Treatment Units</b>                                       |              |                   |                  |
| <b>Stage</b>  | <b>Area</b>  | <b>July -2025</b> | <b>Jan- 2026</b> |
|   |              | <b>Number</b>     | <b>Number</b>    |
| 1.Existing  | Urban        | 5                 | 11               |
|   | Rural        | 2                 | 9                |
|   | <b>Total</b> | <b>7</b>          | <b>20</b>        |
| 2. Ongoing & Proposed   | Urban        | 15                | 8                |
|   | Rural        | 17                | 17               |
|   | <b>Total</b> | <b>32</b>         | <b>25</b>        |
| Total Sewage management through MTU                                 | Urban        | 20                | 19               |
|   | Rural        | 19                | 26               |
|   | <b>Total</b> | <b>39</b>         | <b>45</b>        |

#### **6. SUBMISSION OF UPDATED FORMAT GIVEN BY HON'BLE COURT VIDE ORDER DATED 08.04.2024**

The Hon'ble National Green Tribunal (Principal Bench) vide order dated 08.04.2024 is directed the state to submit the sewage generation and its management for all the Urban local bodies as per the format given. The format has been filled for the Urban Local Bodies based on the projected population for the year 2026. The updated format has been attached as **Annexure 7.**

#### **7. RESPONSES TO THE OBSERVATIONS BY HON'BLE NGT**

The Hon'ble National Green Tribunal (Principal Bench) has observed the following queries regarding the Sewage Management in the State of Kerala as

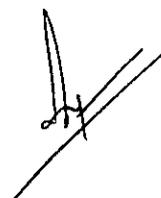


per the order dated 29.07.2025. The detailed submission by the state is given in the subsequent sections.

### **7.1. Observation I - 3 (A) Sewage Management (i)**

***From the data provided, there is a gap of 586 MLD. Furthermore, most of the treatment of sewage is through FSTPs, wherein 4666 KLD is treated. No information has been provided with regard to the quality of the final treated water and the mode of discharge of the treated sewage. Details with regard to proposed treatment of the present untreated sewage of 586 MLD including the future plans taking into consideration the population growth be provided.***

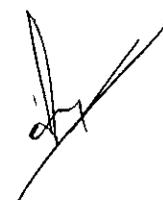
As per the projected population of 2026, the total liquid waste generated in the state of Kerala is 4,043 MLD (1032 MLD from urban areas and 3011 MLD from rural areas). The strategy of the state is to set up network-based Sewage Treatment Plants (STPs) at Core Sanitation Zones of the Urban Local Bodies(ULBs), Faecal Sludge Treatment Plants (FSTPs) in the fringe areas outside the core sanitation zones of ULBs, and the Rural Local Bodies. The total capacity of STPs currently existing in the state is 247.08 MLD, including Centralised STPs and Decentralised STPs at Establishments. As per the previous report the existing capacity was 241.035 MLD, and now it has been increased to 247.08 MLD. The state was able to increase the treatment capacity by 6.045 MLD, which indicates the commitment of state towards scientific way of liquid waste management activities. STPs having capacity of 15.30 MLD are being constructed and STPs of capacity 173.45 MLD are proposed and currently under various stages. Thus considering all the stages the state has put forward STP projects for 435.83 MLD. The remaining urban sewage of 596.17 MLD instead of 586 MLD as reported previously is currently treated through various onsite facilities such as septic tanks, biodigestors. The detailed table for the STP capacities for each district is given below as Table 12.



**Table 12: Stage and District-wise STP capacities of the State**

| Sl. No       | District           | Capacity of plants in Various Stages in MLD |                |               |                |              |               |               |
|--------------|--------------------|---|----------------|---------------|----------------|--------------|---------------|---------------|
|              |                    | Existing                                    | Establishments | Institutional | Total Existing | Ongoing      | Proposed      | Total (MLD)   |
| 1            | Alappuzha          | 0.265                                       | 2.537          | 0.036         | 2.838          | 0            | 5.012         | 7.85          |
| 2            | Thrissur           | 6.395                                       | 6.981          | 0.25          | 13.626         | 0            | 7             | 20.63         |
| 3            | Kozhikode          | 5.6   | 15.546         | 0.425         | 21.571         | 0            | 42.5          | 64.07         |
| 4            | Thiruvananthapuram | 112   | 11.452         | 0.302         | 123.754        | 0            | 0.52          | 124.27        |
| 5            | Ernakulam          | 6.66  | 23.344         | 0.367         | 30.371         | 1.205        | 110           | 141.58        |
| 6            | Kannur             | 1.51  | 5.475          | 1.605         | 8.59           | 0            | 5.4           | 13.99         |
| 7            | Pathanamthitta     | 8.5   | 8.613          | 1.052         | 18.165         | 0            | 0             | 18.17         |
| 8            | Malappuram         | 0.54  | 4.534          | 0.04          | 5.114          | 0            | 0             | 5.11          |
| 9            | Wayanad            | 0.14  | 2.826          | 0.11          | 3.076          | 0            | 0             | 3.08          |
| 10           | Kottayam           | 0.09  | 6.548          | 0.215         | 6.853          | 0            | 0             | 6.85          |
| 11           | Idukki             | 0.076                                       | 1.155          | 0.27          | 1.501          | 0            | 0             | 1.50          |
| 12           | Kollam             | 0   | 5.394          | 0.358         | 5.752          | 12.59        | 0             | 18.34         |
| 13           | Palakkad           | 0   | 4.204          | 0.11          | 4.314          | 1.5          | 3.02          | 8.83          |
| 14           | Kasargod           | 0   | 1.435          | 0.12          | 1.555          | 0            | 0             | 1.56          |
| <b>Total</b> |                    |   |                |               | <b>247.08</b>  | <b>15.30</b> | <b>173.45</b> | <b>435.83</b> |

As mentioned, setting up STPs would be the ideal solution for untreated sewage of 596.17 MLD at present, and considering future increases. However, this is not practical everywhere in Kerala due to the state's unique settlement pattern, geographical diversity, and land availability constraints. The state follows a dispersed homestead settlement pattern, which requires long sewer networks to connect households, making centralized systems for STP costly and inefficient. High land values, particularly in urban and peri-urban areas, further limit the feasibility of acquiring land for large STPs.



Due to Kerala's high population density and continuous spread of habitation very few large vacant lands suitable for STPs are available. In addition, the presence of water bodies, wetlands, and coastal areas brings strict environmental regulations such as Coastal Regulation Zone (CRZ) norms, wetland rules, and buffer distance requirements, significantly restricting site availability. The state's varied and uneven terrain, especially in midland and highland regions, makes sewer construction technically challenging and expensive. The dense road network further complicates sewer laying. Together, these factors make STPs largely impractical here.

Due to these challenges in implementing centralized STP, the state can only rely significantly on onsite sanitation (OSS) systems, including septic tanks and soak pits. To mitigate the risk of groundwater contamination from the insitu onsite sanitation facilities, Fecal Sludge Treatment Plants (FSTPs) have been identified as a critical downstream solution for safe treatment of sludge collected from these systems.

In line with this, the State has adopted a strategic approach to establish FSTPs primarily in peripheral areas outside the core sanitation zones of Urban Local Bodies (ULBs) and in rural areas on a cluster based approach. Under the State Fecal Sludge and Septage Management (FSSM) Plan, FSTPs are proposed on a cluster basis to serve groups of urban and rural local bodies within a radius of approximately 15 km. Additionally, rural local bodies can access nearby ULB-owned STPs for co-treatment of fecal sludge, ensuring safe and efficient management of waste while protecting groundwater and the environment.

Accordingly, the State has identified 65 lands for constructing the FSTPs and STPs with Co-treatment facilities. Among that 7 plants are completed and operational. 10 plants are in the stage of construction. Remaining 48 plants are in different stages like DPR preparation, Tendering, Land Allocation etc. The total capacity of such plants including existing, ongoing and proposed are 4931 KLD. As per the previous report the total capacity including all the



stage was 4666 KLD and currently it enhanced by additional 265 KLD pointing out the states focus towards the liquid waste management actions and totalling to 4931 KLD. Among the 4931 KLD, the existing capacity is 1070 KLD, work ongoing is for 634 KLD, and proposed is 3227 KLD. The detailed splitup of capacity of projects in various districts is tabulated below as Table 13.

**Table 13: District and Stage wise FSTP details with Capacity**

| Sl. NO       | District           | Capacity of plants in Various Stages in KLD |            |             |             |
|--------------|--------------------|---|------------|-------------|-------------|
|              |                    | Existing                                    | Ongoing    | Proposed    | Total (KLD) |
| 1            | Alappuzha          | 250   | 0          | 133         | 383         |
| 2            | Ernakulam          | 200   | 0          | 1114        | 1314        |
| 3            | Idukki             | 0   | 0          | 110         | 110         |
| 4            | Kannur             | 0   | 150        | 255         | 405         |
| 5            | Kasaragod          | 0   | 86         | 80          | 166         |
| 6            | Kollam             | 0   | 25         | 110         | 135         |
| 7            | Kottayam           | 0   | 105        | 50          | 155         |
| 8            | Kozhikode          | 100   | 0          | 420         | 520         |
| 9            | Malappuram         | 0   | 70         | 220         | 290         |
| 10           | Palakkad           | 0   | 100        | 125         | 225         |
| 11           | Pathanamthitta     | 0   | 0          | 250         | 250         |
| 12           | Thiruvananthapuram | 500   | 50         | 130         | 680         |
| 13           | Thrissur           | 10  | 48         | 200         | 258         |
| 14           | Wayanad            | 10  | 0          | 30          | 40          |
| <b>Total</b> |                    | <b>1070</b>                                 | <b>634</b> | <b>3227</b> | <b>4931</b> |

Regular testing is being conducted at the above 7 completed plants by the Kerala State Pollution Control Board (KSPCB). As per the latest Monthly Progress Report submitted by the KSPCB, the plants are complying with the disposal standards. The treated water is being reused in the plant premises for gardening purposes and excess water is disposed of towards the surface water. The table 14 below shows the compliance of the plants.

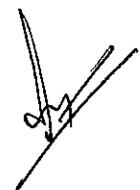


Table 14: Compliance of FSTPs with discharge standards

| List | District           | Project Name                        | Test Result  |
|------|--------------------|-------------------------------------|--|
| 1    | Alappuzha          | Anatharaveli Cherthala (M)          | pH - 8.01, BOD - 13 mg/L, COD -38 mg/L, Total Suspended Solids - 3 mg/L, Fecal coliform - 1.8 MPN /100 ml  |
| 2    | Ernakulam          | Wellington, Kochi Corporation       | pH - 7.56, Total Suspended Solids- BDL, COD - 9.52 mg/L, BOD - 2.4 mg/L, Fecal coliform < 2 MPN/100ml as per analysis report dated 05.12.2025  |
| 3    | Ernakulam          | Brahmpauram , Kochi Corporation     | pH- 7.26, BOD- 0.87 mg/L, COD- 24 mg/L, Oil and Grease- BDL, Total Suspended Solids ± 54 mg/L,, Phosphate ± 0.06 mg/L, Nitrate- 3.09 mg/l, Sulphates ± 12.49 mg/l, Sulphides ± 8.34 mg/l, Ammoniacal Nitrogen ± 0.20 mg/l, Phenolic Compounds -1.23 mg/L, Faecal coliform ±7 cfu/ 100 ml, Faecal Streptococci-60 cfu/ 100 ml as per analysis report dated 14.05.2025 |
| 4    | Kozhikode          | Medical College (CoT)               | pH -7, TSS-32.5 mg/l, Total Residual Chlorine ± Nil, COD- 272 mg/l, Oil and Grease- BDL, BOD-35.87 mg/l, Ammoniacal ± N 139.808 mg/l and Fecal Coliform ± 1300 cfu/100m as per analysis report dated 01.12.2025  |
| 5    | Thiruvananthapuram | Muttathara - TVM (CoT)              | pH-6.9, TSS-38 mg/L, BOD- 6.5 mg/L, COD-60 mg/L, Oil and grease-BDL, Faecal Coliform- 310 MPN/100 ml as per analysis report dated 24.11.2025   |
| 6    | Thrissur           | Madakkathara , Thrissur Corporation | pH ± 7.25, BOD ± 7 mg/l, COD ± 44 mg/l, SS ± 0.09, Oil & Grease ± 0.02 mg/l, Ammoniacal Nitrogen ± Nil, Total Nitrogen ± 35.37 mg/l, Total 11 Phosphorus ± 0.63 mg/l, Faecal Coliform ± Nil as per analysis report dated 11.11.2024  |



|   |         |                           |  |
|---|---------|---------------------------|--|
| 7 | Wayanad | Kalpetta,<br>Kalpetta (M) | pH $\pm$ 7.49, TSS $\pm$ 8.2 mg/l, BOD $\pm$ 7.58 mg/l, Oil and Grease- 6.32 mg/l<br>as per the analysis report dated 31.05.2025 |
|---|---------|---------------------------|--|

To mitigate the gap in sewage treatment the state is focusing on the completion of ongoing and proposed STPs. As an immediate measure the state envisaged identification of suitable lands for FSTPs. As mentioned earlier the total capacity of such FSTPs is 4931 KLD. In order to treat the current gap of 596.17 MLD in sewage management, these FSTPs can be utilized. The equivalent population for the identified gap is 55,19,565 and the required FSTP capacity is 1,159 KLD. But the state has already identified the facilities for treating 4,931 KLD septage waste for both Urban and rural settlements. Thus the state is assuring the proper and scientific management of septage waste. The STPs treat combined domestic and municipal wastewater conveyed through sewer networks. FSTPs treat septage collected from onsite sanitation systems through the desludging trucks. The remaining liquid fraction is termed sullage. The sullage from urban and rural settlements is generated primarily from domestic activities such as bathing, washing, and kitchen use. This wastewater is conveyed through designated drainage or sewerage systems to soak pits or treatment facilities where it undergoes appropriate treatment to meet prescribed standards. The treated sullage is subsequently reused for non-potable purposes such as gardening, flushing, vehicle washing, irrigation, or is safely disposed of. The residual sludge is managed through stabilization and environmentally sound disposal, or beneficially reused as a soil conditioner or manure in agriculture, in compliance with applicable environmental regulations.

### 7.2. Observation II - 3 (A) Sewage Management (ii)

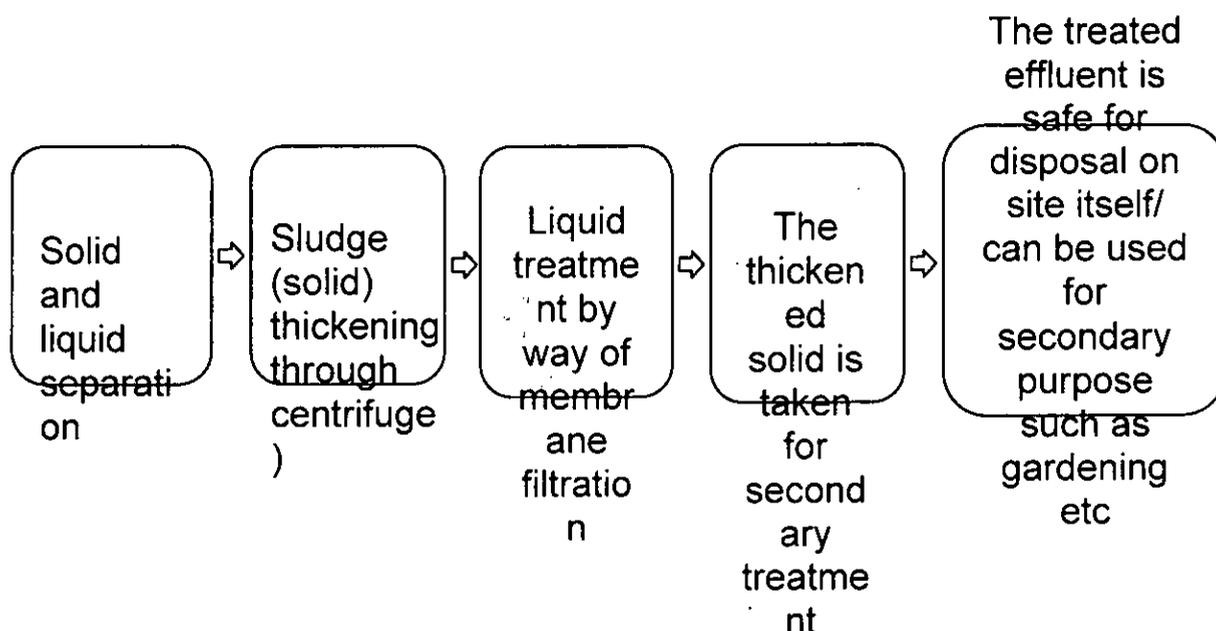
***Use of mobile STPs have been indicated in such areas where STP has not been constructed. Information may be provided with regard to the number of mobile STPs, their capacity and the final treated water***

**quality including its Discharge**

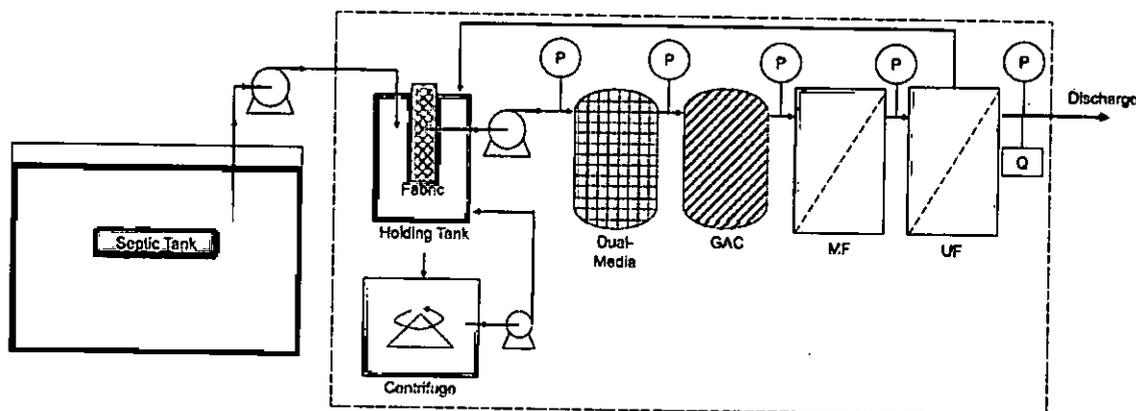
Mobile Treatment Unit (MTU) is an onsite Faecal sludge treatment technology developed by Water, Sanitation and Hygiene Institute (WASHi). It is a treatment system installed on the platform of a truck, which is able to treat the septage collected from septic tanks. MTU treated septage effluent is meeting CPCB disposal standards and is approved by the Department of Drinking Water and Sanitation (DDWS), Government of India. The on-site mobile treatment unit works with the concept of solid-liquid separation, sludge thickening and effluent treatment process. While the liquid is separated from the solid, the effluent passes through the treatment process and disposes the treated effluent. The sludge thickening process helps further in reducing the moisture content in the sludge.

**Technical specification :** Capacity is 6000 litre /hour. Units include Conical tank, Coagulation Tank, Centrifuge storage tank, Storage Tank, Power Source, Filtration Stages, Sand Filter, Carbon Filter, Micron Filter, Ultra Filter.

**Process flow**



*[Handwritten signature]*



**Fig. 1. Mobile treatment unit (MTU) process flow diagram**

The dashed line designates the materials located on the MTU truck. Symbols "P" and "Q" designate locations of pressure and flow gauges, respectively. Septage is pumped from a household septic tank into a holding tank through a fabric-covered feed tube. Liquid is pumped from the holding tank through the series of filters: Dual-Media (D-M), GAC(Granular Activated Carbon, Membrane Filter, and Ultra Filter. UF effluent is discharged into the environment, while only the concentrated solids are transported to a centralized treatment system.

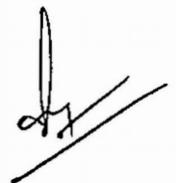
Till date the state has procured 20 MTUs in the various local bodies. Among that 11 MTUs are purchased by Urban Local Bodies. Also 7 more local bodies have taken up projects for purchasing the mobile treatment units. The list of local bodies who have purchased MTU and proposed it is attached below as table 15.

**Table 15: Details of Urban local bodies with MTU (Purchased or Proposed)**

| Sl. No | District  | Local Body Name         | Stage    |
|--------|-----------|-------------------------|----------|
| 1      | Alappuzha | Alappuzha Municipality  | Existing |
| 2      | Alappuzha | Kayamkulam Municipality | Existing |

|    |                |                             |          |
|----|----------------|-----------------------------|----------|
| 3  | Alappuzha      | Alappuzha Municipality      | Existing |
| 4  | Kollam         | Kollam corporation          | Existing |
| 5  | Kottayam       | Changanaserri Municipality  | Existing |
| 6  | Malappuram     | Manjeri Municipality        | Existing |
| 7  | Pathanamthitta | Pandalam Municipality       | Existing |
| 8  | Thrissur       | Chalakkudy Municipality     | Existing |
| 9  | Thrissur       | Kodungaloor Municipality    | Existing |
| 10 | Thrissur       | Kunnamkulam municipality    | Existing |
| 11 | Thrissur       | Chavakkad municipality      | Existing |
| 12 | Alappuzha      | Chenganoor                  | Proposed |
| 13 | Ernakulam      | Maradu Municipality         | Proposed |
| 14 | Kannur         | Iritty Municipality         | Proposed |
| 15 | Kollam         | Kottarakkara Municipality   | Proposed |
| 16 | Kollam         | Kollam corporation          | Proposed |
| 17 | Kottayam       | Kottayam Municipality       | Proposed |
| 18 | Malappuram     | Kondotty ulb                | Proposed |
| 19 | Pathanamthitta | Pattanamthitta Municipality | Proposed |

The MTUs are being monitored by the individual Local bodies. The Operation and Maintenance is given to third party with agreement conditions and clauses. The test results for the functional MTU's are attached as **Annexure 8**. As per the received 13 test results the MTU are successfully delivering the discharge standards prescribed by the KSPCB. The treated water is being



disposed at the site itself for land irrigation purposes and to the storm water drain.

### 7.3. Observation III - 3 (A) Sewage Management (iii)

***ULB Wise discharge of sewage generated, treatment facility, untreated sewage, household connection be provided including the final discharge of treated/untreated sewage into such as rivers/water bodies etc.***

The state has a total of 93 Urban local bodies, including 6 corporations and 87 municipalities. The liquid waste management activities in all the corporations are handled by AMRUT scheme and Kerala Water Authority (KWA). The sewage generated in the urban local bodies is mainly treated through Network based Sewage Treatment plants. In those areas where STP is not feasible Fecal Sludge treatment plants are planned and constructed. In the FSTPs the septic waste from the onsite sanitation systems are collected and transported through these plants through desludging trucks. The Hon'ble court has now directed to submit the details of sewage generated, treatment facility, untreated sewage, house hold connections. The detailed table shows the sewage generation ,its treatment and the proposal for the ULBs which does not have any plant for now is attached as **Annexure 9**.

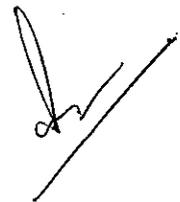
The Table 16 below presents ULB-wise details of household sewer connections associated with network-based STPs. It includes information on the existing household connections, proposed household connections, and the total household connections to be covered under each project. This consolidated data provides an overview of the current status and planned expansion of sewerage infrastructure across the respective ULB. Overall, the district presently has 66,885 existing household sewer connections, with an

additional 1,12,902 connections proposed. Upon implementation of the proposed projects, the total household sewer connections across the district will increase to 1,79,787, reflecting a significant expansion of sewerage coverage and improved wastewater management infrastructure across the respective ULBs.

**Table 16: Project wise Household connection details**

| <b>Household connection details</b> |                    |                                  |                                |                                |   |
|-------------------------------------|--------------------|----------------------------------|--------------------------------|--------------------------------|---|
| <b>Sl. No</b>                       | <b>District</b>    | <b>Project Name</b>              | <b>Existing HH Connections</b> | <b>Proposed HH Connections</b> | <b>Total HH Connections ( Existing +Proposed)</b> |
| 1                                   | Thiruvananthapuram | 107 MLD STP at Muttathara        | 64936                          | 2857                           | 67793   |
| 2                                   | Thiruvananthapuram | 500 KLD STP at Rajaji Nagar      | 0                              | 750                            | 750   |
| 3                                   | Kollam             | 12 MLD STP at Kureepuzha         | 0                              | 11084                          | 11084   |
| 4                                   | Kollam             | 590 KLD STP at Tsunami Flat      | 0                              | 600                            | 600   |
| 5                                   | Ernakulam          | 55 MLD STP at Elamkulam (KIIFB)  | 0                              | 28062                          | 28062   |
| 6                                   | Ernakulam          | 50 MLD STP at Muttar (KIIFB)     | 0                              | 33635                          | 33635   |
| 7                                   | Ernakulam          | 5 MLD STP at Elamkulam(AM RUT 2) | 0                              | 10049                          | 10049   |
| 8                                   | Ernakulam          | 5 MLD STP at Elamkulam           | 1846                           | 0                              | 1846  |
| 9                                   | Ernakulam          | 1.1 MLD STP at Ambedkar          | 0                              | 1897                           | 1897  |

|              |            | Colony  |              |               |               |
|--------------|------------|---|--------------|---------------|---------------|
| 10           | Ernakulam  | 5 MLD STP at Elamkulam                                  | 0            | 199           | 199           |
| 11           | Thrissur   | Augmentation of the 3 MLD STP at Chakkamkandam to 5 MLD | 103          | 0             | 103           |
| 12           | Thrissur   | 5 MLD STP at Kottappuram                                | 0            | 5341          | 5341          |
| 13           | Alappuzha  | 5 MLD STP and associated network                        | 0            | 2048          | 2048          |
| 14           | Alappuzha  | 12 KLD STP at Bhajanamadom                              | 0            | 33            | 33            |
| 15           | Kozhikkode | 27 MLD STP at Sarovaram                                 | 0            | 3622          | 3622          |
| 16           | Kozhikkode | 15 MLD STP at West Hill Industrial Estate               | 0            | 8000          | 8000          |
| 17           | Kannur     | 5 MLD STP at Maithanapally/ Marakkarkandy               | 0            | 3250          | 3250          |
| 18           | Kannur     | 1 MLD STP at Padannapalam                               | 0            | 974           | 974           |
| 19           | Palakkad   | 1.5 MLD STP at Ottappalam                               | 0            | 500           | 500           |
| 20           | Palakkad   | 30 KLD STP at Palakkad Municipal Complex                | 0            | 1             | 1             |
| <b>Total</b> |            |   | <b>66885</b> | <b>112902</b> | <b>179787</b> |



#### 7.4. Observation IV - 3 (B) Ringfence Account (i)

**Ring Fence Account: Details of ring-fenced account and head wise expenditure be provided.**

The Table 17 below presents a comparative overview of ring-fenced financial allocations and expenditure across key urban and rural development schemes. It highlights scheme-wise funding positions as of July 2025 and January 2026, along with the corresponding expenditure incurred. The data covers major programmes implemented through urban local bodies and rural institutions, including AMRUT, SBM-G, PRI, and MGNREGS, providing a consolidated picture of fund availability, progression over time, and utilisation status. The total ring-fenced allocation increased from ₹4,141.97 crore in July 2025 to ₹4,852.80 crore in January 2026, reflecting an increase of ₹710.83 crore. This indicates the State's financial commitment towards liquid waste management, environmental and public health protection, and sustained dedication to strengthening liquid waste management systems across local bodies. Expenditure of ₹753.56 crore was achieved during the last six months. The slower progress is primarily due to prolonged heavy rainfall, delays in fund release and cash flow, and technical and execution challenges arising from Kerala's difficult terrain and site-specific conditions.

**Table 17: Details of ring-fenced amount and expenditure**

| Sl. No | Area  | Agency/<br>Scheme | Ring fenced<br>amount<br>July 2025<br>in Cr | Ring<br>fenced<br>amount<br>Jn 2026<br>in Cr | Expenditu<br>re |
|--------|-------|-------------------|---|--|-----------------|
| 1      | Urban | AMRUT 1.0         | 342.66                                      | 354.93                                       | 315.57          |
| 2      |       | AMRUT 2.0         | 1181.69                                     | 1184.6                                       | 29.49           |
| 3      |       | ULB               | 971.09                                      | 1408.99                                      | 133.01          |
| 4      | Rural | SBM G             | 105.65                                      | 508.36                                       | 12.47           |

|              |  |         |                |               |               |
|--------------|--|---------|----------------|---------------|---------------|
| 5            |  | PRI     | 1515.85        | 1370.43       | 261.39        |
| 6            |  | MGNREGS | 25.03          | 25.49         | 1.63          |
| <b>Total</b> |  |         | <b>4141.97</b> | <b>4852.8</b> | <b>753.56</b> |

The below Table 18 provides a district-wise summary of financial allocation and expenditure under urban projects across the State, covering 14 districts. The total allocation amounts to ₹2,946.37 crore, while the cumulative expenditure reported is ₹476.64 crore, indicating that only a limited portion of the sanctioned funds has been utilized so far. The wide gap between allocation and expenditure suggests that many projects are at early or intermediate stages of implementation, with fund utilization constrained by procedural, administrative, or execution-related factors, thereby highlighting the need for improved project execution and accelerated utilization to achieve the intended urban development objectives. The detailed list showing the individual urban local body allocation and expenditure is attached as **Annexure 10**.

**Table 18: District wise allocation and expenditure**

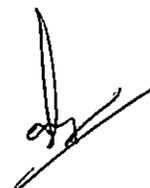
| Sl. No | District           | Total (Cr) |             |
|--------|--------------------|------------|-------------|
|        |                    | Allocation | Expenditure |
| 1      | Thiruvananthapuram | 434.29     | 250.23      |
| 2      | Kollam             | 267.11     | 35.4        |
| 3      | Pathanamthitta     | 14.95      | 1.76        |
| 4      | Alappuzha          | 141.87     | 20.45       |
| 5      | Kottayam           | 30.13      | 3.04        |
| 6      | Idukki             | 18.97      | 1.1         |
| 7      | Ernakulam          | 733.87     | 40.41       |
| 8      | Thrissur           | 275        | 19.27       |
| 9      | Palakkad           | 86.19      | 14.34       |
| 10     | Malappuram         | 100.91     | 14.36       |

| Sl. No       | District  | Total (Cr) |             |
|--------------|-----------|------------|-------------|
|              |           | Allocation | Expenditure |
|              |           |            |             |
| 11           | Wayanad   | 33.58      | 4.72        |
| 12           | Kozhikode | 462.76     | 30.76       |
| 13           | Kannur    | 310.13     | 38.11       |
| 14           | Kasargod  | 35.87      | 2.7         |
| <b>Total</b> |           | 2945.63    | 476.65      |

## 8. Other Initiatives

### 8.1. Grey Water Management systems through KRWSA

Kerala Rural Water Supply and Sanitation Agency (KRWSA) has been engaged for the implementation of Grey Water Management works under the Swachh Bharat Mission (Gramin) in rural areas of Kerala. The scope of works includes preparation and vetting of DPRs, tendering, and execution of decentralized greywater management systems as per SBM (G) guidelines and State-specific technical conditions. The projects are taken up by the Local Self Government Institutions and executed by KRWSA, ensuring compliance with approved designs, quality standards, and convergence with ongoing rural water supply and sanitation schemes. The systems primarily adopt nature-based treatment technologies with low operation and maintenance requirements. As per the data recorded 147 projects have been taken up across LSGIs, of which 12 projects are under tendering, works have been awarded for four projects, and one project has been completed. Continuous monitoring, progress reporting, and coordination with LSGIs and Suchitwa Mission are being carried out to ensure timely implementation and long-term sustainability of the assets created.



## 8.2. Information Education and Communication Activities

The focused and sustained Information, Education and Communication (IEC) interventions on Liquid Waste Management (LWM) during 2025 significantly strengthened Kerala's approach to the protection and conservation of its water resources. Through strong state-level leadership complemented by effective district-level execution, LWM concerns were systematically integrated into public discourse and community practices. These efforts reinforced the overarching vision of a clean, healthy, and resilient *Malinya Muktha Navakeralam*. The key state-level and district-level IEC activities undertaken during the year are outlined below.

### 8.2.1. Key State-Level IEC Activities on Liquid Waste Management

- **Anti-Littering and Water Body Protection Campaigns:**

As part of *Valicheriyal Virudha Pracharana Vaaram*, targeted IEC messages were disseminated statewide to discourage dumping of solid and liquid waste into rivers, canals, ponds, and other water bodies.

- **Single WhatsApp Helpline Promotion:**

Statewide IEC campaigns promoted a unified WhatsApp helpline number for reporting illegal dumping into water bodies, thereby strengthening citizen participation, surveillance, and enforcement mechanisms.

- **NAMASTE Scheme IEC:**

A state-level survey of sewage and septage workers under the NAMASTE scheme was supported through IEC initiatives using newspapers, FM radio, and social media platforms, ensuring wide worker participation and attendance in associated health camps.

- **Pre-Monsoon IEC Campaign:**

The *Perumazhaku Oru Muzham Munpe* campaign incorporated strong LWM-focused messaging on drain cleaning, prevention of water stagnation, septic tank safety, and household-level grey water

management to mitigate monsoon-related health and environmental risks.

- **Poster and Multimedia Campaigns:**

Dedicated IEC creatives, including posters and multimedia content addressing water pollution and ocean littering, were developed and disseminated across print, digital, and social media platforms.

- **Swachh Survekshan IEC:**

Citizen feedback campaigns under Swachh Survekshan highlighted key LWM indicators such as drain maintenance, public toilets, wastewater handling, and overall sanitation infrastructure.

- **Mass Media Outreach:**

The Programme Officer (LWM) participated in a one-hour live phone-in programme aired on Doordarshan's *Samoochapadam*, providing expert guidance and disseminating information on liquid waste management practices to the general public.

### 8.2.2. District-Level IEC Activities on Liquid Waste Management

District authorities effectively contextualised state-level LWM messages through locally relevant, field-based, and community-oriented IEC initiatives, including:

- **Water Body Protection Drives:**

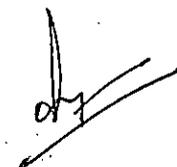
Campaigns focusing on rivers, canals, lakes, and coastal areas were conducted across districts, comprising drain-cleaning drives, public awareness sessions, and community mobilisation activities.

- **Festival- and Pilgrimage-Specific IEC:**

Districts such as Pathanamthitta, Idukki, Ernakulam, Kottayam, and Alappuzha implemented intensive IEC interventions during the Sabarimala pilgrimage, Karkidaka Vavu, and major festivals to prevent pollution of rivers and water bodies.

- **Pre-Monsoon and Monsoon IEC:**

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Door-to-door awareness programmes, cleaning drives, fogging-related IEC, and water quality testing awareness were undertaken at district and Local Self Government Institution (LSGI) levels.

- **Public Toilet and Institutional IEC:**

Awareness campaigns on the proper use, operation, and maintenance of public toilets, Sewage Treatment Plants (STPs), and Faecal Sludge Treatment Plants (FSTPs) were carried out in multiple districts.

- **School and Community Engagement:**

Educational institutions and community groups were actively engaged to promote awareness on water conservation, grey water reuse, hygiene practices, and environmentally responsible behaviour.

The focused IEC interventions on Liquid Waste Management during 2025, when viewed alongside Kerala's significant achievements in sanitation certification, underscore the effectiveness of an integrated and outcome-oriented communication strategy. The sustained emphasis on water body protection, wastewater handling, pre-monsoon preparedness, citizen engagement, and worker welfare has complemented the State's broader sanitation initiatives, contributing to measurable improvements on the ground. The attainment of Water+ certification by Thiruvananthapuram Corporation, the expansion of ODF++ status to Kochi Corporation, Kalpetta, and Guruvayur, and the securing of ODF+ certification by 77 municipalities reflect the positive impact of consistent IEC support in strengthening institutional performance and public compliance. Collectively, these outcomes demonstrate Kerala's steady transition from basic sanitation achievements towards advanced liquid waste management standards, reinforcing the State's commitment to sustainable urban and rural sanitation and the long-term vision of a clean, healthy, and resilient *Malinya Muktha Navakeralam*.



**ANUPAMA TV IAS**  
**PEN: 689581**  
**Secretary**  
**Local Self Government Department**  
**Government Secretariat**

NGT TABLE (A) Legacy Remediation Waste:-

| SL.No | (i)<br>Name of Districts | Name of Local Body             | (ii)<br>Legacy waste site (district wise) | (iii)<br>Area covered by the legacy waste (district wise) (Acre) | (iv)<br>Quantity of waste (in MT) in each site | (v)<br>Composition of the waste                        |                           |                       |                                 | (vi)<br>Process adopted to remediate at each site | (vii)<br>Timelines to process (Agmnt date-work completion date) | (viii)<br>Final destination of the components at (v)  | (ix)<br>Action plan to remediate and recover the sites at (iii) (in sq km) with earmarked budget (district wise) | Status of Remediation as on 10.01.2026 | QTY of processed waste (MT) | Qty of Un processed waste (MT) | Geo-coordinates of the site |
|-------|--------------------------|--------------------------------|---|--|--|--|---------------------------|-----------------------|---------------------------------|---|---|---|--|--|-----------------------------|--------------------------------|-----------------------------|
|       |                          |                                |   |  |  | a)<br>Inerts (%) (construction waste, wood, glass etc) | b)<br>Compost (%) organic | c)<br>RDF (%) Plastic | d)<br>If any other material (%) |   |   |   |  |  |                             |                                |                             |
| 1     | 01 Thiruvananthapuram    | Thiruvananthapuram Corporation | Palayam market                            | 0.1  | 4804   | 45   | 29                        | 20                    | 6                               | Biomining and bioremediation                      | NA  | NA  | Completed  | 4804                                   | 0                           | 8.503046, 76.951791            |                             |
| 2     | 01 Thiruvananthapuram    | Thiruvananthapuram Corporation | Erumakuzhi, near chala market             | 0.6  | 900  | 47   | 37                        | 13                    | 3                               |   | NA  | NA  | Completed  | 900                                    | 0                           | 8.479713, 76.951122            |                             |
| 3     | 02 Kollam                | Kollam Corporation             | Kureepuzha                                | 5.58   | 83926  | 23.579   | 0.008                     | 12.89                 | 63.52                           |   | NA  | Inerts-backfill within the project site, RDF- to cement factories for co processing, Recyclables-to empanelled agencies for recycling | Completed  | 83926                                  | 0                           | 8.912467, 76.566520            |                             |
| 4     | 03 Pathanamthitta        | Pathanamthitta Municipality    | Near Mini stadium, PTA                    | 0.24   | 800  | 35   | 26                        | 37                    | 2                               |   | NA  |   | Completed  | 800                                    | 0                           | 9.259613, 76.784624            |                             |
| 5     | 03 Pathanamthitta        | Adoor Municipality             | Kaimalapara, Ward no. 2, Adoor            | 0.05   | 500  | 31   | 29                        | 39                    | 1                               |   | NA  |   | Completed  | 500                                    | 0                           | 9.17724, 76.730338             |                             |
| 6     | 03 Pathanamthitta        | Pandalam Municipality          | Near RRF Unit, pandalam                   | 0.1  | 400  | 32   | 28                        | 39                    | 1                               |   | NA  |   | Completed  | 400                                    | 0                           | 9.224743, 76.676185            |                             |
| 7     | 05 Kottayam              | Mundakkayam Grama Panchayat    | Mundakkayam                               | 0.49   | 4000   | 18   | 19                        | 63                    | 0                               |   | NA  |   | Completed  | 4000                                   | 0                           | 9.566536, 76.877964            |                             |
| 8     | 05 Kottayam              | Erumeli Grama Panchayat        | Erumeli                                   | 0.19   | 1500   | 14   | 18                        | 68                    | 0                               |   | NA  |   | Completed  | 1500                                   | 0                           | 9°34'06.1"N 76°52'28.6"E       |                             |
| 9     | 07 Ernakulam             | Kalamassery Municipality       | Kalamassery                               | 1.9  | 46699.78                                       | 5.2  | 46                        | 20.6                  | 28.2                            |   | NA  |   | Completed  | 46699.78                               | 0                           | 10.065159, 76.327607           |                             |
| 10    | 08 Thrissur              | Kodungalloor Municipality      | Pullut, Chappara, Kodungalloor            | 1.7  | 26000  | 30   | 8                         | 40                    | 22                              |   | NA  |   | Completed  | 26000                                  | 0                           | 10.227760, 76.214109           |                             |
| 11    | 08 Thrissur              | Guruvayur Municipality         | Choolpuram, Guruvayoor                    | 3.37   | 20000  | 19.5   | 21.5                      | 57                    | 2                               |   | NA  |   | Completed  | 20000                                  | 0                           | 10.614811, 76.045104           |                             |

NGT TABLE (A) Legacy Remediation Waste:-

| SL.No | (i)<br>Name of Districts | Name of Local Body               | (ii)<br>Legacy waste site (district wise)  | (iii)<br>Area covered by the legacy waste (district wise) (Acre) | (iv)<br>Quantity of waste (in MT) in each site | (v)<br>Composition of the waste                        |                           |                       |                                 | (vi)<br>Process adopted to remediate at each site | (vii)<br>Timelines to process (Agmnt date-work completion date) | (viii)<br>Final destination of the components at (v)   | (ix)<br>Action plan to remediate and recover the sites at (iii) (in sq km) with earmarked budget (district wise) | Status of Remediation as on 10.01.2026 | QTY of processed waste (MT) | Qty of Un processed waste (MT) | Geo-coordinates of the site |
|-------|--------------------------|----------------------------------|--|--|--|--|---------------------------|-----------------------|---------------------------------|---|---|--|--|--|-----------------------------|--------------------------------|-----------------------------|
|       |                          |                                  |  |  |  | a)<br>Inerts (%) (constriction waste, wood, glass etc) | b)<br>Compost (%) organic | c)<br>RDF (%) Plastic | d)<br>If any other material (%) |   |   |  |  |  |                             |                                |                             |
| 12    | 08 Thrissur              | Kodungalloor Municipality        | T.K.S. Puram, Kodungalloor                 | 1.6  | 607  | 32   | 7                         | 36.7                  | 22                              | Biomining and bioremediation                      | NA  | Inerts-backfill within the project site, RDF-to cement factories for co processing, Recyclables-to empanelled agencies for recycling | NA   | Completed                              | 607                         | 0                              | 10.204591,76.201574         |
| 13    | 08 Thrissur              | Thrissur Corporation             | Laloor                                     | 0.25   | 19500  | 30   | 30                        | 12                    | 28                              |   | NA  | NA   | Completed  | 19500                                  | 0                           | 10.514903,76.187189            |                             |
| 14    | 09 Palakkad              | Pattambi Municipality            | Pattambi, Sankaramangalam                  | 0.54   | 1041   | 35   | 45                        | 15                    | 5                               |   | NA  | NA   | Completed  | 1041                                   | 0                           | 10.827542,76.190078            |                             |
| 15    | 09 Palakkad              | Alathur Gram Panchayat           | Alathur                                    | 0.15   | 1824   | 42   | 30                        | 20                    | 8                               |   | NA  | NA   | Completed  | 1824                                   | 0                           | 10.630455,76.536034            |                             |
| 16    | 09 Palakkad              | Vadakkancheri Gram Panchayat     | Vadakkanchery                              | 0.15   | 1,520  | 40   | 32                        | 18                    | 10                              |   | NA  | NA   | Completed  | 1,520                                  | 0                           | 10.591206,76.493628            |                             |
| 17    | 09 Palakkad              | Nemmara Grama Panchayat          | Nemmara                                    | 0.49   | 3,641  | 41   | 30                        | 21                    | 8                               |   | NA  | NA   | Completed  | 3,641                                  | 0                           | 10.584081,76.590796            |                             |
| 18    | 10 Malappuram            | Malappuram ulb                   | Puliyettummal, Near Inkel city, Malappuram | 3.2  | 5,079  | 24   | 31.15                     | 44.81                 | 0.04                            |   | NA  | NA   | Completed  | 5079.04                                | 0                           | 11.069194,76.042835            |                             |
| 19    | 10 Malappuram            | Tirur ulb                        | Trenching ground, Ottilathara              | 1  | 3079.2   | 15   | 40                        | 25                    | 20.1                            |   | NA  | NA   | Completed  | 3079.2                                 | 0                           | 10.903003,75.931515            |                             |
| 20    | 10 Malappuram            | Perinthalmanna Municipality      | Perinthalmanna, Kunnappalli                | 10   | 200  | 10   | 0                         | 90                    | 0                               |   | NA  | NA   | Completed  | 200                                    | 0                           | 10.960982,76.209570            |                             |
| 21    | 10 Malappuram            | Manjeri Municipality             | Vettekkode, Manjeri                        | 0.44   | 13902.11                                       | 17.4   | 29.44                     | 53.08                 | 0                               |   | NA  | NA   | Completed  | 13902.11                               | 0                           | 11.109738,76.137926            |                             |
| 22    | 11 Kozhikkode            | Kozhikkode Municipal Corporation | Kalliyi, ward-56, beside the river         | 0.0098   | 15   | 20   | 50                        | 25                    | 5                               |   | NA  | NA   | Completed  | 15                                     | 0                           | 11°13'00.0"N, 75°46'60.0"E     |                             |
| 23    | 11 Kozhikkode            | Koyilandy Municipality           | Koyilandi                                  | 0.012  | 40   | 22   | 46.5                      | 23.5                  | 8                               |   | NA  | NA   | Completed  | 40                                     | 0                           | 11.439° N, 75.695° E           |                             |
| 24    | 11 Kozhikkode            | Kozhikkode Municipal Corporation | Njaliyan parambu                           | 6.4997   | 130000   | 50   | 40                        | 5                     | 5                               |   | NA  | NA   | Completed  | 130000                                 | 0                           | 11.204880,75.816662            |                             |
| 25    | 01 Thiruvananthapuram    | Attingal Municipality            | Attingal, Chudukad                         | 0.5  | 11365.00                                       | 42   | 32                        | 18                    | 8                               |   | Biomining and bioremediation                                    | 01.04.2025 - 30.09.2026  | First phase completed and second phase is under retender process. II nd phase budget -₹0.75 Cr.                  | 50% completed                          | 7800.00                     | 3565.00                        | 8.690629 N, 76.815546 E     |

NGT TABLE (A) Legacy Remediation Waste:-

| SL.No | (i)<br>Name of Districts | Name of Local Body             | (ii)<br>Legacy waste site (district wise) | (iii)<br>Area covered by the legacy waste (district wise) (Acre) | (iv)<br>Quantity of waste (in MT) in each site | (v)<br>Composition of the waste                        |                           |                       |                                 | (vi)<br>Process adopted to remediate at each site | (vii)<br>Timelines to process (Agmnt date-work completion date) | (viii)<br>Final destination of the components at (v) | (ix)<br>Action plan to remediate and recover the sites at (iii) (in sq km) with earmarked budget (district wise) | Status of Remediation as on 10.01.2026 | QTY of processed waste (MT) | Qty of Un processed waste (MT) | Geo-coordinates of the site   |
|-------|--------------------------|--------------------------------|---|--|--|--|---------------------------|-----------------------|---------------------------------|---|---|--|--|--|-----------------------------|--------------------------------|-------------------------------|
|       |                          |                                |   |  |  | a)<br>Inerts (%) (constriction waste, wood, glass etc) | b)<br>Compost (%) organic | c)<br>RDF (%) Plastic | d)<br>If any other material (%) |   |   |  |  |  |                             |                                |                               |
| 26    | 01 Thiruvananthapuram    | Thiruvananthapuram Corporation | Vizhijam                                  | 0.26   | 3177.10  | 35   | 28                        | 27                    | 10                              | Biomining and bioremediation                      | 01.04.2025-22.03.2026   |  | Tendered.The work will be started on the late july . Budget: ₹0.40 Cr  | 60% completed                          | 1906.26                     | 1270.84                        | 8.376044° 76.995686°          |
| 27    | 05 Kottayam              | kottayam municipality          | Vadavathoor, Kottayam                     | 3.2  | 113647   | 22.8   | 42.89                     | 15.7                  | 0                               | Biomining and bioremediation                      | 11.01.2025 - 31.03.2026   |  | Agreement executed Started the site investigation for preparing implementation plan. Budget 16.92 Cr             | 18% completed                          | 20456.46                    | 93190.54                       | 9°35'33.1"N 76°33'31.9"E      |
| 28    | 05 Kottayam              | Changanassery Municipality     | Fathimapuram, Changanassery               | 0.8  | 7300.00  | 22   | 25                        | 50                    | 3                               |   | 22.02.2024 - 30.11.2026   |  | Under SBM Project,work order given to agency (SEUF), Budget-₹84.63 Lakhs   | 75% completed                          | 5475.00                     | 1825.00                        | 9°26'49.8"N 76°33'13.3"E      |
| 29    | 06 Idukki                | Thodupuzha Municipality        | Parakadavu, Thodupuzha                    | 1.26   | 28000.00                                       | 30   | 20                        | 50                    | 0                               |   | 01.11.2024-28.02.2026   |  | 18000m3 qty boimining done, Project cost :- ₹. 2.83 Cr./-  | 68% completed                          | 19040.00                    | 8960.00                        | 9.882586, 76.688313           |
| 30    | 07 Ernakulam             | Kothamangalam Municipality     | Kumbalathumuri, Kothamangalam             | 2.13   | 29915.00                                       | 29.12  | 55.85                     | 15.21                 | 0                               | biomining and bioremediation                      | 01.04.2025-30.12.2026   |  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 28.61 cr           | just started                           | 0.00                        | 29915.00                       | 10.079857, 76.647491          |
| 31    | 07 Ernakulam             | Kochi Corporation              | Brahmapuram, Kochi                        | 39   | 843000   | 16.6   | 36.5                      | 22.3                  | 25                              |   | 01.04.2025-30.09.2026   |  | The work is ongoing (45%). Budget ₹118 Cr  | 92% completed                          | 775560.00                   | 67440.00                       | 9.99339648 13, 76.3638612 623 |
| 32    | 07 Ernakulam             | Muvattupuzha Municipality      | Kurianmala, Muvattupuzha                  | 3.5  | 44589.00                                       | 49.8   | 40.6                      | 8.81                  | 0.8                             | biomining and bioremediation                      | 01.06.2025-31.03.2026   |  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 10.43 cr           | 20% completed                          | 8917.80                     | 35671.20                       | 9.99852, 76.56761             |
| 33    | 07 Ernakulam             | North Paravoor Municipality    | Vedimara, North Paravoor                  | 0.5  | 18666.00                                       | 67.56  | 21.4                      | 11.04                 | 0                               | Biomining and bioremediation                      | 01.06.2025-30.8.2026  |  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 28.61 cr           | Work just started                      | 0.00                        | 18666.00                       | 10.150582° , 76.242171°       |
| 34    | 08 Thrissur              | Chavakkad Municipality         | Chavakkad                                 | 0.2  | 5000.00  | 5  | 30                        | 60                    | 5                               | Biomining and bioremediation                      | 01.04.2025-30.09.2026   |  | 72% work completed, Urban Aglomoration fund, .42 Cr  | Completed upto ground level.           | 3600.00                     | 1400.00                        | 10°35'21.4"N 76°00'36.0"E     |

NGT TABLE (A) Legacy Remediation Waste:-

| SL.No | (i)<br>Name of Districts | Name of Local Body         | (ii)<br>Legacy waste site (district wise)     | (iii)<br>Area covered by the legacy waste (district wise) (Acre) | (iv)<br>Quantity of waste (in MT) in each site | (v)<br>Composition of the waste                        |                           |                       |                                 | (vi)<br>Process adopted to remediate at each site | (vii)<br>Timelines to process (Agmnt date-work completion date) | (viii)<br>Final destination of the components at (v)  | (ix)<br>Action plan to remediate and recover the sites at (iii) (in sq km) with earmarked budget (district wise)       | Status of Remediation as on 10.01.2026 | QTY of processed waste (MT) | Qty of Un processed waste (MT) | Geo-coordinates of the site   |
|-------|--------------------------|----------------------------|---|--|--|--|---------------------------|-----------------------|---------------------------------|---|---|---|--|--|-----------------------------|--------------------------------|-------------------------------|
|       |                          |                            |   |  |  | a)<br>Inerts (%) (construction waste, wood, glass etc) | b)<br>Compost (%) organic | c)<br>RDF (%) Plastic | d)<br>If any other material (%) |   |   |   |  |  |                             |                                |                               |
| 35    | 08 Thrissur              | Irinjalakuda Municipality  | Iringalakkuda, Mangadikunnu, Porathissery     | 0.123  | 18389.00                                       | 35   | 28                        | 27                    | 10                              |   | 14.02.2025-30.10.2026   | Inerts-backfill within the project site, RDF- to cement factories for co processing, Recyclables-to empanelled agencies for recycling | Agreement Executed, .5 cr  | 40% completed                          | 7355.60                     | 11033.40                       | 10.362121, 76.211546          |
| 36    | 08 Thrissur              | Wadakkanchery Municipality | Wadakancheriy, Kumbalanga d                   | 1.35   | 16152.00                                       | 29.88  | 35.16                     | 34.96                 | 0                               |   | 01.06.2025-30.12.2026   |   | KSWMP Project - Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 11.51 cr | 70% completed                          | 11306.40                    | 4845.60                        | 10.656833, 76.223361          |
| 37    | 09 Palakkad              | Ottapalam municipality     | Panamanna, Ottappalam                         | 2.42   | 37600.00                                       | 20   | 35                        | 40                    | 5                               |   | 01.04.2025-30.09.2026   |   | Phase-1 work completed (CFC Tied grant). Remaining area remediation work Tender process, 2.20 Cr                       | 75% completed                          | 28100.00                    | 9500.00                        | 10°47'11.6"N , 76°20'43.5"E   |
| 38    | 09 Palakkad              | Palakkad Municipality      | Koottupatha, Kodumba                          | 6.04   | 70541.35                                       | 22.63  | 0                         | 39.58                 | 37.78                           |   | 16.03.2024 30.03.2026   |   | Work in progress under KSWMP Budget: ₹15.45 cr   | 24.12% completed                       | 17014.57                    | 53526.78                       | 10°45'58.3"N , 76°41'17.9"E   |
| 39    | 11 Kozhikode             | Vatakara Municipality      | Puthiyappu, Vadakara                          | 1.25   | 30693.60                                       | 23   | 50.5                      | 23.9                  | 2.6                             |   | 01.06.2025-30.12.2026   |   | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 6.57 cr                  | 45% completed                          | 13812.12                    | 16881.48                       | 11.608495, 75.591705.         |
| 40    | 13 Kannur                | Kannur Corporation         | Kannur Corporation                            | 6.67   | 66700  | 43727.32   | 15                        | 20                    | 60                              |   | 01.04.2025-30.10.2026   |   | Work in progress (65%). Budget : ₹ 9.19 cr   | 50% completed                          | 33350.00                    | 33350.00                       | 11.9023 , 75.4403             |
| 41    | 13 Kannur                | MATTANNUR MUNICIPALITY     | Mattannur Municipality                        | 0.45   | 15680  | 4.5  | 73                        | 9.61                  | 12.89                           |   | 01.04.2025-30.12.2026   |   | Work in progress. Budget : ₹ 1.60 cr   | 99% completed                          | 15523.20                    | 156.80                         | 11.966435, 75.571939          |
| 42    | 13 Kannur                | Thalassery Municipality    | Thalassery, Punnoolpetty palam                | 5.5  | 45430  | 23   | 50.5                      | 23.9                  | 2.6                             |   | 15.02.2025-15.03.2026   |   | Agreement executed Budget - ₹6.47 Cr.  | 60% completed                          | 27258.24                    | 18172.16                       | 11.7223140 78, 75.5144978 367 |
| 43    | 14 Alappuzha             | Alappuzha Municipality     | 1- Sarvodayapuram                             | 12   | 20,482.00                                      | 0.49   | 0.49                      | 0.02                  | 0.00                            |   | 15.02.2025-15.03.2026   |   | Bioming @ Sarvodayapuram Phase 1 & Phase 2   | 60% completed                          | 12289.20                    | 8192.80                        | 9.551602, 76.318093           |
| 44    | 14 Kasaragod             | Kanhangad Municipality     | Kanjhangad, Trenching Ground Chemmattam vayal | 0.69   | 3481.39  | 38   | 32                        | 22                    | 8                               |   | 07.07.2025-07.12.2026   | Renteder Process on going (Total cost -₹56,00,000   | just started   | 0                                      | 3481.39                     | 12.32511 , 75.11016            |                               |
| 45    | 14 Kasaragod             | Mangalpady Grama Panchayat | Kubanoor                                      | 1.77   | 12557.80                                       | 38   | 32                        | 22                    | 8                               |   | 01.04.2025-30.03.2026   | Work Awarded to MC K Kutty . Total cost - ₹2,00,00,000/-  | just started   | 0                                      | 12557.80                    | 12.658176 , 74.948976          |                               |

NGT TABLE (A) Legacy Remediation Waste:-

| SL.No | (i)<br>Name of Districts | Name of Local Body          | (ii)<br>Legacy waste site (district wise) | (iii)<br>Area covered by the legacy waste (district wise) (Acre) | (iv)<br>Quantity of waste (in MT) in each site | (v)<br>Composition of the waste                        |                           |                       |                                 | (vi)<br>Process adopted to remediate at each site | (vii)<br>Timelines to process (Agmnt date-work completion date) | (viii)<br>Final destination of the components at (v)   | (ix)<br>Action plan to remediate and recover the sites at (iii) (in sq km) with earmarked budget (district wise) | Status of Remediation as on 10.01.2026 | QTY of processed waste (MT) | Qty of Un processed waste (MT) | Geo-coordinates of the site            |
|-------|--------------------------|-----------------------------|---|--|--|--|---------------------------|-----------------------|---------------------------------|---|---|--|--|--|-----------------------------|--------------------------------|--|
|       |                          |                             |   |  |  | a)<br>Inerts (%) (construction waste, wood, glass etc) | b)<br>Compost (%) organic | c)<br>RDF (%) Plastic | d)<br>If any other material (%) |   |   |  |  |  |                             |                                |  |
| 46    | 02 Kollam                | Kottarakara Municipality    | Ugrankunnu, Kottarakkara                  | 0.366  | 6596   | 1.86   | 90.83                     | 6.03                  | 1.28                            |   | 01.06.2025-30.12.2026   |  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹1.41 Cr.            | Work Awarded                           | 0                           | 6596                           | 9.001114, 76.758965                    |
| 47    | 04 Alappuzha             | Kayamkulam Municipality     | Murikkummodu, Kayamkulam                  | 0.26   | 6567.04  | 49.51  | 16.9                      | 26.51                 | 7.08                            | Biomining and bioremediation                      | 20.01.2026-30.12.2026   |  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 2.51 cr            | Work not yet started                   | 0                           | 6567.04                        | 9.172666° , 76.500931°                 |
| 48    | 04 Alappuzha             | Mavelikkara Municipality    | Puthiyakavu, Mavelikkara                  | 0.32   | 2880   | 19.14  | 74.03                     | 6.82                  | 0                               |   | 30.01.2026-30.12.2026   | Bio earth& C&Dwaste will beutilized for the development of the reclaimed legacy waste dumpsite as a  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 2.51 cr            | Work not yet started                   | 0                           | 2880                           | 9.25379, 76.548                        |
| 49    | 05 Kottayam              | Erattupetta Municipality    | Erattupettah, Thevarrupara                | 0.6  | 8000   | 29   | 30                        | 37                    | 4                               |   | 30.01.2026-30.07.2026   | Recreational Park/facility. RDF will be sent to cement factories for coprocessing. Recyclables will be sold to authorized recyclers utilized for the development of the reclaimed legacy waste dumpsite as a | SBM Project,Retender the work, Budget-₹76 Lakhs  | Work not yet started                   | 0                           | 8000                           | 9.69°-9.71° N, 76.77°-76.80° E         |
| 50    | 06 Idukki                | Kattappana Municipality     | Kattappana, Puliyanmala                   | 0.89   | 12000  | Not Categorized  | Not Categorized           | Not Categorized       | Not Categorized                 |   | 01.04.2025-30.03.2026   | Total qty 12000m3. project is tendered and finalised agency, agreement execution pending. Project cost ₹170,00,000/-   | Agreement execution pending  | 0                                      | 12000                       | 9.759365, 77.146511            |  |
| 51    | 06 Idukki                | Munnar Grama Panchayath     | Munnar                                    | 0.50   | 25000  | Not Categorized  | Not Categorized           | Not Categorized       | Not Categorized                 |   | 01.12. 2025-30.03.2026  | First phase completed in 2022. Fund expended ₹9429330/- CFC & Own Fund, Taken project (Pr no. 225) for 2nd phase Biomining at Kallar with Suchitwa Keralam rural fund 3 Cr. for 25000m3                      | TS pending   | 0                                      | 25000                       | 10°09'35" N 77°05'93"E         |  |
| 52    | 07 Ernakulam             | Koothattukulam Municipality | Town-Ward 15, Koothattukulam              | 0.12   | 1346   | 82.94  | 5.1                       | 9.38                  | 2.58                            | Biomining and bioremediation                      | 01.06.2025-30.12.2026   | Recreational utilized for the development  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 28.61 cr           | work not started (KSWMP)               | 0                           | 1346                           | 9.86385921 8954934, 76.5909938 0276766 |

NGT TABLE (A) Legacy Remediation Waste:-

| SL.No | (i)<br>Name of Districts | Name of Local Body        | (ii)<br>Legacy waste site (district wise) | (iii)<br>Area covered by the legacy waste (district wise) (Acre) | (iv)<br>Quantity of waste (in MT) in each site | (v)<br>Composition of the waste                        |                           |                       |                                 | (vi)<br>Process adopted to remediate at each site | (vii)<br>Timelines to process (Agmnt date-work completion date) | (viii)<br>Final destination of the components at (v)   | (ix)<br>Action plan to remediate and recover the sites at (iii) (in sq km) with earmarked budget (district wise)          | Status of Remediation as on 10.01.2026 | QTY of processed waste (MT) | Qty of Un processed waste (MT) | Geo-coordinates of the site        |
|-------|--------------------------|---------------------------|---|--|--|--|---------------------------|-----------------------|---------------------------------|---|---|--|---|--|-----------------------------|--------------------------------|------------------------------------|
|       |                          |                           |   |  |  | a)<br>Inerts (%) (construction waste, wood, glass etc) | b)<br>Compost (%) organic | c)<br>RDF (%) Plastic | d)<br>If any other material (%) |   |   |  |   |  |                             |                                |                                    |
| 53    | 08 Thrissur              | Chalakyud Municipality    | Near Cosmos Club, Chalakyud               | 0.26   | 6769   | 32.1   | 26.5                      | 41.3                  | 0.1                             |   | 01.06.2025-30.12.2026   | of the reclaimed legacy waste dumpsite as a Recreational Park/facility.<br>2. Refused derived fuel (RDF) of 4062.44 m3 will be sent to cement factories for coprocessing i.e., for utilizing as alternative fuel, supplementing the conventional fuel in the process.<br>3. Recyclables of 543.67 m3 will be sold to authorized recyclers. | KSWMP Project -Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 11.51 cr     | Prefeasibility study undergoing        | 0                           | 6769                           | 10.315732, 76.32695                |
| 54    | 12 Wayanad               | Kalpetta Municipality     | Vellaramkundu, Kalpetta                   | 1.12   | 9485.37  | 29.17  | 53.9                      | 24.51                 | 0.76                            |   | 01.06.2025-30.12.2026   |  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 2.1 cr                      | Work about to start                    | 0                           | 9485.37                        | 11.590497, 76.055332               |
| 55    | 13 Kannur                | Iritty Municipality       | Iritty, Athithattu                        | 0.04   | 1618.49  | 22.5   | 49                        | 25.33                 | 3.18                            | Biomining and bioremediation                      | 01.06.2025-30.12.2026   |  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 2.93 cr                     | work not started (KSWMP)               | 0                           | 1618.49                        | 11.96760 75.68179                  |
| 56    | 13 Kannur                | Payyannur Municipality    | Payyannur, Moorikkovval                   | 0.75   | 2100.00  | 21   | 50                        | 26.05                 | 2.95                            |   | 30.01.2026-30.07.2026   |  | Tender stage. Total cost - ₹70,28,577.74  | Prefeasibility study undergoing        | 0                           | 2100.00                        | 12.1214822 2, 75.2090550           |
| 57    | 13 Kannur                | Kuthuparamba Municipality | Palapparamba, Kuthuparamba                | 0.98   | 22473.955                                      | 14.79  | 31.91                     | 20.57                 | 32.73                           |   | 25.11.25-31.3.26  |  | Agreement executed Budget - 49.98 Cr (Estimated cost for 12 legacy waste dumpsite). Agreement number 784280 dated 6.11.24 | Work about to start                    | 0                           | 22473.955                      | 11° 50' 10.14"N, 75° 34' 18.959" E |
| 58    | 14 Kasaragod             | Kasaragod Municipality    | Kelugudde, Kasaragod                      | 1.1  | 12874  | 21   | 50                        | 26.05                 | 2.95                            |   | 01.06.2025-30.12.2026   |  | Agreement executed Started the site investigation for preparing implementation plan Budget: ₹ 3.44 cr                     | work not started (KSWMP)               | 0                           | 12873.6                        | 12.515864 , 74.986021              |
| 59    | 08 Thrissur              | Kunnamkulam Municipality  | Kunnamkulam                               | 2  | 24660  | 22.5   | 49                        | 25.33                 | 3.18                            |   | 01.06.2025-30.12.2026   |  | Agreement executed Started the site investigation for preparing implementation plan                                       | Prefeasibility study undergoing        | 0                           | 24660                          | 10.638828, 76.058874               |
|       |                          |                           |   |  | <b>1954714</b>                                 |  |                           |                       |                                 |   |   |  |   |  | <b>1378743</b>              | <b>575971</b>                  |                                    |



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## Annexure 2

NGT TABLE (B) Daily Solid Waste generation &amp; treatment details:-

| District           | (ii) Waste generation (in TPD) district wise | (iii) Break up of waste generated district wise (in TPD) |                | (iv) Method of treatment in the district (in TPD) |               |               |                | (v) Final destination of each of components of (iv)   | (vi) Break up details of waste processing district wise (TPD) |                |               |                      |                |                      |                | (vii) Action Plan to process 100 % waste |                        |   |
|--------------------|--|--|----------------|---|---------------|---------------|----------------|---|---|----------------|---------------|----------------------|----------------|----------------------|----------------|--|------------------------|---|
|                    |  | Urban  | Rural          | Organic material (wet waste)                      | Inerts        | RDF           | Other          |   | Biomet hanatio n  | Compos t units | Renderi ng    | Used in cement kilns | Landfill sites | Other uses of inerts | Recycla bles   | Timelin e                                | Budget outlay (in Cr.) | Proposal  |
| Thiruvananthapuram | 1072.32                                      | 524.03   | 548.29         | 778.04  | 53.62         | 90.78         | 117.71         | <b>Inerts-Landfill in KEIL, RDF- to cement factories for co-processing, Recyclables- Handed over to empanelled agencies for recycling</b> | 70.25   | 789.05         | 0.00          | 90.78                | 0              | 53.62                | 117.71         | 2 yrs                                    | 4.50                   | <b>Projects for the upgradation of existing facilities, incorporation of innovative technologies and mechanized waste management facilities</b> |
| Kollam             | 775.03                                       | 238.75   | 536.28         | 569.34  | 38.75         | 61.42         | 82.28          |   | 55.94   | 578.89         | 10.00         | 61.42                | 0              | 38.75                | 82.28          | 2 yrs                                    | 12.00                  |   |
| Pathanamthitta     | 301.71                                       | 53.95  | 247.75         | 223.58  | 15.09         | 22.74         | 31.25          |   | 19.70   | 205.32         | 15.00         | 22.74                | 0              | 15.09                | 31.25          | 2 yrs                                    | 6.50                   |   |
| Alappuzha          | 574.90                                       | 125.62   | 449.29         | 424.90  | 28.75         | 44.01         | 60.00          |   | 31.16   | 405.86         | 0.00          | 44.01                | 0              | 28.75                | 60.00          | 2 yrs                                    | 3.65                   |   |
| Kottayam           | 532.81                                       | 109.17   | 423.64         | 394.15  | 26.64         | 40.57         | 55.46          |   | 28.01   | 380.76         | 30.00         | 40.57                | 0              | 26.64                | 55.46          | 2 yrs                                    | 17.00                  |   |
| Idukki             | 278.96                                       | 31.72  | 247.23         | 207.63  | 13.95         | 20.48         | 28.53          |   | 16.24   | 205.19         | 0.00          | 20.48                | 0              | 13.95                | 28.53          | 2 yrs                                    | 4.18                   |   |
| Ernakulam          | 1084.66                                      | 505.18   | 579.47         | 788.23  | 54.23         | 91.08         | 118.57         |   | 49.81   | 716.32         | 210.00        | 91.08                | 0.01           | 54.22                | 118.57         | 2 yrs                                    | 23.00                  |   |
| Thrissur           | 952.13                                       | 306.84   | 645.29         | 698.76  | 47.61         | 75.85         | 101.35         |   | 59.03   | 672.11         | 63.00         | 75.85                | 0              | 47.61                | 101.35         | 2 yrs                                    | 8.73                   |   |
| Palakkad           | 823.41                                       | 137.79   | 685.63         | 610.67  | 41.17         | 61.77         | 85.10          |   | 36.26   | 646.63         | 36.00         | 61.77                | 0              | 41.17                | 85.10          | 2 yrs                                    | 5.80                   |   |
| Malappuram         | 1347.94                                      | 320.41   | 1027.53        | 994.93  | 67.40         | 103.97        | 141.20         |   | 121.77  | 935.26         | 234.50        | 103.97               | 0              | 67.40                | 141.20         | 2 yrs                                    | 10.70                  |   |
| Kozhikode          | 1036.64                                      | 451.49   | 585.15         | 754.90  | 51.83         | 86.11         | 112.69         |   | 55.56   | 769.50         | 30.00         | 86.11                | 0              | 51.83                | 112.69         | 2 yrs                                    | 10.07                  |   |
| Wayanad            | 232.69                                       | 46.93  | 185.75         | 172.17  | 11.63         | 17.70         | 24.21          |   | 6.70  | 185.03         | 0.00          | 17.70                | 0              | 11.63                | 24.21          | 2 yrs                                    | 0.85                   |   |
| Kannur             | 779.17                                       | 284.21   | 494.96         | 570.17  | 38.96         | 63.07         | 83.60          |   | 38.07   | 587.60         | 54.00         | 63.07                | 0              | 38.96                | 83.60          | 2 yrs                                    | 12.00                  |   |
| Kasaragod          | 390.54                                       | 66.55  | 324.00         | 289.58  | 19.53         | 29.33         | 40.39          |   | 18.59   | 294.39         | 110.00        | 29.33                | 0              | 19.53                | 40.39          | 2 yrs                                    | 2.40                   |   |
| <b>Total</b>       | <b>10182.91</b>                              | <b>3202.65</b>   | <b>6980.25</b> | <b>7477.05</b>                                    | <b>509.15</b> | <b>808.88</b> | <b>1082.34</b> |   | <b>607.08</b>   | <b>7371.91</b> | <b>792.50</b> | <b>808.88</b>        | <b>0.01</b>    | <b>509.14</b>        | <b>1082.34</b> |  | <b>121.38</b>          |   |



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## Annexure 3

## Annexure 3 - ULB Level details of Biodegradable waste Management

| Sl.No | LB Name            | LB Type (Corp/ Mpty/ GP) | Bio waste Generated (TPD) | Source level waste management (TPD) | Community/ centralized waste management (TPD) | Connect ed to Renderin g units (TPD) | Connect ed to Farms (TPD) | Total compost generated (TPD) |
|-------|--------------------|--------------------------|---------------------------|-------------------------------------|---|--------------------------------------|---------------------------|-------------------------------|
| 1     | Thiruvananthapuram | Corp                     | 314.15                    | 267.27                              | 14.20   | 15.00                                | 17.69                     | 106.12                        |
| 2     | Attingal           | Mpty                     | 9.44                      | 1.34                                | 6.50  | 1.00                                 | 0.60                      | 2.33                          |
| 3     | Nedumangad         | Mpty                     | 15.20                     | 8.02                                | 0.12  | 5.50                                 | 1.57                      | 3.20                          |
| 4     | Neyyatinkara       | Mpty                     | 17.91                     | 12.26                               | 0.44  | 4.50                                 | 0.71                      | 4.92                          |
| 5     | Varkala            | Mpty                     | 10.12                     | 2.98                                | 4.06  | 2.00                                 | 1.08                      | 2.29                          |
| 6     | Kollam             | Corp                     | 125.86                    | 88.16                               | 2.72  | 15.00                                | 19.99                     | 32.88                         |
| 7     | Karunagappally     | Mpty                     | 12.51                     | 6.64                                | 0.66  | 2.30                                 | 2.91                      | 2.59                          |
| 8     | Kottarakkara       | Mpty                     | 7.58                      | 3.79                                | 0.31  | 1.30                                 | 2.18                      | 1.34                          |
| 9     | Punalur            | Mpty                     | 11.78                     | 4.81                                | 0.81  | 3.25                                 | 2.91                      | 2.16                          |
| 10    | South Paravoor     | Mpty                     | 9.39                      | 3.74                                | 0.06  | 4.40                                 | 1.20                      | 1.47                          |
| 11    | Adoor              | Mpty                     | 6.84                      | 2.68                                | 0.51  | 1.00                                 | 2.65                      | 1.23                          |
| 12    | Pandalam           | Mpty                     | 9.75                      | 3.25                                | 0.22  | 4.25                                 | 2.02                      | 1.32                          |
| 13    | Pathanathitta      | Mpty                     | 8.80                      | 3.55                                | 0.55  | 2.25                                 | 2.45                      | 1.22                          |
| 14    | Thiruvalla         | Mpty                     | 12.39                     | 3.61                                | 0.59  | 4.20                                 | 3.99                      | 1.09                          |
| 15    | Alappuzha          | Mpty                     | 43.24                     | 12.75                               | 4.50  | 5.00                                 | 20.99                     | 6.76                          |
| 16    | Chengannur         | Mpty                     | 5.83                      | 3.02                                | 0.06  | 1.00                                 | 1.75                      | 1.07                          |
| 17    | Cherthala          | Mpty                     | 11.38                     | 7.10                                | 0.06  | 3.30                                 | 0.93                      | 2.72                          |
| 18    | Haripad            | Mpty                     | 3.90                      | 2.80                                | 0.06  | 0.84                                 | 0.20                      | 0.93                          |
| 19    | Kayamkulam         | Mpty                     | 17.04                     | 6.44                                | 4.18  | 2.50                                 | 3.92                      | 3.82                          |
| 20    | Mavelikkara        | Mpty                     | 6.56                      | 2.96                                | 0.18  | 1.00                                 | 2.42                      | 0.98                          |
| 21    | Changanaserry      | Mpty                     | 11.87                     | 3.64                                | 0.06  | 4.20                                 | 3.97                      | 1.40                          |

| Sl.No | LB Name        | LB Type (Corp/ Mpty/ GP) | Bio waste Generated (TPD) | Source level waste management (TPD) | Community/ centralized waste management (TPD) | Connected to Rendering units (TPD) | Connected to Farms (TPD) | Total compost generated (TPD) |
|-------|----------------|--------------------------|---------------------------|-------------------------------------|---|------------------------------------|--------------------------|-------------------------------|
| 22    | Erattupetta    | Mpty                     | 7.40                      | 3.19                                | 0.06  | 1.80                               | 2.35                     | 1.22                          |
| 23    | Ettumanoor     | Mpty                     | 11.41                     | 7.01                                | 0.36  | 2.10                               | 1.95                     | 2.71                          |
| 24    | Kottayam       | Mpty                     | 34.47                     | 20.13                               | 2.46  | 11.30                              | 0.57                     | 7.67                          |
| 25    | Pala           | Mpty                     | 5.49                      | 2.39                                | 0.12  | 1.45                               | 1.53                     | 0.92                          |
| 26    | Vaikom         | Mpty                     | 5.78                      | 2.65                                | 0.06  | 1.55                               | 1.53                     | 1.02                          |
| 27    | Kattappana     | Mpty                     | 9.79                      | 6.85                                | 0.06  | 1.40                               | 1.48                     | 2.23                          |
| 28    | Thodupuzha     | Mpty                     | 12.41                     | 7.36                                | 0.06  | 2.50                               | 2.49                     | 2.78                          |
| 29    | Kochi          | Corp                     | 206.49                    | 16.67                               | 105.18  | 30.00                              | 54.65                    | 48.73                         |
| 30    | Aluva          | Mpty                     | 5.98                      | 1.73                                | 1.36  | 1.70                               | 1.19                     | 1.22                          |
| 31    | Angamaly       | Mpty                     | 8.93                      | 5.67                                | 0.36  | 1.00                               | 1.89                     | 1.85                          |
| 32    | Eloor          | Mpty                     | 9.80                      | 4.49                                | 1.90  | 2.05                               | 1.35                     | 2.54                          |
| 33    | Kalamassery    | Mpty                     | 18.95                     | 12.61                               | 0.06  | 5.00                               | 1.28                     | 4.40                          |
| 34    | Koothattukulam | Mpty                     | 4.60                      | 2.94                                | 0.56  | 1.00                               | 0.11                     | 0.77                          |
| 35    | Kothamangalam  | Mpty                     | 10.36                     | 4.31                                | 3.06  | 2.00                               | 0.99                     | 2.71                          |
| 36    | Maradu         | Mpty                     | 11.93                     | 6.85                                | 0.53  | 2.30                               | 2.25                     | 2.58                          |
| 37    | Muvattupuzha   | Mpty                     | 8.11                      | 2.84                                | 2.63  | 1.00                               | 1.64                     | 1.71                          |
| 38    | North Paravur  | Mpty                     | 8.40                      | 2.69                                | 2.25  | 1.00                               | 2.46                     | 1.73                          |
| 39    | Perumbavur     | Mpty                     | 7.50                      | 2.97                                | 1.56  | 1.25                               | 1.71                     | 1.38                          |
| 40    | Piravom        | Mpty                     | 7.26                      | 3.11                                | 0.63  | 2.05                               | 1.47                     | 1.19                          |
| 41    | Thrikkakkara   | Mpty                     | 20.63                     | 13.89                               | 0.06  | 5.50                               | 1.17                     | 5.27                          |
| 42    | Thripunithura  | Mpty                     | 24.69                     | 15.75                               | 0.72  | 7.60                               | 0.62                     | 6.03                          |
| 43    | Thrissur       | Corp                     | 107.16                    | 64.43                               | 14.94   | 10.00                              | 17.79                    | 29.53                         |
| 44    | Chalakkudy     | Mpty                     | 13.06                     | 6.49                                | 2.30  | 1.50                               | 2.78                     | 2.76                          |

| Sl.No | LB Name                | LB Type (Corp/ Mpty/ GP) | Bio waste Generated (TPD) | Source level waste management (TPD) | Community/ centralized waste management (TPD) | Connect ed to Rendering units (TPD) | Connect ed to Farms (TPD) | Total compost generated (TPD) |
|-------|------------------------|--------------------------|---------------------------|-------------------------------------|---|-------------------------------------|---------------------------|-------------------------------|
| 45    | Chavakkad              | Mpty                     | 10.31                     | 5.89                                | 2.06  | 1.00                                | 1.37                      | 2.08                          |
| 46    | Guruvayur              | Mpty                     | 18.47                     | 9.91                                | 5.06  | 2.00                                | 1.50                      | 5.49                          |
| 47    | Irinjalakkuda          | Mpty                     | 16.50                     | 6.93                                | 4.06  | 3.50                                | 2.01                      | 3.56                          |
| 48    | Kodungallur            | Mpty                     | 18.84                     | 11.69                               | 2.23  | 4.20                                | 0.72                      | 4.17                          |
| 49    | Kunnamkulam            | Mpty                     | 14.26                     | 5.25                                | 4.56  | 2.50                                | 1.95                      | 3.76                          |
| 50    | Wadakkanchery          | Mpty                     | 16.18                     | 5.42                                | 4.00  | 1.00                                | 5.77                      | 3.32                          |
| 51    | Cherpulassery          | Mpty                     | 9.54                      | 5.40                                | 0.06  | 3.00                                | 1.08                      | 2.18                          |
| 52    | Chittur Thathamangalam | Mpty                     | 8.83                      | 4.15                                | 1.26  | 1.00                                | 2.42                      | 2.14                          |
| 53    | Mannarkkad             | Mpty                     | 7.83                      | 3.59                                | 0.06  | 1.00                                | 3.18                      | 1.41                          |
| 54    | Ottapalam              | Mpty                     | 14.71                     | 9.74                                | 0.06  | 1.00                                | 3.91                      | 3.29                          |
| 55    | Palakkad               | Mpty                     | 35.81                     | 22.36                               | 3.77  | 4.00                                | 5.67                      | 10.45                         |
| 56    | Pattambi               | Mpty                     | 7.83                      | 3.11                                | 2.27  | 1.00                                | 1.45                      | 1.96                          |
| 57    | Shornur                | Mpty                     | 11.90                     | 6.53                                | 1.68  | 2.70                                | 0.99                      | 2.68                          |
| 58    | Kondotty               | Mpty                     | 17.74                     | 7.50                                | 0.00  | 2.00                                | 8.24                      | 2.77                          |
| 59    | Kottakal               | Mpty                     | 13.29                     | 11.05                               | 0.00  | 1.80                                | 0.43                      | 3.87                          |
| 60    | Malappuram             | Mpty                     | 20.39                     | 7.09                                | 0.00  | 9.50                                | 3.81                      | 2.59                          |
| 61    | Manjery                | Mpty                     | 29.07                     | 20.74                               | 0.00  | 6.00                                | 2.32                      | 8.14                          |
| 62    | Nilambur               | Mpty                     | 13.87                     | 9.77                                | 0.00  | 1.50                                | 2.61                      | 3.65                          |
| 63    | Parappanangadi         | Mpty                     | 21.23                     | 14.86                               | 0.00  | 5.40                                | 0.97                      | 5.58                          |
| 64    | Perinthalmanna         | Mpty                     | 14.89                     | 7.47                                | 3.86  | 2.00                                | 1.56                      | 3.72                          |
| 65    | Ponnani                | Mpty                     | 27.09                     | 20.11                               | 0.06  | 5.50                                | 1.42                      | 5.86                          |
| 66    | Thanur                 | Mpty                     | 20.92                     | 14.29                               | 0.00  | 5.60                                | 1.03                      | 5.69                          |
| 67    | Thirur                 | Mpty                     | 16.78                     | 10.81                               | 1.56  | 2.20                                | 2.21                      | 4.54                          |

| Sl.No | LB Name         | LB Type (Corp/Mpty/GP) | Bio waste Generated (TPD) | Source level waste management (TPD) | Community/centralized waste management (TPD) | Connected to Rendering units (TPD) | Connected to Farms (TPD) | Total compost generated (TPD) |
|-------|-----------------|------------------------|---------------------------|-------------------------------------|--|------------------------------------|--------------------------|-------------------------------|
| 68    | Thirurangadi    | Mpty                   | 16.95                     | 10.53                               | 0.50   | 5.50                               | 0.43                     | 3.74                          |
| 69    | Valancheri      | Mpty                   | 12.07                     | 5.51                                | 0.06   | 6.00                               | 0.50                     | 1.39                          |
| 70    | Kozhikode       | Corp                   | 213.46                    | 80.41                               | 80.06  | 10.00                              | 42.98                    | 59.96                         |
| 71    | Feroke          | Mpty                   | 14.75                     | 8.93                                | 0.62   | 2.30                               | 2.90                     | 3.60                          |
| 72    | Koduvally       | Mpty                   | 13.28                     | 9.68                                | 0.12   | 2.50                               | 0.98                     | 3.78                          |
| 73    | Koyilandy       | Mpty                   | 19.61                     | 6.93                                | 1.67   | 5.00                               | 6.01                     | 2.88                          |
| 74    | Mukkam          | Mpty                   | 11.10                     | 6.59                                | 0.06   | 1.50                               | 2.95                     | 2.53                          |
| 75    | Payyoli         | Mpty                   | 13.50                     | 9.96                                | 0.06   | 2.40                               | 1.08                     | 3.71                          |
| 76    | Ramanattukara   | Mpty                   | 9.80                      | 6.80                                | 0.00   | 2.40                               | 0.60                     | 2.47                          |
| 77    | Vatakara        | Mpty                   | 20.54                     | 13.56                               | 0.45   | 5.45                               | 1.08                     | 5.39                          |
| 78    | Kalpetta        | Mpty                   | 8.30                      | 3.65                                | 2.62   | 1.50                               | 0.53                     | 2.33                          |
| 79    | Mananthavady    | Mpty                   | 12.61                     | 8.99                                | 0.06   | 2.80                               | 0.76                     | 3.17                          |
| 80    | Sulthan Bathery | Mpty                   | 11.94                     | 7.37                                | 0.12   | 3.20                               | 1.25                     | 2.48                          |
| 81    | Kannur          | Corp                   | 92.39                     | 58.53                               | 7.16   | 5.00                               | 21.71                    | 26.24                         |
| 82    | Anthoor         | Mpty                   | 7.44                      | 4.30                                | 2.06   | 0.85                               | 0.23                     | 1.65                          |
| 83    | Iritty          | Mpty                   | 10.62                     | 6.60                                | 0.06   | 1.20                               | 2.75                     | 2.49                          |
| 84    | Koothuparamba   | Mpty                   | 7.79                      | 3.09                                | 1.86   | 1.00                               | 1.84                     | 1.83                          |
| 85    | Mattannur       | Mpty                   | 12.38                     | 7.26                                | 1.25   | 1.00                               | 2.87                     | 3.34                          |
| 86    | Panoor          | Mpty                   | 4.59                      | 3.41                                | 0.06   | 1.00                               | 0.12                     | 0.67                          |
| 87    | Payyannur       | Mpty                   | 18.96                     | 14.40                               | 0.00   | 1.00                               | 3.56                     | 4.37                          |
| 88    | Sreekandapuram  | Mpty                   | 8.81                      | 5.11                                | 0.06   | 2.00                               | 1.64                     | 1.90                          |
| 89    | Thalasseri      | Mpty                   | 24.34                     | 17.02                               | 0.00   | 1.12                               | 6.20                     | 5.88                          |
| 90    | Thalipparamba   | Mpty                   | 11.64                     | 6.28                                | 0.56   | 1.00                               | 3.80                     | 2.17                          |

| Sl.No | LB Name     | LB Type<br>(Corp/<br>Mpty/<br>GP) | Bio waste<br>Generate<br>d (TPD) | Source<br>level<br>waste<br>manage<br>ment<br>(TPD) | Community/<br>centralized<br>waste<br>management<br>(TPD) | Connect<br>ed to<br>Renderin<br>g units<br>(TPD) | Connect<br>ed to<br>Farms<br>(TPD) | Total<br>compost<br>generated<br>(TPD) |
|-------|-------------|-----------------------------------|----------------------------------|---|---|--|------------------------------------|--|
| 91    | Kanhangad   | Mpty                              | 20.43                            | 13.68   | 0.06  | 1.00   | 5.69                               | 2.93                                   |
| 92    | Kasaragod   | Mpty                              | 15.09                            | 10.04   | 0.06  | 1.20   | 3.79                               | 3.98                                   |
| 93    | Nileshwaram | Mpty                              | 11.07                            | 7.02  | 0.56  | 2.00   | 1.49                               | 2.59                                   |
|       |             |                                   | <b>2241.86</b>                   | <b>1,227.10</b>                                     | <b>318.89</b>   | <b>320.18</b>                                    | <b>375.77</b>                      | <b>565.17</b>                          |



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## Annexure 4

## Annexure 4 - ULB Level details of Solid Waste Management

| Sl. No. | Name of ULB        | Break-up of waste generated (in TPD) |                 |              | Destination of each of components (TPD) |                             |                                    |                          |                  |                            |                      |
|---------|--------------------|--------------------------------------|-----------------|--------------|---|-----------------------------|------------------------------------|--------------------------|------------------|----------------------------|----------------------|
|         |                    | Wet waste (TPD)                      | Dry waste (TPD) | Inerts (TPD) | Wet Waste                               |                             |                                    |                          | Dry Waste        |                            | Inerts               |
|         |                    |                                      |                 |              | Composting units (TPD)                  | Bio-methanation units (TPD) | Connected to Rendering units (TPD) | Connected to Farms (TPD) | Recyclable (TPD) | Used in cement kilns (TPD) | Soil refilling (TPD) |
| 1       | Thiruvananthapuram | 314.15                               | 98.73           | 22.44        | 265.30                                  | 16.17                       | 15.00                              | 17.69                    | 58.70            | 40.03                      | 22.44                |
| 2       | Attingal           | 9.44                                 | 2.97            | 0.67         | 5.83                                    | 2.01                        | 1.00                               | 0.60                     | 1.42             | 1.55                       | 0.67                 |
| 3       | Nedumangad         | 15.20                                | 4.78            | 1.09         | 8.01                                    | 0.13                        | 5.50                               | 1.57                     | 2.92             | 1.86                       | 1.09                 |
| 4       | Neyyatinkara       | 17.91                                | 5.63            | 1.28         | 12.30                                   | 0.40                        | 4.50                               | 0.71                     | 2.79             | 2.84                       | 1.28                 |
| 5       | Varkala            | 10.12                                | 3.18            | 0.72         | 5.72                                    | 1.32                        | 2.00                               | 1.08                     | 1.87             | 1.31                       | 0.72                 |
| 6       | Kollam             | 125.86                               | 39.56           | 8.99         | 82.19                                   | 8.69                        | 15.00                              | 19.99                    | 19.20            | 20.36                      | 8.99                 |
| 7       | Karunagappally     | 12.51                                | 3.93            | 0.89         | 6.49                                    | 0.82                        | 2.30                               | 2.91                     | 2.36             | 1.57                       | 0.89                 |
| 8       | Kottarakkara       | 7.58                                 | 2.38            | 0.54         | 3.34                                    | 0.77                        | 1.30                               | 2.18                     | 1.18             | 1.20                       | 0.54                 |
| 9       | Punalur            | 11.78                                | 3.70            | 0.84         | 5.41                                    | 0.21                        | 3.25                               | 2.91                     | 2.18             | 1.52                       | 0.84                 |
| 10      | South Paravoor     | 9.39                                 | 2.95            | 0.67         | 3.67                                    | 0.13                        | 4.40                               | 1.20                     | 1.43             | 1.52                       | 0.67                 |
| 11      | Adoor              | 6.84                                 | 2.15            | 0.49         | 3.08                                    | 0.11                        | 1.00                               | 2.65                     | 1.30             | 0.85                       | 0.49                 |
| 12      | Pandalam           | 9.75                                 | 3.06            | 0.70         | 3.31                                    | 0.17                        | 4.25                               | 2.02                     | 1.54             | 1.52                       | 0.70                 |
| 13      | Pathanathitta      | 8.80                                 | 2.76            | 0.63         | 3.04                                    | 1.06                        | 2.25                               | 2.45                     | 1.66             | 1.10                       | 0.63                 |
| 14      | Thiruvalla         | 12.39                                | 3.89            | 0.89         | 2.72                                    | 1.48                        | 4.20                               | 3.99                     | 1.91             | 1.98                       | 0.89                 |
| 15      | Alappuzha          | 43.24                                | 13.59           | 3.09         | 16.90                                   | 0.35                        | 5.00                               | 20.99                    | 8.23             | 5.36                       | 3.09                 |
| 16      | Chengannur         | 5.83                                 | 1.83            | 0.42         | 2.69                                    | 0.39                        | 1.00                               | 1.75                     | 0.88             | 0.95                       | 0.42                 |
| 17      | Cherthala          | 11.38                                | 3.58            | 0.81         | 6.81                                    | 0.35                        | 3.30                               | 0.93                     | 2.16             | 1.42                       | 0.81                 |
| 18      | Haripad            | 3.90                                 | 1.22            | 0.28         | 2.34                                    | 0.52                        | 0.84                               | 0.20                     | 0.59             | 0.63                       | 0.28                 |
| 19      | Kayamkulam         | 17.04                                | 5.36            | 1.22         | 9.55                                    | 1.08                        | 2.50                               | 3.92                     | 3.24             | 2.12                       | 1.22                 |
| 20      | Mavelikkara        | 6.56                                 | 2.06            | 0.47         | 2.44                                    | 0.70                        | 1.00                               | 2.42                     | 1.00             | 1.06                       | 0.47                 |
| 21      | Changanaserry      | 11.87                                | 3.73            | 0.85         | 3.50                                    | 0.20                        | 4.20                               | 3.97                     | 2.24             | 1.49                       | 0.85                 |
| 22      | Erattupetta        | 7.40                                 | 2.32            | 0.53         | 3.05                                    | 0.20                        | 1.80                               | 2.35                     | 1.15             | 1.17                       | 0.53                 |
| 23      | Ettumanoor         | 11.41                                | 3.59            | 0.82         | 6.79                                    | 0.58                        | 2.10                               | 1.95                     | 2.15             | 1.44                       | 0.82                 |
| 24      | Kottayam           | 34.47                                | 10.83           | 2.46         | 19.16                                   | 3.43                        | 11.30                              | 0.57                     | 5.26             | 5.57                       | 2.46                 |

| Sl. No. | Name of ULB    | Break-up of waste generated (in TPD) |                 |              | Destination of each of components (TPD) |                             |                                    |                          |                  |                            |                      |  |
|---------|----------------|--------------------------------------|-----------------|--------------|---|-----------------------------|------------------------------------|--------------------------|------------------|----------------------------|----------------------|--|
|         |                | Wet waste (TPD)                      | Dry waste (TPD) | Inerts (TPD) | Wet Waste                               |                             |                                    |                          | Dry Waste        |                            | Inerts               |  |
|         |                |                                      |                 |              | Composting units (TPD)                  | Bio-methanation units (TPD) | Connected to Rendering units (TPD) | Connected to Farms (TPD) | Recyclable (TPD) | Used in cement kilns (TPD) | Soil refilling (TPD) |  |
| 25      | Pala           | 5.49                                 | 1.73            | 0.39         | 2.30                                    | 0.21                        | 1.45                               | 1.53                     | 1.05             | 0.68                       | 0.39                 |  |
| 26      | Vaikom         | 5.78                                 | 1.82            | 0.41         | 2.54                                    | 0.17                        | 1.55                               | 1.53                     | 0.90             | 0.92                       | 0.41                 |  |
| 27      | Kattappana     | 9.79                                 | 3.08            | 0.70         | 5.58                                    | 1.33                        | 1.40                               | 1.48                     | 1.83             | 1.25                       | 0.70                 |  |
| 28      | Thodupuzha     | 12.41                                | 3.90            | 0.89         | 6.96                                    | 0.46                        | 2.50                               | 2.49                     | 1.87             | 2.03                       | 0.89                 |  |
| 29      | Kochi          | 206.49                               | 64.90           | 14.75        | 121.83                                  | 0.02                        | 30.00                              | 54.65                    | 38.94            | 25.96                      | 14.75                |  |
| 30      | Aluva          | 5.98                                 | 1.88            | 0.43         | 3.06                                    | 0.03                        | 1.70                               | 1.19                     | 0.91             | 0.97                       | 0.43                 |  |
| 31      | Angamaly       | 8.93                                 | 2.81            | 0.64         | 4.64                                    | 1.40                        | 1.00                               | 1.89                     | 1.68             | 1.13                       | 0.64                 |  |
| 32      | Eloor          | 9.80                                 | 3.08            | 0.70         | 6.36                                    | 0.03                        | 2.05                               | 1.35                     | 1.54             | 1.54                       | 0.70                 |  |
| 33      | Kalamassery    | 18.95                                | 5.96            | 1.35         | 11.00                                   | 1.67                        | 5.00                               | 1.28                     | 3.51             | 2.45                       | 1.35                 |  |
| 34      | Koothattukulam | 4.60                                 | 1.45            | 0.33         | 1.92                                    | 1.58                        | 1.00                               | 0.11                     | 0.73             | 0.72                       | 0.33                 |  |
| 35      | Kothamangalam  | 10.36                                | 3.26            | 0.74         | 6.77                                    | 0.61                        | 2.00                               | 0.99                     | 1.94             | 1.32                       | 0.74                 |  |
| 36      | Maradu         | 11.93                                | 3.75            | 0.85         | 6.44                                    | 0.94                        | 2.30                               | 2.25                     | 1.82             | 1.93                       | 0.85                 |  |
| 37      | Muvattupuzha   | 8.11                                 | 2.55            | 0.58         | 4.28                                    | 1.19                        | 1.00                               | 1.64                     | 1.56             | 0.99                       | 0.58                 |  |
| 38      | North Paravur  | 8.40                                 | 2.64            | 0.60         | 4.33                                    | 0.62                        | 1.00                               | 2.46                     | 1.31             | 1.33                       | 0.60                 |  |
| 39      | Perumbavur     | 7.50                                 | 2.36            | 0.54         | 3.44                                    | 1.09                        | 1.25                               | 1.71                     | 1.43             | 0.93                       | 0.54                 |  |
| 40      | Piravom        | 7.26                                 | 2.28            | 0.52         | 2.97                                    | 0.77                        | 2.05                               | 1.47                     | 1.11             | 1.17                       | 0.52                 |  |
| 41      | Thrikkakkara   | 20.63                                | 6.48            | 1.47         | 13.18                                   | 0.77                        | 5.50                               | 1.17                     | 3.92             | 2.56                       | 1.47                 |  |
| 42      | Thripunithura  | 24.69                                | 7.76            | 1.76         | 15.08                                   | 1.39                        | 7.60                               | 0.62                     | 3.77             | 3.99                       | 1.76                 |  |
| 43      | Thrissur       | 107.16                               | 33.68           | 7.65         | 73.83                                   | 5.54                        | 10.00                              | 17.79                    | 20.58            | 13.10                      | 7.65                 |  |
| 44      | Chalakkudy     | 13.06                                | 4.11            | 0.93         | 6.91                                    | 1.88                        | 1.50                               | 2.78                     | 1.99             | 2.12                       | 0.93                 |  |
| 45      | Chavakkad      | 10.31                                | 3.24            | 0.74         | 5.20                                    | 2.75                        | 1.00                               | 1.37                     | 1.93             | 1.31                       | 0.74                 |  |
| 46      | Guruvayur      | 18.47                                | 5.80            | 1.32         | 13.72                                   | 1.25                        | 2.00                               | 1.50                     | 2.82             | 2.98                       | 1.32                 |  |
| 47      | Irinjalakkuda  | 16.50                                | 5.18            | 1.18         | 8.91                                    | 2.08                        | 3.50                               | 2.01                     | 3.17             | 2.01                       | 1.18                 |  |
| 48      | Kodungallur    | 18.84                                | 5.92            | 1.35         | 10.42                                   | 3.50                        | 4.20                               | 0.72                     | 2.91             | 3.01                       | 1.35                 |  |
| 49      | Kunnamkulam    | 14.26                                | 4.48            | 1.02         | 9.40                                    | 0.41                        | 2.50                               | 1.95                     | 2.69             | 1.79                       | 1.02                 |  |
| 50      | Wadakkanchery  | 16.18                                | 5.09            | 1.16         | 8.30                                    | 1.11                        | 1.00                               | 5.77                     | 2.50             | 2.59                       | 1.16                 |  |
| 51      | Cherpulassery  | 9.54                                 | 3.00            | 0.68         | 5.45                                    | 0.01                        | 3.00                               | 1.08                     | 1.77             | 1.23                       | 0.68                 |  |

| Sl. No. | Name of ULB            | Break-up of waste generated (in TPD) |                 |              | Destination of each of components (TPD) |                             |                                    |                          |                  |                            |                      |  |
|---------|------------------------|--------------------------------------|-----------------|--------------|---|-----------------------------|------------------------------------|--------------------------|------------------|----------------------------|----------------------|--|
|         |                        | Wet waste (TPD)                      | Dry waste (TPD) | Inerts (TPD) | Wet Waste                               |                             |                                    |                          | Dry Waste        |                            | Inerts               |  |
|         |                        |                                      |                 |              | Composting units (TPD)                  | Bio-methanation units (TPD) | Connected to Rendering units (TPD) | Connected to Farms (TPD) | Recyclable (TPD) | Used in cement kilns (TPD) | Soil refilling (TPD) |  |
| 52      | Chittur Thathamangalam | 8.83                                 | 2.78            | 0.63         | 5.35                                    | 0.06                        | 1.00                               | 2.42                     | 1.33             | 1.45                       | 0.63                 |  |
| 53      | Mannarkkad             | 7.83                                 | 2.46            | 0.56         | 3.54                                    | 0.12                        | 1.00                               | 3.18                     | 1.50             | 0.96                       | 0.56                 |  |
| 54      | Ottapalam              | 14.71                                | 4.62            | 1.05         | 8.23                                    | 1.57                        | 1.00                               | 3.91                     | 2.22             | 2.40                       | 1.05                 |  |
| 55      | Palakkad               | 35.81                                | 11.25           | 2.56         | 26.13                                   | 0.01                        | 4.00                               | 5.67                     | 6.69             | 4.56                       | 2.56                 |  |
| 56      | Pattambi               | 7.83                                 | 2.46            | 0.56         | 4.90                                    | 0.48                        | 1.00                               | 1.45                     | 1.21             | 1.25                       | 0.56                 |  |
| 57      | Shornur                | 11.90                                | 3.74            | 0.85         | 6.70                                    | 1.51                        | 2.70                               | 0.99                     | 2.20             | 1.54                       | 0.85                 |  |
| 58      | Kondotty               | 17.74                                | 5.58            | 1.27         | 6.92                                    | 0.59                        | 2.00                               | 8.24                     | 2.74             | 2.84                       | 1.27                 |  |
| 59      | Kottakal               | 13.29                                | 4.18            | 0.95         | 9.67                                    | 1.38                        | 1.80                               | 0.43                     | 2.53             | 1.65                       | 0.95                 |  |
| 60      | Malappuram             | 20.39                                | 6.41            | 1.46         | 6.47                                    | 0.61                        | 9.50                               | 3.81                     | 3.18             | 3.23                       | 1.46                 |  |
| 61      | Manjery                | 29.07                                | 9.14            | 2.08         | 20.34                                   | 0.40                        | 6.00                               | 2.32                     | 5.38             | 3.76                       | 2.08                 |  |
| 62      | Nilambur               | 13.87                                | 4.36            | 0.99         | 9.13                                    | 0.63                        | 1.50                               | 2.61                     | 2.16             | 2.20                       | 0.99                 |  |
| 63      | Parappanangadi         | 21.23                                | 6.67            | 1.52         | 13.94                                   | 0.92                        | 5.40                               | 0.97                     | 4.00             | 2.67                       | 1.52                 |  |
| 64      | Perinthalmanna         | 14.89                                | 4.68            | 1.06         | 9.30                                    | 2.03                        | 2.00                               | 1.56                     | 2.30             | 2.38                       | 1.06                 |  |
| 65      | Ponnani                | 27.09                                | 8.51            | 1.93         | 14.64                                   | 5.53                        | 5.50                               | 1.42                     | 5.11             | 3.40                       | 1.93                 |  |
| 66      | Thanur                 | 20.92                                | 6.57            | 1.49         | 14.23                                   | 0.06                        | 5.60                               | 1.03                     | 3.23             | 3.34                       | 1.49                 |  |
| 67      | Thirur                 | 16.78                                | 5.27            | 1.20         | 11.34                                   | 1.03                        | 2.20                               | 2.21                     | 3.14             | 2.13                       | 1.20                 |  |
| 68      | Thirurangadi           | 16.95                                | 5.33            | 1.21         | 9.36                                    | 1.67                        | 5.50                               | 0.43                     | 2.59             | 2.74                       | 1.21                 |  |
| 69      | Valancheri             | 12.07                                | 3.79            | 0.86         | 3.48                                    | 2.09                        | 6.00                               | 0.50                     | 2.32             | 1.47                       | 0.86                 |  |
| 70      | Kozhikode              | 213.46                               | 67.09           | 15.25        | 149.90                                  | 10.57                       | 10.00                              | 42.98                    | 32.93            | 34.16                      | 15.25                |  |
| 71      | Feroke                 | 14.75                                | 4.64            | 1.05         | 9.01                                    | 0.55                        | 2.30                               | 2.90                     | 2.83             | 1.81                       | 1.05                 |  |
| 72      | Koduvally              | 13.28                                | 4.17            | 0.95         | 9.45                                    | 0.35                        | 2.50                               | 0.98                     | 2.10             | 2.07                       | 0.95                 |  |
| 73      | Koyilandy              | 19.61                                | 6.16            | 1.40         | 7.19                                    | 1.41                        | 5.00                               | 6.01                     | 3.66             | 2.50                       | 1.40                 |  |
| 74      | Mukkam                 | 11.10                                | 3.49            | 0.79         | 6.33                                    | 0.33                        | 1.50                               | 2.95                     | 1.69             | 1.80                       | 0.79                 |  |
| 75      | Payyoli                | 13.50                                | 4.24            | 0.96         | 9.27                                    | 0.75                        | 2.40                               | 1.08                     | 2.55             | 1.69                       | 0.96                 |  |
| 76      | Ramanattukara          | 9.80                                 | 3.08            | 0.70         | 6.17                                    | 0.64                        | 2.40                               | 0.60                     | 1.50             | 1.58                       | 0.70                 |  |
| 77      | Vatakara               | 20.54                                | 6.46            | 1.47         | 13.47                                   | 0.55                        | 5.45                               | 1.08                     | 3.91             | 2.55                       | 1.47                 |  |

| Sl. No.               | Name of ULB     | Break-up of waste generated (in TPD) |                 |               | Destination of each of components (TPD) |                             |                                    |                          |                  |                            |               |                      |
|-----------------------|-----------------|--------------------------------------|-----------------|---------------|---|-----------------------------|------------------------------------|--------------------------|------------------|----------------------------|---------------|----------------------|
|                       |                 | Wet waste (TPD)                      | Dry waste (TPD) | Inerts (TPD)  | Wet Waste                               |                             |                                    |                          | Dry Waste        |                            | Inerts        |                      |
|                       |                 |                                      |                 |               | Composting units (TPD)                  | Bio-methanation units (TPD) | Connected to Rendering units (TPD) | Connected to Farms (TPD) | Recyclable (TPD) | Used in cement kilns (TPD) |               | Soil refilling (TPD) |
| 78                    | Kalpetta        | 8.30                                 | 2.61            | 0.59          | 5.82                                    | 0.45                        | 1.50                               | 0.53                     | 1.27             | 1.34                       | 0.59          |                      |
| 79                    | Mananthavady    | 12.61                                | 3.96            | 0.90          | 7.94                                    | 1.11                        | 2.80                               | 0.76                     | 2.42             | 1.54                       | 0.90          |                      |
| 80                    | Sulthan Bathery | 11.94                                | 3.75            | 0.85          | 6.20                                    | 1.29                        | 3.20                               | 1.25                     | 1.80             | 1.95                       | 0.85          |                      |
| 81                    | Kannur          | 92.39                                | 29.04           | 6.60          | 65.61                                   | 0.08                        | 5.00                               | 21.71                    | 17.58            | 11.46                      | 6.60          |                      |
| 82                    | Anthoor         | 7.44                                 | 2.34            | 0.53          | 4.14                                    | 2.23                        | 0.85                               | 0.23                     | 1.16             | 1.18                       | 0.53          |                      |
| 83                    | Iritty          | 10.62                                | 3.34            | 0.76          | 6.24                                    | 0.43                        | 1.20                               | 2.75                     | 2.02             | 1.32                       | 0.76          |                      |
| 84                    | Koothuparamba   | 7.79                                 | 2.45            | 0.56          | 4.58                                    | 0.37                        | 1.00                               | 1.84                     | 1.19             | 1.26                       | 0.56          |                      |
| 85                    | Mattannur       | 12.38                                | 3.89            | 0.88          | 8.35                                    | 0.16                        | 1.00                               | 2.87                     | 2.29             | 1.60                       | 0.88          |                      |
| 86                    | Panoor          | 4.59                                 | 1.44            | 0.33          | 1.69                                    | 1.78                        | 1.00                               | 0.12                     | 0.72             | 0.72                       | 0.33          |                      |
| 87                    | Payyannur       | 18.96                                | 5.96            | 1.35          | 10.92                                   | 3.48                        | 1.00                               | 3.56                     | 3.61             | 2.35                       | 1.35          |                      |
| 88                    | Sreekandapuram  | 8.81                                 | 2.77            | 0.63          | 4.75                                    | 0.42                        | 2.00                               | 1.64                     | 1.39             | 1.38                       | 0.63          |                      |
| 89                    | Thalasseri      | 24.34                                | 7.65            | 1.74          | 14.70                                   | 2.32                        | 1.12                               | 6.20                     | 4.55             | 3.10                       | 1.74          |                      |
| 90                    | Thalipparamba   | 11.64                                | 3.66            | 0.83          | 5.44                                    | 1.41                        | 1.00                               | 3.80                     | 1.76             | 1.90                       | 0.83          |                      |
| 91                    | Kanhangad       | 20.43                                | 6.42            | 1.46          | 7.33                                    | 6.41                        | 1.00                               | 5.69                     | 3.89             | 2.53                       | 1.46          |                      |
| 92                    | Kasaragod       | 15.09                                | 4.74            | 1.08          | 9.96                                    | 0.14                        | 1.20                               | 3.79                     | 2.30             | 2.44                       | 1.08          |                      |
| 93                    | Nileshwaram     | 11.07                                | 3.48            | 0.79          | 6.49                                    | 1.09                        | 2.00                               | 1.49                     | 2.11             | 1.37                       | 0.79          |                      |
|                       |                 | <b>2241.86</b>                       | <b>704.58</b>   | <b>160.13</b> | <b>1412.92</b>                          | <b>133.07</b>               | <b>320.18</b>                      | <b>375.77</b>            | <b>392.60</b>    | <b>311.98</b>              | <b>160.15</b> |                      |
| <b>KEIL</b>           |                 |                                      |                 |               |   |                             |                                    |                          | <b>16</b>        |                            |               |                      |
| <b>Total Capacity</b> |                 |                                      |                 |               | <b>3122.67 TPD</b>                      |                             |                                    |                          |                  |                            |               |                      |



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## Annexure 5

## Annexure 5 - ULB wise Daily Solid Waste generation &amp; treatment capacity

| Sl. No. | Name of ULB        | Type of ULB | Wet waste        |                           | Dry waste (TPD)  |                           |
|---------|--------------------|-------------|------------------|---------------------------|------------------|---------------------------|
|         |                    |             | Generation (TPD) | Processing Capacity (TPD) | Generation (TPD) | Processing Capacity (TPD) |
| 1       | Thiruvananthapuram | Corp        | 314.15           | 390.34                    | 98.73            | 108.86                    |
| 2       | Attingal           | Mpty        | 9.44             | 18.73                     | 2.97             | 4.21                      |
| 3       | Nedumangad         | Mpty        | 15.20            | 20.46                     | 4.78             | 9.82                      |
| 4       | Neyyatinkara       | Mpty        | 17.91            | 26.16                     | 5.63             | 7.21                      |
| 5       | Varkala            | Mpty        | 10.12            | 14.08                     | 3.18             | 13.61                     |
| 6       | Kollam             | Corp        | 125.86           | 182.75                    | 39.56            | 42.10                     |
| 7       | Karunagappally     | Mpty        | 12.51            | 17.05                     | 3.93             | 6.39                      |
| 8       | Kottarakkara       | Mpty        | 7.58             | 9.64                      | 2.38             | 12.28                     |
| 9       | Punalur            | Mpty        | 11.78            | 15.44                     | 3.70             | 7.51                      |
| 10      | South Paravoor     | Mpty        | 9.39             | 11.67                     | 2.95             | 4.53                      |
| 11      | Adoor              | Mpty        | 6.84             | 8.94                      | 2.15             | 6.27                      |
| 12      | Pandalam           | Mpty        | 9.75             | 12.05                     | 3.06             | 8.93                      |
| 13      | Pathanathitta      | Mpty        | 8.80             | 13.03                     | 2.76             | 4.38                      |
| 14      | Thiruvalla         | Mpty        | 12.39            | 14.85                     | 3.89             | 5.32                      |
| 15      | Alappuzha          | Mpty        | 43.24            | 54.61                     | 13.59            | 20.52                     |
| 16      | Chengannur         | Mpty        | 5.83             | 7.70                      | 1.83             | 3.34                      |
| 17      | Cherthala          | Mpty        | 11.38            | 15.98                     | 3.58             | 12.78                     |
| 18      | Haripad            | Mpty        | 3.90             | 5.44                      | 1.22             | 5.35                      |
| 19      | Kayamkulam         | Mpty        | 17.04            | 22.68                     | 5.36             | 6.77                      |
| 20      | Mavelikkara        | Mpty        | 6.56             | 8.30                      | 2.06             | 5.61                      |
| 21      | Changanaserry      | Mpty        | 11.87            | 14.21                     | 3.73             | 5.63                      |
| 22      | Erattupetta        | Mpty        | 7.40             | 9.30                      | 2.32             | 3.63                      |
| 23      | Ettumanoor         | Mpty        | 11.41            | 16.00                     | 3.59             | 6.24                      |
| 24      | Kottayam           | Mpty        | 34.47            | 44.81                     | 10.83            | 12.38                     |
| 25      | Pala               | Mpty        | 5.49             | 6.94                      | 1.73             | 4.00                      |
| 26      | Vaikom             | Mpty        | 5.78             | 7.43                      | 1.82             | 4.30                      |
| 27      | Kattappana         | Mpty        | 9.79             | 14.37                     | 3.08             | 8.32                      |
| 28      | Thodupuzha         | Mpty        | 12.41            | 17.25                     | 3.90             | 6.63                      |
| 29      | Kochi              | Corp        | 206.49           | 216.05                    | 64.90            | 75.00                     |

| Sl. No. | Name of ULB            | Type of ULB | Wet waste        |                           | Dry waste (TPD)  |                           |
|---------|------------------------|-------------|------------------|---------------------------|------------------|---------------------------|
|         |                        |             | Generation (TPD) | Processing Capacity (TPD) | Generation (TPD) | Processing Capacity (TPD) |
| 30      | Aluva                  | Mpty        | 5.98             | 8.78                      | 1.88             | 4.79                      |
| 31      | Angamaly               | Mpty        | 8.93             | 11.87                     | 2.81             | 6.39                      |
| 32      | Eloor                  | Mpty        | 9.80             | 13.29                     | 3.08             | 5.39                      |
| 33      | Kalamassery            | Mpty        | 18.95            | 26.60                     | 5.96             | 7.00                      |
| 34      | Koothattukulam         | Mpty        | 4.60             | 5.64                      | 1.45             | 3.20                      |
| 35      | Kothamangalam          | Mpty        | 10.36            | 13.18                     | 3.26             | 5.63                      |
| 36      | Maradu                 | Mpty        | 11.93            | 16.55                     | 3.75             | 5.31                      |
| 37      | Muvattupuzha           | Mpty        | 8.11             | 10.36                     | 2.55             | 6.59                      |
| 38      | North Paravur          | Mpty        | 8.40             | 10.05                     | 2.64             | 4.04                      |
| 39      | Perumbavur             | Mpty        | 7.50             | 8.79                      | 2.36             | 3.40                      |
| 40      | Piravom                | Mpty        | 7.26             | 9.26                      | 2.28             | 3.07                      |
| 41      | Thrikkakkara           | Mpty        | 20.63            | 28.86                     | 6.48             | 8.34                      |
| 42      | Thripunithura          | Mpty        | 24.69            | 33.85                     | 7.76             | 8.53                      |
| 43      | Thrissur               | Corp        | 107.16           | 143.53                    | 33.68            | 36.60                     |
| 44      | Chalakkudy             | Mpty        | 13.06            | 16.61                     | 4.11             | 4.15                      |
| 45      | Chavakkad              | Mpty        | 10.31            | 12.80                     | 3.24             | 9.74                      |
| 46      | Guruvayur              | Mpty        | 18.47            | 26.25                     | 5.80             | 8.03                      |
| 47      | Irinjalakkuda          | Mpty        | 16.50            | 19.64                     | 5.18             | 6.11                      |
| 48      | Kodungallur            | Mpty        | 18.84            | 27.95                     | 5.92             | 7.33                      |
| 49      | Kunnamkulam            | Mpty        | 14.26            | 18.15                     | 4.48             | 9.85                      |
| 50      | Wadakkanchery          | Mpty        | 16.18            | 21.71                     | 5.09             | 7.51                      |
| 51      | Cherpulassery          | Mpty        | 9.54             | 13.14                     | 3.00             | 5.01                      |
| 52      | Chittur Thathamangalam | Mpty        | 8.83             | 13.44                     | 2.78             | 18.87                     |
| 53      | Mannarkkad             | Mpty        | 7.83             | 9.80                      | 2.46             | 3.69                      |
| 54      | Ottapalam              | Mpty        | 14.71            | 19.23                     | 4.62             | 6.81                      |
| 55      | Palakkad               | Mpty        | 35.81            | 55.68                     | 11.25            | 13.42                     |
| 56      | Pattambi               | Mpty        | 7.83             | 11.29                     | 2.46             | 3.92                      |
| 57      | Shornur                | Mpty        | 11.90            | 19.02                     | 3.74             | 5.32                      |
| 58      | Kondotty               | Mpty        | 17.74            | 22.46                     | 5.58             | 6.84                      |
| 59      | Kottakal               | Mpty        | 13.29            | 17.19                     | 4.18             | 5.49                      |
| 60      | Malappuram             | Mpty        | 20.39            | 24.66                     | 6.41             | 7.20                      |

| Sl. No. | Name of ULB     | Type of ULB | Wet waste        |                           | Dry waste (TPD)  |                           |
|---------|-----------------|-------------|------------------|---------------------------|------------------|---------------------------|
|         |                 |             | Generation (TPD) | Processing Capacity (TPD) | Generation (TPD) | Processing Capacity (TPD) |
| 61      | Manjery         | Mpty        | 29.07            | 42.39                     | 9.14             | 9.83                      |
| 62      | Nilambur        | Mpty        | 13.87            | 18.43                     | 4.36             | 5.70                      |
| 63      | Parappanangadi  | Mpty        | 21.23            | 30.42                     | 6.67             | 8.38                      |
| 64      | Perinthalmanna  | Mpty        | 14.89            | 17.73                     | 4.68             | 5.86                      |
| 65      | Ponnani         | Mpty        | 27.09            | 34.45                     | 8.51             | 9.52                      |
| 66      | Thanur          | Mpty        | 20.92            | 28.39                     | 6.57             | 9.21                      |
| 67      | Thirur          | Mpty        | 16.78            | 24.24                     | 5.27             | 6.70                      |
| 68      | Thirurangadi    | Mpty        | 16.95            | 22.26                     | 5.33             | 7.18                      |
| 69      | Valancheri      | Mpty        | 12.07            | 14.11                     | 3.79             | 4.88                      |
| 70      | Kozhikode       | Corp        | 213.46           | 276.22                    | 67.09            | 76.25                     |
| 71      | Feroke          | Mpty        | 14.75            | 19.02                     | 4.64             | 6.19                      |
| 72      | Koduvally       | Mpty        | 13.28            | 19.52                     | 4.17             | 5.14                      |
| 73      | Koyilandy       | Mpty        | 19.61            | 24.47                     | 6.16             | 7.32                      |
| 74      | Mukkam          | Mpty        | 11.10            | 15.38                     | 3.49             | 5.05                      |
| 75      | Payyoli         | Mpty        | 13.50            | 19.39                     | 4.24             | 5.74                      |
| 76      | Ramanattukara   | Mpty        | 9.80             | 14.24                     | 3.08             | 5.22                      |
| 77      | Vatakara        | Mpty        | 20.54            | 29.60                     | 6.46             | 8.83                      |
| 78      | Kalpetta        | Mpty        | 8.30             | 11.30                     | 2.61             | 8.00                      |
| 79      | Mananthavady    | Mpty        | 12.61            | 18.52                     | 3.96             | 6.05                      |
| 80      | Sulthan Bathery | Mpty        | 11.94            | 15.12                     | 3.75             | 4.65                      |
| 81      | Kannur          | Corp        | 92.39            | 129.91                    | 29.04            | 31.07                     |
| 82      | Anthoor         | Mpty        | 7.44             | 9.39                      | 2.34             | 4.13                      |
| 83      | Iritty          | Mpty        | 10.62            | 14.60                     | 3.34             | 4.88                      |
| 84      | Koothuparamba   | Mpty        | 7.79             | 11.73                     | 2.45             | 7.38                      |
| 85      | Mattannur       | Mpty        | 12.38            | 15.56                     | 3.89             | 8.27                      |
| 86      | Panoor          | Mpty        | 4.59             | 6.31                      | 1.44             | 3.35                      |
| 87      | Payyannur       | Mpty        | 18.96            | 26.17                     | 5.96             | 7.10                      |
| 88      | Sreekandapuram  | Mpty        | 8.81             | 11.95                     | 2.77             | 5.65                      |
| 89      | Thalasseri      | Mpty        | 24.34            | 34.22                     | 7.65             | 8.80                      |
| 90      | Thalipparamba   | Mpty        | 11.64            | 14.34                     | 3.66             | 3.78                      |
| 91      | Kanhangad       | Mpty        | 20.43            | 24.07                     | 6.42             | 11.30                     |
| 92      | Kasaragod       | Mpty        | 15.09            | 20.70                     | 4.74             | 7.05                      |

| Sl. No. | Name of ULB | Type of ULB | Wet waste        |                           | Dry waste (TPD)  |                           |
|---------|-------------|-------------|------------------|---------------------------|------------------|---------------------------|
|         |             |             | Generation (TPD) | Processing Capacity (TPD) | Generation (TPD) | Processing Capacity (TPD) |
| 93      | Nileshwaram | Mpty        | 11.07            | 15.00                     | 3.48             | 4.53                      |
|         |             |             | <b>2241.86</b>   | <b>2935.02</b>            | <b>704.58</b>    | <b>972.48</b>             |

  
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## Annexure 6

**Annexure 6 - ULB wise clearing of legacy waste and area recovered including geo coordinates**

| SL No | Name of Local Body              | Legacy waste site (district wise)          | Area covered by the legacy waste (district wise) (Acre) | Quantity of waste (in MT) in each site | Area recovered (Acre) | QTY of processed waste (MT) | Geo-coordinates of the site   |
|-------|---------------------------------|--|---|--|-----------------------|-----------------------------|-------------------------------|
| 1     | Thiruvananthapuram Corporation  | Palayam market                             | 0.1   | 4804                                   | 0.1                   | 4804                        | 8.503046,<br>76.951791        |
| 2     | Thiruvananthapuram Corporation  | Erumakuzhi, near chala market              | 0.6   | 900                                    | 0.6                   | 900                         | 8.479713,<br>76.951122        |
| 3     | Kollam Corporation              | Kureepuzha                                 | 5.58  | 83926                                  | 5.6                   | 83926                       | 8.912467,<br>76.566520        |
| 4     | Pathanamthitta Municipality     | Near Mini stadium, PTA                     | 0.24  | 800                                    | 0.2                   | 800                         | 9.259613,<br>76.784624        |
| 5     | Adoor Municipality              | Kaimalapara, Ward no. 2, Adoor             | 0.05  | 500                                    | 0.1                   | 500                         | 9.17724,<br>76.730338         |
| 6     | Pandalam Municipality           | Near RRF Unit, pandalam                    | 0.1   | 400                                    | 0.1                   | 400                         | 9.224743,<br>76.676185        |
| 7     | Kalamassery Municipality        | Kalamassery                                | 1.9   | 46699.78                               | 1.9                   | 46699.78                    | 10.065159,<br>76.327607       |
| 8     | Kodungalloor Municipality       | Pullut, Chappara, Kodungalloor             | 1.7   | 26000                                  | 1.7                   | 26000                       | 10.227760,<br>76.214109       |
| 9     | Guruvayur Municipality          | Choolpuram, Guruvayoor                     | 3.37  | 20000                                  | 3.4                   | 20000                       | 10.614811,<br>76.045104       |
| 10    | Kodungalloor Municipality       | T.K.S. Puram, Kodungalloor                 | 1.6   | 607                                    | 1.6                   | 607                         | 10.204591,<br>76.201574       |
| 11    | Thrissur Corporation            | Laloor                                     | 0.25  | 19500                                  | 0.3                   | 19500                       | 10.514903,<br>76.187189       |
| 12    | Pattambi Municipality           | Pattambi, Sankara mangalam                 | 0.54  | 1041                                   | 0.5                   | 1041                        | 10.827542,<br>76.190078       |
| 13    | Malappuram ulb                  | Puliyettummal, Near Inkel city, Malappuram | 3.2   | 5,079                                  | 3.2                   | 5079.04                     | 11.069194,<br>76.042835       |
| 14    | Tirur ulb                       | Trenching ground, Ottilathara              | 1   | 3079.2                                 | 1.0                   | 3079.2                      | 10.903003,<br>75.931515       |
| 15    | Perinthalmanna Municipality     | Perinthalmanna, Kunnappalli                | 10  | 200                                    | 10.0                  | 200                         | 10.960982,<br>76.209570       |
| 16    | Manjeri Municipality            | Vettekkode, Manjeri                        | 0.44  | 13902.11                               | 0.4                   | 13902.11                    | 11.109738,<br>76.137926       |
| 17    | Kozhikode Municipal Corporation | Kalliyi, ward-56, beside the river         | 0.0098  | 15                                     | 0.0                   | 15                          | 11°13'00.0"N,<br>75°46'60.0"E |

| SL No | Name of Local Body              | Legacy waste site (district wise)         | Area covered by the legacy waste (district wise) (Acre) | Quantity of waste (in MT) in each site | Area recovered (Acre) | QTY of processed waste (MT) | Geo-coordinates of the site |
|-------|---------------------------------|---|---|--|-----------------------|-----------------------------|-----------------------------|
| 18    | Koyilandy Municipality          | Koyilandi                                 | 0.012   | 40                                     | 0.0                   | 40                          | 11.439° N, 75.695° E        |
| 19    | Kozhikode Municipal Corporation | Njaliyan parambu                          | 6.4997  | 130000                                 | 6.5                   | 130000                      | 11.204880, 75.816662        |
| 20    | Attingal Municipality           | Attingal, Chudukad                        | 0.5   | 11365.00                               | 0.3                   | 7800.00                     | 8.690629 N, 76.815546 E     |
| 21    | Thiruvananthapuram Corporation  | Vizhijam                                  | 0.26  | 3177.10                                | 0.2                   | 1906.26                     | 8.376044° , 76.995686°      |
| 22    | kottayam municipality           | Vadavathoor, Kottayam                     | 3.2   | 113647                                 | 0.6                   | 20456.46                    | 9°35'33.1"N 76°33'31.9"E    |
| 23    | Changanassery Municipality      | Fathimapuram, Changanassery               | 0.8   | 7300.00                                | 0.6                   | 5475.00                     | 9°26'49.8"N 76°33'13.3"E    |
| 24    | Thodupuzha Municipality         | Parakadavu, Thodupuzha                    | 1.26  | 28000.00                               | 0.9                   | 19040.00                    | 9.882586, 76.688313         |
| 25    | Kothamangalam Municipality      | Kumbalathumuri, Kothamangalam             | 2.13  | 29915.00                               | 0.0                   | 0.00                        | 10.079857, 76.647491        |
| 26    | Kochi Corporation               | Brahmapuram, Kochi                        | 39  | 843000                                 | 35.9                  | 775560.00                   | 9.99339648, 76.3638612      |
| 27    | Muvattupuzha Municipality       | Kurianmala, Muvattupuzha                  | 3.5   | 44589.00                               | 0.7                   | 8917.80                     | 9.99852, 76.56761           |
| 28    | North Paravoor Municipality     | Vedimara, North Paravoor                  | 0.5   | 18666.00                               | 0.0                   | 0.00                        | 10.150582° , 76.242171°     |
| 29    | Chavakkad Municipality          | Chavakkad                                 | 0.2   | 5000.00                                | 0.2                   | 3600.00                     | 10°35'21.4"N 76°00'36.0"E   |
| 30    | Irinjalakuda Municipality       | Iringalakkuda, Mangadikunnu, Porathissery | 0.123   | 18389.00                               | 0.0                   | 7355.60                     | 10.362121, 76.211546        |
| 31    | Wadakkanchery Municipality      | Wadakanchery, Kumbalangad                 | 1.35  | 16152.00                               | 0.9                   | 11306.40                    | 10.656833, 76.223361        |
| 32    | Ottapalam municipality          | Panamanna, Ottappalam                     | 2.42  | 37600.00                               | 1.8                   | 28100.00                    | 10°47'11.6"N , 76°20'43.5"E |
| 33    | Palakkad Municipality           | Koottupatha, Kodumba                      | 6.04  | 70541.35                               | 1.5                   | 17014.57                    | 10°45'58.3"N, 76°41'17.9"E  |
| 34    | Vatakara Municipality           | Puthiyappu, Vadakara                      | 1.25  | 30693.60                               | 0.6                   | 13812.12                    | 11.608495, 75.591705.       |
| 35    | Kannur Corporation              | Kannur Corporation                        | 6.67  | 66700                                  | 3.3                   | 33350.00                    | 11.9023 , 75.4403           |
| 36    | MATTANNUR MUNICIPALITY          | Mattannur Municipality                    | 0.446   | 15680                                  | 0.4                   | 15523.20                    | 11.966435, 75.571939        |

| SL No | Name of Local Body          | Legacy waste site (district wise)            | Area covered by the legacy waste (district wise) (Acre) | Quantity of waste (in MT) in each site | Area recovered (Acre) | QTY of processed waste (MT) | Geo-coordinates of the site        |
|-------|-----------------------------|--|---|--|-----------------------|-----------------------------|------------------------------------|
| 37    | Thalassery Municipality     | Thalassery, Punnoolpetty palam               | 5.5   | 45430                                  | 3.3                   | 27258.24                    | 11.722314, 75.5144978              |
| 38    | Alappuzha Municipality      | Sarvodayapuram                               | 12  | 20482.00                               | 7.2                   | 12289.20                    | 9.551602, 76.318093                |
| 39    | Kanhangad Municipality      | Kanjhangad, Trenching Ground Chemmattamvayal | 0.69  | 3481.39                                | 0.0                   | 0                           | 12.32511, 75.11016                 |
| 40    | Kottarakara Municipality    | Ugrankunnu, Kottarakkara                     | 0.366   | 6596                                   | 0.0                   | 0                           | 9.001114, 76.758965                |
| 41    | Kayamkulam Municipality     | Murikkummoodu, Kayamkulam                    | 0.26  | 6567.04                                | 0.0                   | 0                           | 9.172666°, 76.500931°              |
| 42    | Mavelikkara Municipality    | Puthiyakavu, Mavelikkara                     | 0.32  | 2880                                   | 0.0                   | 0                           | 9.25379, 76.548                    |
| 43    | Erattupetta Municipality    | Erattupettah, Thevarrupara                   | 0.6   | 8000                                   | 0.0                   | 0                           | 9.69°-9.71° N, 76.77°-76.80° E     |
| 44    | Kattappana Municipality     | Kattappana, Puliyanmala                      | 0.89  | 12000                                  | 0.0                   | 0                           | 9.759365, 77.146511                |
| 45    | Koothattukulam Municipality | Town-Ward 15, Koothattukulam                 | 0.12  | 1346                                   | 0.0                   | 0                           | 9.8638592, 76.59099380             |
| 46    | Chalakyudy Municipality     | Near Cosmos Club, Chalakkudy                 | 0.26  | 6769                                   | 0.0                   | 0                           | 10.315732, 76.32695                |
| 47    | Kalpetta Municipality       | Vellaramkunnu, Kalpetta                      | 1.12  | 9485.37                                | 0.0                   | 0                           | 11.590497, 76.055332               |
| 48    | Iritty Municipality         | Iritty, Athithattu                           | 0.04  | 1618.49                                | 0.0                   | 0                           | 11.96760, 75.68179                 |
| 49    | Payyannur Municipality      | Payyannur, Moorikkovval                      | 0.75  | 2100.00                                | 0.0                   | 0                           | 12.12148222, 75.2090550            |
| 50    | Kuthuparamba Municipality   | Palapparamba, Kuthuparambu                   | 0.98  | 22473.955                              | 0.0                   | 0                           | 11° 50' 10.14"N, 75° 34' 18.959" E |
| 51    | Kasaragod Municipality      | Kelugudde, Kasaragod                         | 1.1   | 12874                                  | 0.0                   | 0                           | 12.515864, 74.986021               |
| 52    | Kunnamkulam Municipality    | Kunnamkulam                                  | 2   | 24660                                  | 0.0                   | 0                           | 10.638828, 76.058874               |
|       |                             |  | <b>138</b>  | <b>1954714</b>                         | <b>97.0</b>           | <b>1378743</b>              |                                    |



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| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |  |   |                          |                            |   |  |                               |                                 |                                  |      |
|--|---|------------|--|---|--------------------------|----------------------------|---|--|-------------------------------|---------------------------------|----------------------------------|------|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban) | (iv) Details of Treatment of Sewage (District Wise) |                          |                            |   |  |                               |                                 | (v) Details of disposal (in MLD) |      |
|  |   |            |  | By STP (MLD)  | Type of STP              | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli   | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) | Destination of (b) If (a) above |                                  |      |
|  |   |            |  |   |                          |                            |   |  |                               | Wet land                        | Pond                             |      |
| [1]  | (2)   | (3)        | (3)                                    | (6)   | (7)                      | (8)                        | (9)   | (10)                                       | (11) STPs in Establishment    | (12) Individual septic Tanks    | (13)                             | (14) |
| Thiruvananthapuram   | Thiruvananthapuram (MC)                                     | 997032     | 144                                    | (1) 107 MLD STP at Muttathara                       | Activated Sludge Process | Chlorination               | pH-6.9, TSS-38 mg/L, BOD- 6.5 mg/L, COD-60 mg/L, Oil and grease-BDL, Faecal Coliform- 310 MPN/100 ml as per analysis report dated 24.11.2025 (KSPCB Inference-Action taken for preventing exceedance. Directions issued to KWA for full utilization of plant) | 80   | 11.452                        | 50                              | -                                | -    |
|  |   |            |  | (2) 5 MLD STP Medical College(AMRUT-1.0)            | MBBR                     | Chlorination               | pH-3.1, TSS-9.0 mg/L, BOD- 1.2 mg/L, Bio-assay Test - 100% fish died within 1 hour, COD- 52 mg/L, oil and grease-0.7 mg/L, Total Coliform - NIL, FC - NIL as per Analysis report dated 24.11.2025 (KSPCB Inference-complying)                                 | 2.5  |                               |                                 | -                                | -    |
|  | Neyyatinkara  | 73062      | 7.9                                    |   |                          |                            |   |  |                               | 7.9                             |                                  |      |
|  | Nedumangad  | 62039      | 6.71                                   |   |                          |                            |   |  |                               | 6.71                            |                                  |      |
|  | Attingal  | 38512      | 4.16                                   |   |                          |                            |   |  |                               | 4.16                            |                                  |      |
| Varkala  | 41298   | 4.47       |  |   |                          |                            |   |  | 4.47                          |                                 |                                  |      |
| Kollam (MC)  | 399464  | 57.53      |  |   |                          |                            |   |  | 5.394                         | 52.136                          |                                  |      |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |   |       |      |  |  |            |                     |            |  |
|--|---|---|-------|------|--|--|------------|---------------------|------------|--|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | (iii) Disposal of untreated Sewage (ULB Wise)                     |       |      | (vi) Action Plan to treat untreated sewage (District Wise).  | (vii) Action Taken against the defaulting authority                              |            |                     |            |  |
|  |   | (a) Final Discharge of untreated sewage is let out in its quality | River | Sea  |  | Other water body   | Time lines | Budget outlay (Cr.) | EC imposed | Show Cause Notice Issued   |
| [1]  |   | (15)  | (16)  | (17) | (18)   | (19)   | (20)       | (21)                | (22)       | [23]   |
| Thiruvananthapuram   | Thiruvananthapuram (MC)                                     | -   | -     | -    | Sewer Network - UIDF (Dec-27)<br>Sewer Network & Other Works - AMRUT-1.0 (Dec-27)<br>Sewer Network - AMRUT-2.0 (Dec-27)                    | 1. Sewer Network - 443.55<br>2. FSTPs - 14.2<br>3. MTU - 0.45                    |            |                     |            | LSG:<br>Notices Issued: 4325,<br>Cases Fined: 3392,<br>Total Fine Amount in Rs: 10981440 |
|  | Neyyatinkara  |   |       |      | FSTP - Nettukaltheri, Kallikadu-SBM(G) KLD (May-27) 80   |  |            |                     |            | LSG:<br>Notices Issued: 254,<br>Cases Fined: 10,<br>Total Fine Amount in Rs: 109500      |
|  | Nedumangad  |   |       |      | FSTP - Nettukaltheri, Kallikadu-SBM(G) KLD (May-27) 80   |  |            |                     |            | LSG:<br>Notices Issued: 106,<br>Cases Fined: 22,<br>Total Fine Amount in Rs: 313050      |
|  | Attingal  |   |       |      | FSTP - Attingal, Chudukadu - SBM(U) 10KLD (Jun-27)   |  |            |                     |            | LSG:<br>Notices Issued: 55,<br>Cases Fined: 21,<br>Total Fine Amount in Rs: 222190       |
|  | Varkala   |   |       |      | FSTP - Varkala - IMPACT - SBM(U) 50KLD (Jun-26)  |  |            |                     |            | LSG:<br>Notices Issued: 36,<br>Cases Fined: 27,<br>Total Fine Amount in Rs: 359320       |
|  | Kollam (MC)   |   |       |      | Sewer Network - AMRUT-2.0 (Dec-27)<br>STP - Kureepuzha - AMRUT-1.0, 12 MLD STP (Mar-26)<br>MTU - Kollam Corporation - SBM(U) MLD Delivered | 1. Sewer Network - 145.36<br>2. STPs - 43.47<br>3. FSTPs - 1.36<br>4. MTU - 0.90 | Nil        | 3                   | 1          | LSG:<br>Notices Issued: 273,<br>Cases Fined: 276,<br>Total Fine Amount in Rs: 1175810    |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |  |   |                    |                            |   |  |                               |                              |                                  |      |
|--|---|------------|--|---|--------------------|----------------------------|---|--|-------------------------------|------------------------------|----------------------------------|------|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban) | (iv) Details of Treatment of Sewage (District Wise) |                    |                            |   |  |                               |                              | (v) Details of disposal (in MLD) |      |
|  |   |            |  | By STP (MLD)  | Type of STP        | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli   | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) |                              | Wet land                         | Pond |
|  |   |            |  |   |                    |                            |   |  | (11) STPs in Establishment    | (12) Individual septic Tanks |                                  |      |
| [1]  | (2)   | (3)        | (3)                                    | (6)   | (7)                | (8)                        | (9)   | (10)                                       | (11) STPs in Establishment    | (12) Individual septic Tanks | (13)                             | (14) |
| Kollam   | Paravur   | 38335      | 4.15                                   |   |                    |                            |   |  |                               | 4.15                         |                                  |      |
|  | Punalur   | 48068      | 5.2                                    |   |                    |                            |   |  |                               | 5.2                          |                                  |      |
|  | Karunagappally  | 51055      | 5.52                                   |   |                    |                            |   |  |                               | 5.52                         |                                  |      |
|  | Kottarakkara  | 30934      | 3.35                                   |   |                    |                            |   |  |                               | 3.35                         |                                  |      |
| Pathanamthitta   | Pathanamthitta  | 35879.0    | 3.88                                   |   |                    |                            |   |  | 1.14                          | 2.74                         |                                  |      |
|  | Adoor   | 27882      | 3.02                                   |   |                    |                            |   |  | 1.67                          | 1.35                         |                                  |      |
|  | Thiruvalla  | 50545      | 5.46                                   |   |                    |                            |   |  | 3.1                           | 2.36                         |                                  |      |
|  | Pandalam  | 39755      | 4.3                                    |   |                    |                            |   |  | 2.7                           | 1.6                          |                                  |      |
|  | Alappuzha   | 176469     | 25.4                                   | (1) 0.24 MLD STP at General Hospital (AMRUT-1.0)    | Electrocoagulation | Chlorination               | Electrocoagulation<br>Ph - 7.3, BOD - 2.8 mg/l, COD - 10 mg/l, SS - 10 mg/l, Total Phosphorous - 0.043 mg/l, Faecal Coliform - NIL, Total Nitrogen - 22.507 mg/l, Oil and grease - BDL as per the analysis report on 09.10.2025 (KSPCB Inference-complying) | 0.24                                       | 2.537                         | 22.7                         |                                  |      |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |   |       |      |  |  |            |                     |            |   |
|--|---|---|-------|------|--|--|------------|---------------------|------------|---|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | (iii) Disposal of untreated Sewage (ULB Wise)                     |       |      | (vi) Action Plan to treat untreated sewage (District Wise).  | (vii) Action Taken against the defaulting authority  |            |                     |            |   |
|  |   | (a) Final Discharge of untreated sewage is let out in its quality | River | Sea  |  | Other water body                                     | Time lines | Budget outlay (Cr.) | EC imposed | Show Cause Notice Issued  |
| [1]  |   | (15)  | (16)  | (17) | (18)   | (19)   | (20)       | (21)                | (22)       | [23]  |
| Kollam   | Paravur   |   |       |      | FSTP- Nedumgolam Taluk Hopital-SBM(U) 20 KLD (Dec-27)  |  | Nil        | 0                   | 0          | LSG: Notices Issued: 187, Cases Fined: 48, Total Fine Amount in Rs: 161050  |
|  | Punalur   |   |       |      | FSTP- Karunagapally-SBM(U) 25 KLD (Dec-26)   |  | Nil        | 0                   | 0          | LSG: Notices Issued: 108, Cases Fined: 50, Total Fine Amount in Rs: 125450  |
|  | Karunagapally   |   |       |      | FSTP- Karunagapally-SBM(U) 25 KLD (Dec-26)   |  | Nil        | 3                   | 0          | LSG: Notices Issued: 142, Cases Fined: 72, Total Fine Amount in Rs: 326060  |
|  | Kottarakkara  |   |       |      | FSTP-Paravur,Nedugolam- SBM(U) 20 KLD(Dec-27)<br>MTU - Kottarakkara Municipality - SBM(U) (July-26)  |  | Nil        | 2                   | 0          | LSG: Notices Issued: 235, Cases Fined: 115, Total Fine Amount in Rs: 422510 |
| Pathanamthitta   | Pathanamthitta  |   |       |      | FSTP- Nilackal - SBM(G) 150 KLD(Dec-27)<br>MTU - Pathanamthitta Municipality - SBM(U) (July-26)  | 1. MTU (3 Nos) - 1.35 Cr<br>2. FSTP (2 Nos) - 5.5 Cr | Nil        | Nil                 | Nil        | LSG: Notices Issued: 93, Cases Fined: 11, Total Fine Amount in Rs: 43570    |
|  | Adoor   |   |       |      | FSTP-Kodumon plantation- 100 KLD(Dec-27)   |  | Nil        | Nil                 | Nil        | LSG: Notices Issued: 10, Cases Fined: 20, Total Fine Amount in Rs: 54500    |
|  | Thiruvalla  |   |       |      | FSTP-Kodumon plantation- 100 KLD(Dec-27)   |  | Nil        | Nil                 | Nil        | LSG: Notices Issued: 106, Cases Fined: 72, Total Fine Amount in Rs: 204020  |
|  | Pandalam  |   |       |      | FSTP-Kodumon Plantation 100 KLD(Dec-27)<br>MTU - Pandalam Municipality - SBM(U) - Operational  |  | Nil        | Nil                 | Nil        | LSG: Notices Issued: 29, Cases Fined: 10, Total Fine Amount in Rs: 75010    |
|  | Alappuzha   |   |       |      | STP - Alissery - AMRUT-2.0, 5MLD & Co-treatment 13KLD (Dec-27)<br>STP - Bhajanamadom Settlement - AMRUT-2.0, 0.012MLD (Dec-27)<br>MTU - Alappuzha Municipality - AMRUT-1.0 Delivered<br>MTU - Alappuzha Municipality - AMRUT-1.0 Delivered | 1. STPs - 68.76<br>2. FSTPs - 18.4<br>3. MTU - 1.15  | Nil        | 2 SCN               | Nil        | LSG: Notices Issued: 223, Cases Fined: 236, Total Fine Amount in Rs: 885500 |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |  |   |             |                            |   |  |                               |                              |                                  |      |  |
|--|---|------------|--|---|-------------|----------------------------|---|--|-------------------------------|------------------------------|----------------------------------|------|--|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban) | (iv) Details of Treatment of Sewage (District Wise) |             |                            |   |  |                               |                              | (v) Details of disposal (in MLD) |      |  |
|  |   |            |  | By STP (MLD)  | Type of STP | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli   | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) |                              | Wet land                         | Pond |  |
|  |   |            |  |   |             |                            |   |  | (11) STPs in Establishment    | (12) Individual septic Tanks |                                  |      |  |
| [1]  | (2)   | (3)        | (3)                                    | (6)   | (7)         | (8)                        | (9)   | (10)                                       | (11) STPs in Establishment    | (12) Individual septic Tanks | (13)                             | (14) |  |
| Alappuzha  |   |            |  | (2) 25 KLD STP at Chathanad Colony                  | ABR         | Chlorination               | pH - 7, BOD - 22.256 mg/l, SS - 11 mg/l, Oil and grease BDL as per the analysis report dated 08.08.2025 (KSPCB Inference-complying) | 0.025                                      |                               |                              |                                  |      |  |
|  | Kayamkulam  | 69542      | 7.52                                   |   |             |                            |   |  |                               | 7.52                         |                                  |      |  |
|  | Mavelikara  | 26771      | 2.9                                    |   |             |                            |   |  |                               | 2.9                          |                                  |      |  |
|  | Chengannur  | 23777      | 2.57                                   |   |             |                            |   |  |                               | 2.57                         |                                  |      |  |
|  | Cherthala   | 46434      | 5.02                                   | 250 KLD FSTP at Cherthala                           | MBBR        | Chlorination               |   |  |                               |                              | 5.02                             |      |  |
|  | Haripad   | 15899      | 1.72                                   |   |             |                            |   |  |                               |                              | 1.72                             |      |  |
|  | Kottayam  | 140667     | 20.26                                  |   |             |                            |   |  | 6.548                         | 13.71                        |                                  |      |  |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |   |       |      |   |   |            |                     |            |   |
|--|---|---|-------|------|---|---|------------|---------------------|------------|---|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Disposal of untreated Sewage (LD) (ULB Wise)                      |       |      | (vi) Action Plan to treat untreated sewage (District Wise).   | (vii) Action Taken against the defaulting authority |            |                     |            |   |
|  |   | (a) Final Discharge of untreated sewage is let out in its quality | River | Sea  |   | Other water body                                    | Time lines | Budget outlay (Cr.) | EC imposed | Show Cause Notice Issued  |
| [1]  |   | (15)  | (16)  | (17) | (18)  | (19)  | (20)       | (21)                | (22)       | [23]  |
| Alappuzha  |   |   |       |      | AMRUT-1.0 Delivered   |   |            |                     |            |   |
|  | Kayamkulam  |   |       |      | MTU - Kayamkulam Municipality-SBM(U) Delivered<br>FSTP- Stadium, Chengannur- SBM(G) 30 KLD(Dec-27)  |   | Nil        | Nil                 | Nil        | LSG:<br>Notices Issued: 245,<br>Cases Fined: 98,<br>Total Fine Amount in Rs: 372395 |
|  | Mavelikara  |   |       |      | FSTP- Mavelikkara Thekkekara - SBM(G) 70KLD (Jun-27)  |   | Nil        | Nil                 | Nil        | LSG:<br>Notices Issued: 31,<br>Cases Fined: 13,<br>Total Fine Amount in Rs: 60510   |
|  | Chengannur  |   |       |      | FSTP- Stadium, Chengannur - SBM(G) 30KLD (Dec-27)<br>MTU -Changannur - SBM(U) Delivered   |   | Nil        | Nil                 | Nil        | LSG:<br>Notices Issued: 23,<br>Cases Fined: 14,<br>Total Fine Amount in Rs: 213510  |
|  | Cherthala   |   |       |      | FSTP - Cherthala-Antharaveli - IMPACT 250KLD Commissioned   |   | Nil        | Nil                 | Nil        | LSG:<br>Notices Issued: 28,<br>Cases Fined: 12,<br>Total Fine Amount in Rs: 34000   |
|  | Haripad   |   |       |      | FSTP- Stadium, Chengannur - SBM(G) 30KLD (Dec-27)   |   | Nil        | Nil                 | Nil        | LSG:<br>Notices Issued: 78,<br>Cases Fined: 30,<br>Total Fine Amount in Rs: 73000   |
|  | Kottayam  |   |       |      | FSTP - Vellor- SBM(G) 30KLD (Jun-27)<br>FSTP - Vadavathur- SBM(U) 20KLD (May-27)<br>MTU - Kumarakom Gramapanchayat - SBM(G) - Operational<br>FSTP - Erumeli - SBM(G) 105KLD (Mar-27)<br>MTU- Kottayam Municipality SBM(U) July-26 | 1. FSTPs - 8.7062<br>2. MTU - 0.90                  |            |                     |            | LSG:<br>Notices Issued: 135,<br>Cases Fined: 87,<br>Total Fine Amount in Rs: 214500 |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |  |   |             |                            |   |  |                               |      |                                  |  |
|--|---|------------|--|---|-------------|----------------------------|---|--|-------------------------------|------|----------------------------------|--|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban) | (iv) Details of Treatment of Sewage (District Wise) |             |                            |   |  |                               |      | (v) Details of disposal (in MLD) |  |
|  |   |            |  | By STP (MLD)  | Type of STP | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) |      | Destination of (b) If (a) above  |  |
|  |   |            |  |   |             |                            |   |  | Wet land                      | Pond |                                  |  |
| [1]  | (2)   | (3)        | (6)                                    | (7)   | (8)         | (9)                        | (10)  | (11) STPs in Establishment                 | (12) Individual septic Tanks  | (13) | (14)                             |  |
| Kottayam   | Changanacherry  | 48453      | 5.24                                   |   |             |                            |   |  |                               | 5.24 |                                  |  |
|  | Vaikom  | 23608      | 2.55                                   |   |             |                            |   |  |                               | 2.55 |                                  |  |
|  | Pala  | 22411      | 2.43                                   |   |             |                            |   |  |                               | 2.43 |                                  |  |
|  | Erattupetta   | 30184      | 3.26                                   |   |             |                            |   |  |                               | 3.26 |                                  |  |
|  | Ettumanoor  | 46575      | 5.04                                   |   |             |                            |   |  |                               | 5.04 |                                  |  |
| Idukki   | Thodupuzha  | 50654      | 5.48                                   |   |             |                            |   | 1.155                                      | 4.325                         |      |                                  |  |
|  | Kattappana  | 39960      | 4.32                                   |   |             |                            |   |  | 4.32                          |      |                                  |  |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |   |       |      |   |   |            |                     |            |   |
|--|---|---|-------|------|---|---|------------|---------------------|------------|---|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Disposal of untreated Sewage (ULB Wise)                           |       |      | (vi) Action Plan to treat untreated sewage (District Wise).   | (vii) Action Taken against the defaulting authority |            |                     |            |   |
|  |   | (a) Final Discharge of untreated sewage is let out in its quality | River | Sea  |   | Other water body                                    | Time lines | Budget outlay (Cr.) | EC imposed | Show Cause Notice Issued  |
| [1]  |   | (15)  | (16)  | (17) | (18)  | (19)  | (20)       | (21)                | (22)       | [23]  |
| Kottayam   | Changanacherry  |   |       |      | MTU - Changanaserry Municipality - LSG fund - Operational<br>FSTP- Stadium, Chengannur - SBM(G)<br>30KLD (Dec-27) |   |            |                     |            | LSG:<br>Notices Issued: 96,<br>Cases Fined: 52,<br>Total Fine Amount in<br>Rs: 163610   |
|  | Vaikom  |   |       |      | FSTP-KPPL Land - SBM(G)<br>30 KLD ( Jun 27)   |   |            |                     |            | LSG:<br>Notices Issued: 57,<br>Cases Fined: 21,<br>Total Fine Amount in<br>Rs: 65000    |
|  | Pala  |   |       |      | FSTP - Erumeli - SBM(G)<br>105KLD (Mar-27)  |   |            |                     |            | LSG:<br>Notices Issued: 142,<br>Cases Fined: 117,<br>Total Fine Amount in<br>Rs: 394920 |
|  | Erattupetta   |   |       |      | FSTP-KPPL Land - SBM(G)<br>30 KLD ( Jun 27)   |   |            |                     |            | LSG:<br>Notices Issued: 85,<br>Cases Fined: 48,<br>Total Fine Amount in<br>Rs: 385040   |
|  | Ettumanoor  |   |       |      | FSTP-KPPL Land - SBM(G)<br>30 KLD ( Jun 27)   |   |            |                     |            | LSG:<br>Notices Issued: 69,<br>Cases Fined: 18,<br>Total Fine Amount in<br>Rs: 56550    |
| Idukki   | Thodupuzha  |   |       |      | FSTP- Chathamala- SBM(G)<br>20 KLD(Mar-27)  |   |            |                     |            | LSG:<br>Notices Issued: 179,<br>Cases Fined: 135,<br>Total Fine Amount in<br>Rs: 447530 |
|  | Kattappana  |   |       |      | FSTP- Chathamala- SBM(G)<br>20 KLD(Mar-27)  |   |            |                     |            | LSG:<br>Notices Issued: 158,<br>Cases Fined: 125,<br>Total Fine Amount in<br>Rs: 344750 |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |   |   |              |   |   |  |                               |                                 |                                  |  |
|--|---|------------|---|---|--------------|---|---|--|-------------------------------|---------------------------------|----------------------------------|--|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban)      | (iv) Details of Treatment of Sewage (District Wise) |              |   |   |  |                               |                                 | (v) Details of disposal (in MLD) |  |
|  |   |            |   | By STP (MLD)  | Type of STP  | Disinfection method in STP  | Discharge Water Quality from STP including Fecal & E-Coli | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) | Destination of (b) If (a) above |                                  |  |
|  |   |            |   |   |              |   |   |  |                               | Wet land                        | Pond                             |  |
| [1]  | (2)   | (3)        | (6)   | (7)   | (8)          | (9)   | (10)  | (11) STPs in Establishment                 | (12) Individual septic Tanks  | (13)                            | (14)                             |  |
| Kochi (MC)   | 654155  | 94.2       | (1) 5MLD (AMRUT-1.0) Elamkulam              | MBBR  | Chlorination | pH7.18, TSS-64.3 mg/l, phosphates- 2.8mg/l, ammoniacal nitrogen-6.92 mg/l,BOD-15 mg/l, COD- 56 mg/l, oil &grease- BDL, Nitrates as Nitrogen – 0.271 mg/l, Nitrite as Nitrogen – 0.03 mg/l, total Kjeldahl nitrogen-12.32 mg/l (KSPCB Inference-complying) Co-treatment is under maintenance   | 5   | 23.344                                     | 63.456                        |                                 |                                  |  |
|  |   |            | (2) 0.9 MLD STP at Marine Drive             | Activated Sludge Process                            | Chlorination | Operational, (pH7.98, TSS-84 mg/l, phosphates- 18.5 mg/l, ammoniacal nitrogen- 41.16 mg/l, BOD-16 mg/l, COD- 68 mg/l, oil & grease- BDL, Total Nitrogen – 44.53mg/l, Nitrite as Nitrogen – BDL, Nitrite as Nitrogen – 0.174 mg/l, total Kjeldahl nitrogen-44.352 mg/l), FaecalColiform – 8000 cfu/100ml, (KSPCB Inference-complying)  | 0.9   |  |                               |                                 |                                  |  |
|  |   |            | (3) 0.75 MLD at Kaloor Stadium              | Activated Sludge Process                            | Chlorination | Operational ,pH -7.51, TSS- 21.5 mg/l, BOD - 4.6 mg/l, Oil and Grease -5 mg/l,  | 0.75  |  |                               |                                 |                                  |  |
|  |   |            | (4) 100 KLD FSTPs at Brahmapuram,           | MBBR  | Chlorination | • pH- 7.26 mg/L, BOD- 0.87 mg/L, COD- 24 mg/L, Oil and Grease-BDL, Total Suspended Solids – 54 mg/L,, Phosphate – 0.06 mg/L, Nitrate- 3.09mg/l, Sulphates – 12.49 mg/l, Sulphides – 8.34 mg/l, Ammoniacal Nitrogen – 0.20 mg/l, Phenolic Compounds -1.23 mg/L,,Faecal coliform -7 cfu/ 100 ml, Faecal Streptococci-60 cfu/ 100 ml as per analysis report dated 14.05.2025 (KSPCB Inference-complying) | 0.1   |  |                               |                                 |                                  |  |
|  |   |            | (5) 0.01 MLD ,Wellington, Kochi Corporation | MBBR  | Chlorination | pH - 7.56, Total Suspended Solids- BDL, COD - 9.52 mg/L, BOD - 2.4 mg/L, Fecal coliform < 2 MPN/100ml as per analysis report dated 05.12.2025   |   |  |                               |                                 |                                  |  |
| Thrippunithura   | 100561  | 14.49      |   |   |              |   |   |  | 14.49                         |                                 |                                  |  |
| Ernak  |   |            |   |   |              |   |   |  |                               |                                 |                                  |  |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |   |       |      |  |   |            |                     |            |                          |
|--|---|---|-------|------|--|---|------------|---------------------|------------|--------------------------|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | (iii) Disposal of untreated Sewage (LD) (ULB Wise)                |       |      | (vi) Action Plan to treat untreated sewage (District Wise).    | (vii) Action Taken against the defaulting authority |            |                     |            |                          |
|  |   | (a) Final Discharge of untreated sewage is let out in its quality | River | Sea  |  | Other water body                                    | Time lines | Budget outlay (Cr.) | EC imposed | Show Cause Notice Issued |
| [1]  |   | (15)  | (16)  | (17) | (18)   | (19)  | (20)       | (21)                | (22)       | [23]                     |
| Kochi (MC)   |   |   |       |      | STP - Ray Flats, Fort Kochi - AMRUT-2.0, 0.105MLD (Dec-26)     |   |            |                     |            |                          |
|  |   |   |       |      | STP - Elamkulam - AMRUT-2.0, 5MLD & Cotreatment 24KLD (Dec-27) |   |            |                     |            |                          |
| Thrippunithura   |   |   |       |      | STP - Ambedkar Colony - AMRUT-1.0, 1.1MLD (July-26)            |   |            |                     |            |                          |
|  |   |   |       |      | FSTP - Brahmapuram - AMRUT-2.0, 1000KLD (Dec-27)               |   |            |                     |            |                          |
| Ernakulam  |   |   |       |      | STP-Elamkulam-KMRL 55 MLD (Dec-30)                             |   |            |                     |            |                          |
|  |   |   |       |      | 105 KLD STP-Ray Flats, Fort Kochi-AMRUT (May-26)               |   |            |                     |            |                          |
|  |   |   |       |      | FSTP - Brahmapuram - AMRUT-2.0, 1000KLD (Dec-27)               |   |            |                     |            |                          |
|  |   |   |       |      |  | 1. STPs - 254.81                                    |            |                     |            |                          |
|  |   |   |       |      |  | 2. FSTPs - 25.50                                    |            |                     |            |                          |

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| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |   |   |             |                            |   |  |                               |                              |                                  |      |
|--|---|------------|---|---|-------------|----------------------------|---|--|-------------------------------|------------------------------|----------------------------------|------|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban)                                | (iv) Details of Treatment of Sewage (District Wise) |             |                            |   |  |                               |                              | (v) Details of disposal (in MLD) |      |
|  |   |            |   | By STP (MLD)  | Type of STP | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) |                              | Wet land                         | Pond |
|  |   |            |   |   |             |                            |   |  | (11) STPs in Establishment    | (12) Individual septic Tanks |                                  |      |
| [1]  | (2)   | (3)        | (3)   | (6)   | (7)         | (8)                        | (9)   | (10)                                       | (11) STPs in Establishment    | (12) Individual septic Tanks | (13)                             | (14) |
| Kottayam   | Thrikkakkar a   | 84012      | 9.08  |   |             |                            |   |  |                               | 9.08                         |                                  |      |
|  | Piravam   | 29586      | 3.2   |   |             |                            |   |  |                               | 3.2                          |                                  |      |
|  | Kothamanga lam  | 42199      | 4.56  |   |             |                            |   |  |                               | 4.56                         |                                  |      |
|  | Maradu  | 48574      | 5.25  |   |             |                            |   |  |                               | 5.25                         |                                  |      |
|  | Muvattupuz ha   | 33028      | 3.57  |   |             |                            |   |  |                               | 3.57                         |                                  |      |
|  | Perumbavoo r  | 30544      | 3.3   |   |             |                            |   |  |                               | 3.3                          |                                  |      |
|  | Eloor   | 39901      | 4.31  |   |             |                            |   |  |                               | 4.31                         |                                  |      |
|  | Aluva   | 24370      | 2.64  |   |             |                            |   |  |                               | 2.64                         |                                  |      |
|  | Paravur   | 34230      | 3.7   |   |             |                            |   |  |                               | 3.7                          |                                  |      |
|  | Angamali  | 36362      | 3.93  |   |             |                            |   |  |                               | 3.93                         |                                  |      |
| Koothattuku lam  | 18747   | 2.03       |   |   |             |                            |   |  | 2.03                          |                              |                                  |      |
| Kalamasseri  | 77187   | 8.34       | (6) 10 KLD STP at Kalamassery, Market, Kalamassery Municipality (PRS) |   |             | Chlorination               | Plant operational. KSPCB Inference-complying              | 0.01                                       |                               | 8.33                         |                                  |      |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |   |       |  |   |                        |   |   |                          |   |
|--|---|---|-------|--|---|------------------------|---|---|--------------------------|---|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Disposal of untreated Sewage (ULB Wise)                           |       |  | (vi) Action Plan to treat untreated sewage (District Wise).                                     | Budget outlay (Cr.)    | (vii) Action Taken against the defaulting authority |   |                          |   |
|  |   | (a) Final Discharge of untreated sewage is let out in its quality | River | Sea  |   |                        | Other water body                                    | EC imposed  | Show Cause Notice Issued | Closure notice issued   |
| [1]  |   | (15)  | (16)  | (17)   | (18)  | (19)                   | (20)  | (21)  | (22)                     | [23]  |
| Elamkulam  | Thrikkakkar a   |   |       |  | FSTP - Brahmapuram - AMRUT-2.0, 1000KLD (Dec-27)  | 37.70<br>3. MTU - 0.45 |   |   |                          | LSG: Notices Issued: 102, Cases Fined: 74, Total Fine Amount in Rs: 259750  |
|  | Piravam   |   |       |  | FSTP - Brahmapuram - AMRUT-2.0, 1000KLD (Dec-27)  |                        | NIL   | NIL   | NIL                      | LSG: Notices Issued: 15, Cases Fined: 23, Total Fine Amount in Rs: 148020   |
|  | Kothamangalam   |   |       |  | FSTP - Brahmapuram - AMRUT-2.0, 1000KLD (Dec-27)  |                        | NIL   | NIL   | NIL                      | LSG: Notices Issued: 35, Cases Fined: 19, Total Fine Amount in Rs: 248010   |
|  | Maradu  |   |       |  | MTU - Maradu Municipality - SBM(U) (Mar-26)<br>FSTP - Brahmapuram - AMRUT-2.0, 1000KLD (Dec-27) |                        |   |   |                          | LSG: Notices Issued: 41, Cases Fined: 37, Total Fine Amount in Rs: 492000   |
|  | Muvattupuzha  |   |       |  | FSTP -Muvattupuzha - 20KLD (Dec-27)   |                        | NIL   | NIL   | NIL                      | LSG: Notices Issued: 88, Cases Fined: 26, Total Fine Amount in Rs: 142500   |
|  | Perumbavoor   |   |       |  | FSTP - Aluva- AMRUT-2.0, 20KLD (Dec-27)   |                        | NIL   | 1   | NIL                      | LSG: Notices Issued: 42, Cases Fined: 39, Total Fine Amount in Rs: 222520   |
|  | Eloor   |   |       |  | FSTP - Aluva- AMRUT-2.0, 20KLD (Dec-27)   |                        | Nil   | Nil   | Nil                      | LSG: Notices Issued: 128, Cases Fined: 134, Total Fine Amount in Rs: 606700 |
|  | Aluva   |   |       |  | FSTP- Vedimara- IMPACT 50 KLD(June-27)  |                        | N IL  | 1(For not operating STP)  | N IL                     | LSG: Notices Issued: 22, Cases Fined: 28, Total Fine Amount in Rs: 509020   |
|  | Paravur   |   |       |  | FSTP- Vedimara- IMPACT 50 KLD(June-27)  |                        | Nil   | Nil   | Nil                      | LSG: Notices Issued: 112, Cases Fined: 104, Total Fine Amount in Rs: 429000 |
|  | Angamali  |   |       |  | FSTP- Vedimara- IMPACT 50 KLD(June-27)  |                        | N IL  | N IL  | N IL                     | LSG: Notices Issued: 60, Cases Fined: 42, Total Fine Amount in Rs: 203540   |
|  | Koothattukulam  |   |       |  | FSTP -Muvattupuzha - 20KLD (Dec-27)   |                        | NIL   | NIL   | NIL                      | LSG: Notices Issued: 31, Cases Fined: 34, Total Fine Amount in Rs: 131000   |
| Kalamasseri  |   |   |       | STP - Elamkulam - AMRUT-2.0, 5MLD & Cotreatment 24KLD (Dec-27) | N IL  | N IL                   | N IL  | LSG: Notices Issued: 74, Cases Fined: 73, Total Fine Amount in Rs: 399500 |                          |   |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |  |  |                          |                            |  |  |                               |                              |                                  |      |
|--|---|------------|--|--|--------------------------|----------------------------|--|--|-------------------------------|------------------------------|----------------------------------|------|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban) | (iv) Details of Treatment of Sewage (District Wise)                  |                          |                            |  |  |                               |                              | (v) Details of disposal (in MLD) |      |
|  |   |            |  | By STP (MLD)   | Type of STP              | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli  | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) |                              | Wet land                         | Pond |
|  |   |            |  |  |                          |                            |  |  | (11) STPs in Establishment    | (12) Individual septic Tanks |                                  |      |
| [1]  | (2)   | (3)        | (3)                                    | (6)  | (7)                      | (8)                        | (9)  | (10)                                       | (11) STPs in Establishment    | (12) Individual septic Tanks | (13)                             | (14) |
| Thrissur   | Thrissur (MC)   | 339657     | 48.92                                  | (1) 0.36 MLD STP at General Hospital, Thrissur (AMRUT-1.0)           | MBBR                     | Chlorination               | Plant operational. KSPCB Inference-complying   | 0.36                                       | 6.981                         | 41.534                       |                                  |      |
|  |   |            |  | (2) 10 KLD FSTP at Mattampuram                                       | Biological               | Chlorination               | pH - 7.25, BOD - 7 mg/l, COD - 44 mg/l, SS - 0.09, Oil & Grease - 0.02 mg/l, Ammoniacal Nitrogen - Nil, Total Nitrogen - 35.37 mg/l, Total Phosphorus - 0.63 mg/l, Faecal Coliform - Nil as per analysis report dated 11.11.2024 (KSPCB Inference-complying) | 0.01                                       |                               |                              |                                  |      |
|  |   |            |  | (3) 35 KLD STP at Kuriachira   | MBBR                     | Chlorination               | pH - 7, BOD - 165.6 mg/l, COD - 524mg/l, SS - 0.63 mg/l, oil & grease - 15.2 as per the analysis report dated 02.09.2024 (KSPCB Inference-Action being taken for corrective measure)   | 0.035                                      |                               |                              |                                  |      |
|  | Chavakkad   | 42031      | 4.54                                   |  |                          |                            |  |  |                               | 4.54                         |                                  |      |
|  | Guruvayoor  | 75264      | 8.13                                   | (4) 3 MLD STP at Chakkamkan dam, Guruvayur with septage co-treatment | Activated Sludge Process | Chlorination               | pH-7.65, BOD-6.4 mg/l, COD -160 mg/l, Suspended solids 1.76 mg/l, Oil and grease- 0.56 mg/l, Faecal coliform- NIL as per Analysis report dated 29.10.2025 (KSPCB Inference-complying)  | 3  |                               | 5.13                         |                                  |      |
|  | Kodungaloor   | 76774      | 8.3                                    |  |                          |                            |  |  |                               | 8.3                          |                                  |      |
|  | Chalakkudi  | 53240      | 5.75                                   |  |                          |                            |  |  |                               | 5.75                         |                                  |      |
|  | Iringalakkuda   | 67223      | 7.27                                   |  |                          |                            |  |  |                               | 7.27                         |                                  |      |
|  | Kunnamkulam   | 58127      | 6.28                                   |  |                          |                            |  |  |                               | 6.28                         |                                  |      |
| Vadakkancheri  | 65943   | 7.13       |  |  |                          |                            |  |  | 7.13                          |                              |                                  |      |
| Palakkad   | 145655  | 20.98      | -                                      | -  | -                        | -                          | -  |  | 4.204                         | 16.776                       |                                  |      |
| Shornur  | 48420   | 5.23       |  |  |                          |                            |  |  |                               | 5.23                         |                                  |      |
| Ottappalam   | 59831   | 6.47       |  |  |                          |                            |  |  |                               | 6.47                         |                                  |      |

| Daily Liquid Waste (Sewage) generation & treatment details:- |  |  |       |      |  |  |            |                        |               |   |
|--|--|--|-------|------|--|--|------------|------------------------|---------------|---|
| (i)<br>Names<br>of<br>Distric<br>ts                          | (ii) Sewage<br>Generation<br>District Wise<br>with<br>Population<br>(2026) | (iii) Disposal of untreated Sewage<br>(LD) (ULB Wise)                      |       |      | (vi) Action Plan to treat untreated sewage (District<br>Wise).   | (vii)<br>Action Taken against the defaulting authority |            |                        |               |   |
|  |  | (a) Final<br>Discharge of untreated<br>sewage<br>is let out in its quality | River | Sea  |  | Other water<br>body                                    | Time lines | Budget<br>outlay (Cr.) | EC<br>imposed | Show Cause<br>Notice Issued   |
| [1]  |  | (15)   | (16)  | (17) | (18)   | (19)   | (20)       | (21)                   | (22)          | [23]  |
| Thriss<br>ur   | Thrissur<br>(MC)   |  |       |      | FSTP - Ramavarmapuram -<br>AMRUT-1.0,<br>100KLD(June-27)<br>FSTP at erumappetty-SBM(G)<br>20 KLD(DEC-27)   | 1. STPs -<br>144.03<br>2. FSTPs -<br>17.1              |            |                        |               | LSG:<br>Notices Issued: 1079,<br>Cases Fined: 796,<br>Total Fine Amount in<br>Rs: 2385755 |
|  | Chavakkad  |  |       |      | MTU - Chavakkad municipality -<br>SBM(U) Operational   |  |            |                        |               | LSG:<br>Notices Issued: 48,<br>Cases Fined: 20,<br>Total Fine Amount in<br>Rs: 189500     |
|  | Guruvayoor   |  |       |      | FSTP at erumappetty-SBM(G)<br>50 KLD(DEC-27)<br>20 KLD Cotreatment at<br>Chakkamkandam (DEC-27))           |  |            |                        |               | LSG:<br>Notices Issued: 75,<br>Cases Fined: 47,<br>Total Fine Amount in<br>Rs: 306690     |
|  | Kodungaloo<br>r  |  |       |      | MTU - Kodungalloor Municipality (LSG)<br>- Operational   |  |            |                        |               | LSG:<br>Notices Issued: 88,<br>Cases Fined: 73,<br>Total Fine Amount in<br>Rs: 286000     |
|  | Chalakkudi   |  |       |      | MTU - Chalakkudy Municipality (LSG) -<br>Operational<br>FSTP-Gandhigram hospital<br>20 KLD(Dec-27)         |  |            |                        |               | LSG:<br>Notices Issued: 107,<br>Cases Fined: 53,<br>Total Fine Amount in<br>Rs: 186250    |
|  | Iringalakku<br>da  |  |       |      | FSTP-Wadakkancherry-SBM(U)<br>40 KLD(DEC-27)   |  |            |                        |               | LSG:<br>Notices Issued: 218,<br>Cases Fined: 132,<br>Total Fine Amount in<br>Rs: 595010   |
|  | Kunnamkul<br>am  |  |       |      | MTU - Kunnamkulam municipality -<br>SBM(U) Delivered on June<br>2025<br>FSTP-Erumapetty-<br>KLD(Dec-27) 20 |  |            |                        |               | LSG:<br>Notices Issued: 160,<br>Cases Fined: 98,<br>Total Fine Amount in<br>Rs: 370250    |
|  | Vadakkanch<br>eri  |  |       |      | FSTP-Wadakkancherry-SBM(U)<br>40 KLD(DEC-27)   |  |            |                        |               | LSG:<br>Notices Issued: 112,<br>Cases Fined: 46,<br>Total Fine Amount in<br>Rs: 169240    |
|  | Palakkad   |  |       |      | FSTP - Yakkara - AMRUT-1.0,<br>100KLD (Mar-26)   | 1. STPs -<br>25.91<br>2. FSTPs -<br>3.859              |            |                        |               | LSG:<br>Notices Issued: 392,<br>Cases Fined: 385,<br>Total Fine Amount in<br>Rs: 1158980  |
|  | Shornur  |  |       |      | FSTP - Shornur - IMPACT<br>50KLD (Dec-27)  |  |            |                        |               | LSG:<br>Notices Issued: 72,<br>Cases Fined: 68,<br>Total Fine Amount in<br>Rs: 206510     |
|  | Ottappalam   |  |       |      | STP - Ottapalam - IMPACT<br>1.5 MLD (Aug - 26)<br>FSTP - Shornur - IMPACT<br>50KLD (Dec-27)                |  |            |                        |               | LSG:<br>Notices Issued: 95,<br>Cases Fined: 66,<br>Total Fine Amount in<br>Rs: 248000     |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |  |   |             |                            |   |  |                               |          |                                  |                                 |
|--|---|------------|--|---|-------------|----------------------------|---|--|-------------------------------|----------|----------------------------------|---------------------------------|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban) | (iv) Details of Treatment of Sewage (District Wise) |             |                            |   |  |                               |          | (v) Details of disposal (in MLD) |                                 |
|  |   |            |  | By STP (MLD)  | Type of STP | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli   | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) | Wet land | Pond                             |                                 |
|  |   |            |  |   |             |                            |   |  |                               |          |                                  | Destination of (b) If (a) above |
| [1]  | (2)   | (3)        | (6)                                    | (7)   | (8)         | (9)                        | (10)  | (11) STPs in Establishment                 | (12) Individual septic Tanks  | (13)     | (14)                             |                                 |
| Palakkad   | Chittur-Thamangalam   | 35924      | 3.88                                   |   |             |                            |   |  |                               | 3.88     |                                  |                                 |
|  | Pattambi  | 31846      | 3.44                                   |   |             |                            |   |  |                               | 3.44     |                                  |                                 |
|  | Cherpulasseri   | 38817      | 4.2                                    |   |             |                            |   |  |                               | 4.2      |                                  |                                 |
|  | Mannarcadu  | 31830      | 3.44                                   |   |             |                            |   |  |                               | 3.44     |                                  |                                 |
| Malappuram   | Malappuram  | 82324      | 8.9                                    | (1) 30 KLD STP at Municipal Bus stand               | MBBR        | Chlorination               | KSPCB Inference- Plant Proposal for maintenancework have been approved. ICE issued to the unit vide consent.  | 0.03                                       | 4.534                         | 4.336    |                                  |                                 |
|  | Thirur  | 67740      | 7.32                                   | (2) 50KLD STP at Municipal Bus Stand, Tirur         | Biological  | Chlorination               | pH - 6.6, BOD - 12.4 mg/l, COD - 48 mg/l, TSS - 24 mg/l, Oil and grease - BDL as per the analysis report on 12.08.2024 (KSPCB Inference- Action is being taken for preventing its exceedance.)            | 0.05                                       |                               | 7.225    |                                  |                                 |
|  |   |            |  | 3) Tirur Fish Market (45KLD)                        | Biological  | Chlorination               | KSPCB Inference- Ph- 6.3, BOD - 103 mg/l, COD - 330 mg/l, TSS - 64 mg/l, Oil & Grease - BDL as per analysis report dated 22.10.24 (KSPCB Inference- Action is being taken for preventing its exceedance.) | 0.045                                      |                               |          |                                  |                                 |
|  | Perinthalmanna  | 60085      | 6.49                                   |   |             |                            |   |  |                               | 6.49     |                                  |                                 |
|  | Ponnani   | 109349     | 15.75                                  |   |             |                            |   |  |                               | 15.75    |                                  |                                 |
|  | Kottakkal   | 53631      | 5.8                                    |   |             |                            |   |  |                               | 5.8      |                                  |                                 |
|  | Manjeri   | 117337     | 16.9                                   |   |             |                            |   |  |                               | 16.9     |                                  |                                 |
|  | Nilambur  | 56003      | 6.05                                   |   |             |                            |   |  |                               | 6.05     |                                  |                                 |
|  | Valancheri  | 48720      | 5.27                                   |   |             |                            |   |  |                               | 5.27     |                                  |                                 |
|  | Thanur  | 84431      | 9.12                                   |   |             |                            |   |  |                               | 9.12     |                                  |                                 |
| Thirurangadi   | 68434   | 7.4        |  |   |             |                            |   |  | 7.4                           |          |                                  |                                 |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |   |       |      |   |   |            |                     |            |   |
|--|---|---|-------|------|---|---|------------|---------------------|------------|---|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Disposal of untreated Sewage (ULB Wise)                           |       |      | (vi) Action Plan to treat untreated sewage (District Wise). | (vii) Action Taken against the defaulting authority |            |                     |            |   |
|  |   | (a) Final Discharge of untreated sewage is let out in its quality | River | Sea  |   | Other water body                                    | Time lines | Budget outlay (Cr.) | EC imposed | Show Cause Notice Issued  |
| [1]  |   | (15)  | (16)  | (17) | (18)  | (19)  | (20)       | (21)                | (22)       | [23]  |
| Palakkad   | Chittur-Thathamangalam                                      |   |       |      | FSTP-Chittur - Thathamangalam-IMPACT 20 KLD(Dec-27)         |   |            |                     |            | LSG: Notices Issued: 44, Cases Fined: 23, Total Fine Amount in Rs: 72070    |
|  | Pattambi  |   |       |      | STP - Pattambi -SBM(U) 10 KLD (Dec-27) (CoT)                |   |            |                     |            | LSG: Notices Issued: 107, Cases Fined: 109, Total Fine Amount in Rs: 245070 |
|  | Cherpulasserri  |   |       |      | FSTP - Shornur - IMPACT 50KLD (Dec-27)                      |   |            |                     |            | LSG: Notices Issued: 16, Cases Fined: 0, Total Fine Amount in Rs: 0         |
|  | Mannarcadu  |   |       |      | FSTP - Perinthalmanna - SBM(U) 100KLD (Dec-27)              |   |            |                     |            | LSG: Notices Issued: 94, Cases Fined: 73, Total Fine Amount in Rs: 185225   |
| Malappuram   | Malappuram  |   |       |      | FSTP - Valancheri- SBM(U) 70KLD (Mar-27)                    | 1. FSTPs - 8.455                                    |            |                     |            | LSG: Notices Issued: 124, Cases Fined: 41, Total Fine Amount in Rs: 154140  |
|  | Thirur  |   |       |      | FSTP - Tirur Ground- SBM(U) 100KLD (Dec-27)                 |   |            |                     |            | LSG: Notices Issued: 47, Cases Fined: 28, Total Fine Amount in Rs: 66000    |
|  | Perinthalmanna  |   |       |      | FSTP - Perinthalmanna - SBM(U) 100KLD (Dec-27)              |   |            |                     |            | LSG: Notices Issued: 88, Cases Fined: 26, Total Fine Amount in Rs: 98510    |
|  | Ponnani   |   |       |      | FSTP - Tirur Ground- SBM(U) 100KLD (Dec-27)                 |   |            |                     |            | LSG: Notices Issued: 68, Cases Fined: 5, Total Fine Amount in Rs: 36000     |
|  | Kottakkal   |   |       |      | FSTP - Valancheri- SBM(U) 70KLD (Mar-27)                    |   |            |                     |            | LSG: Notices Issued: 145, Cases Fined: 111, Total Fine Amount in Rs: 544520 |
|  | Manjeri   |   |       |      | FSTP - Valancheri- SBM(U) 70KLD (Mar-27)                    |   |            |                     |            | LSG: Notices Issued: 118, Cases Fined: 68, Total Fine Amount in Rs: 189000  |
|  | Nilambur  |   |       |      | FSTP - Valancheri- SBM(U) 70KLD (Mar-27)                    |   |            |                     |            | LSG: Notices Issued: 242, Cases Fined: 68, Total Fine Amount in Rs: 216630  |
|  | Valancheri  |   |       |      | FSTP - Valancheri- SBM(U) 70KLD (Mar-27)                    |   |            |                     |            | LSG: Notices Issued: 137, Cases Fined: 59, Total Fine Amount in Rs: 177690  |
|  | Thanur  |   |       |      | FSTP - Valancheri- SBM(U) 70KLD (Mar-27)                    |   |            |                     |            | LSG: Notices Issued: 30, Cases Fined: 8, Total Fine Amount in Rs: 25510     |
|  | Thirurangadi  |   |       |      | FSTP - Tirur Ground- SBM(U) 100KLD (Dec-27)                 |   |            |                     |            | LSG: Notices Issued: 79, Cases Fined: 56, Total Fine Amount in Rs: 181770   |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |  |   |                    |                            |  |  |                               |                                 |                                  |      |
|--|---|------------|--|---|--------------------|----------------------------|--|--|-------------------------------|---------------------------------|----------------------------------|------|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban) | (iv) Details of Treatment of Sewage (District Wise) |                    |                            |  |  |                               |                                 | (v) Details of disposal (in MLD) |      |
|  |   |            |  | By STP (MLD)  | Type of STP        | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli  | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) | Destination of (b) If (a) above |                                  |      |
|  |   |            |  |   |                    |                            |  |  |                               | Wet land                        | Pond                             |      |
| [1]  | (2)   | (3)        | (3)                                    | (6)   | (7)                | (8)                        | (9)  | (10)                                       | (11) STPs in Establishment    | (12) Individual septic Tanks    | (13)                             | (14) |
|  | Kondotti  | 71605      | 7.74                                   |   |                    |                            |  |  |                               | 7.74                            |                                  |      |
|  | Parappanagadi   | 85679      | 9.26                                   |   |                    |                            |  |  |                               | 9.26                            |                                  |      |
| Kozhikode  | Kozhikodu (MC)  | 675391     | 97.26                                  | (1) 2 MLD (AMRUT-1.0)                               | Electrocoagulation | Chlorination               | pH -7, TSS- BDL, Total Residual Chlorine - Nil, COD- 40 mg/l, Oil and GreaseBDL, BOD-6.27 mg/l, Ammoniacal - N 208.711 mg/l andFecal Coliform - 1200 cfu/100ml According to analysis report on 01.12.2025 (KSPCB Inference-complying)      | 2.1  | 15.546                        | 76.014                          |                                  |      |
|  |   |            |  | (2) 1 MLD (AMRUT-1.0)                               | Electrocoagulation | Chlorination               | pH -7.5, TSSBDL, Total Residual Chlorine -Nil, COD- 120 mg/l, Oil andGrease- BDL, BOD-48.67 mg/l, Ammoniacal - N 224.139 mg/l andFecal Coliform - 2000 cfu/100ml According to analysis report on 01.12.2025 (KSPCB Inference-complying)    | 1  |                               |                                 |                                  |      |
|  |   |            |  | (3) 0.5 MLD STP at Medical College                  |                    | Chlorination               | pH -10, TotalResidual Chlorine - 20.9 mg/l,TSS- BDL, COD- 40 mg/l, Oil and Grease- BDL , BOD-7.27 mg/l, Ammoniacal - N 3.3016 mg/l and Nitrate - N-0.789 mg/l According to analysis report on 10.11.2025 (KSPCB Inference-complying)       | 0.5  |                               |                                 |                                  |      |
|  |   |            |  | 4) CSTP at Narayananagaram 100 KLD                  |                    | Chlorination               | pH -9, COD- 48 mg/l, BOD-0.67 mg/l, Chloride - 30 mg/l , Suspended Solids - BDL According to analysis report on 27.06.2025 KSPCB Inference-Complying   | 0.1  |                               |                                 |                                  |      |
|  |   |            |  | (5) 2MLD STP at Medical College                     |                    | Chlorination               | pH -7, TSS-32.5mg/l, Total Residual Chlorine -Nil, COD- 272 mg/l, Oil andGrease- BDL, BOD-35.87 mg/l,Ammoniacal - N 139.808 mg/l andFecal Coliform - 1300 cfu/100ml According to analysis report on 01.12.2025 (KSPCB Inference-complying) | 2  |                               |                                 |                                  |      |
|  | Koilandy  | 79774      | 8.62                                   |   |                    |                            |  |  |                               | 8.62                            |                                  |      |
|  | Koduvalli   | 54039      | 5.84                                   |   |                    |                            |  |  |                               | 5.84                            |                                  |      |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |   |       |      |  |   |            |                     |  |   |
|--|---|---|-------|------|--|---|------------|---------------------|--|---|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Disposal of untreated Sewage (LD) (ULB Wise)                      |       |      | (vi) Action Plan to treat untreated sewage (District Wise).  | (vii) Action Taken against the defaulting authority |            |                     |  |   |
|  |   | (a) Final Discharge of untreated sewage is let out in its quality | River | Sea  |  | Other water body                                    | Time lines | Budget outlay (Cr.) | EC imposed   | Show Cause Notice Issued  |
| [1]  |   | (15)  | (16)  | (17) | (18)   | (19)  | (20)       | (21)                | (22)   | [23]  |
|  | Kondotti  |   |       |      | MTU - Kondotty ulb - SBM(U) (March-26 )<br>FSTP - Tirur Ground- SBM(U) 100KLD (Dec-27)   |   |            |                     |  | LSG:<br>Notices Issued: 96,<br>Cases Fined: 23,<br>Total Fine Amount in Rs: 199280    |
|  | Parappanagadi   |   |       |      | FSTP - Tirur Ground- SBM(U) 100KLD (Dec-27)  |   |            |                     |  | LSG:<br>Notices Issued: 53,<br>Cases Fined: 33,<br>Total Fine Amount in Rs: 140500    |
| Kozhikode  | Kozhikodu (MC)  |   |       |      | STP - Sarovaram - AMRUT-2.0, 27MLD & Cotreatment 220KLD (Dec-27)<br>STP - West Hill Industrial Estate - AMRUT-1.0, 15 MLD (Dec-27) | 1. STPs - 322.45                                    |            |                     | Authorizati on Refusal intention notice dated 27/05/2025(Authorization under solid waste management rules,2016 ) | LSG:<br>Notices Issued: 948,<br>Cases Fined: 506,<br>Total Fine Amount in Rs: 1388510 |
|  | Koilandy  |   |       |      | 2MLD STP Medical college 100 KLD (Co -Treatment), Operational  |   |            |                     |  | LSG:<br>Notices Issued: 33,<br>Cases Fined: 21,<br>Total Fine Amount in Rs: 91500     |
|  | Koduvalli   |   |       |      | STP - Sarovaram - AMRUT-2.0, 27MLD & Cotreatment 220KLD (Dec-27)<br>2MLD STP Medical college 100 KLD (Co -Treatment), Operational  |   |            |                     |  | LSG:<br>Notices Issued: 35,<br>Cases Fined: 14,<br>Total Fine Amount in Rs: 66040     |

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| Daily Liquid Waste (Sewage) generation & treatment details:- |   |            |  |   |             |                            |  |  |                               |                              |                                  |      |
|--|---|------------|--|---|-------------|----------------------------|--|--|-------------------------------|------------------------------|----------------------------------|------|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population | (iii) Sewage Generation in MLD (Urban) | (iv) Details of Treatment of Sewage (District Wise) |             |                            |  |  |                               |                              | (v) Details of disposal (in MLD) |      |
|  |   |            |  | By STP (MLD)  | Type of STP | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli  | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) |                              | Wet land                         | Pond |
|  |   |            |  |   |             |                            |  |  | (11) STPs in Establishment    | (12) Individual septic Tanks |                                  |      |
| [1]  | (2)   | (3)        | (3)                                    | (6)   | (7)         | (8)                        | (9)  | (10)                                       | (11) STPs in Establishment    | (12) Individual septic Tanks | (13)                             | (14) |
| Wayanad  | Vadakara  | 83572      | 9.03                                   |   |             |                            |  |  |                               | 9.03                         |                                  |      |
|  | Farok   | 60018      | 6.49                                   |   |             |                            |  |  |                               | 6.49                         |                                  |      |
|  | Ramanattukara   | 39888      | 4.31                                   |   |             |                            |  |  |                               | 4.31                         |                                  |      |
|  | Mukkom  | 45141      | 4.88                                   |   |             |                            |  |  |                               | 4.88                         |                                  |      |
|  | Payyoli   | 54908      | 5.94                                   |   |             |                            |  |  |                               | 5.94                         |                                  |      |
| Wayanad  | Kalpatta  | 33838      | 3.66                                   | (1) 10KLD FSTP at Kalpatta                          | Biological  | Chlorination               | pH - 7.49, TSS - 8.2 mg/l, BOD - 7.58 mg/l, Oil and Grease - 6.32 mg/l as per the analysis report dated 31.05.2025 (KSPCB Inference-complying)             |  |                               | 3.66                         |                                  |      |
|  | Sultan Betheri  | 48664      | 5.26                                   |   |             |                            |  |  | 2.826                         | 2.434                        |                                  |      |
|  | Mananthavadi  | 51403      | 5.56                                   |   |             |                            |  |  |                               | 5.56                         |                                  |      |
| Kannur   | Kannur (MC)   | 292879     | 42.18                                  | 1 MLD at Padannapalam (AMRUT-1.0)                   | RMBR        | Chlorination               | pH - 7.48, TSS - 19 mg/l, BOD - 16 mg/l, COD - 30.2 mg/l; Oil and Grease - 0.44 mg/l as per the analysis report dated 17.10.2025 KSPCB Inference-complying | 0.1  | 5.475                         | 36.605                       | -                                | -    |
|  | Thaliparambu  | 47424      | 5.13                                   | Taliparamba Municipality (0.5 MLD)                  | MBBR        | Chlorination               | pH - 6.52, TSS - 33 mg/l, COD - 8 mg/l, BOD - 4 mg/l, Oil and Grease - 0.1 mg/l as per the analysis report dated 17.10.2025 (KSPCB Inference-complying)    | 0.5  |                               | 4.63                         |                                  |      |
|  | Thalasseri  | 99203      | 10.72                                  |   |             |                            |  |  |                               | 10.72                        |                                  |      |
|  | Koothuparambu   | 31746      | 3.43                                   |   |             |                            |  |  |                               | 3.43                         |                                  |      |
|  | Mattannur   | 50458      | 5.45                                   |   |             |                            |  |  |                               | 5.45                         |                                  |      |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |   |       |      |   |  |            |   |            |   |
|--|---|---|-------|------|---|--|------------|---|------------|---|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Disposal of untreated Sewage (ULB Wise)                           |       |      | (vi) Action Plan to treat untreated sewage (District Wise).   | (vii) Action Taken against the defaulting authority    |            |   |            |   |
|  |   | (a) Final Discharge of untreated sewage is let out in its quality | River | Sea  |   | Other water body                                       | Time lines | Budget outlay (Cr.)   | EC imposed | Show Cause Notice Issued  |
| [1]  |   | (15)  | (16)  | (17) | (18)  | (19)   | (20)       | (21)  | (22)       | [23]  |
|  | Vadakara  |   |       |      | STP - Sarovaram - AMRUT-2.0, 27MLD & Cotreatment 220KLD (Dec-27)  |  |            |   |            | LSG: Notices Issued: 83, Cases Fined: 76, Total Fine Amount in Rs: 204800   |
|  | Farok   |   |       |      | STP - Sarovaram - AMRUT-2.0, 27MLD & Cotreatment 220KLD (Dec-27)  |  |            |   |            | LSG: Notices Issued: 127, Cases Fined: 25, Total Fine Amount in Rs: 119500  |
|  | Ramanattukara   |   |       |      | STP - Sarovaram - AMRUT-2.0, 27MLD & Cotreatment 220KLD (Dec-27)  |  |            |   |            | LSG: Notices Issued: 62, Cases Fined: 33, Total Fine Amount in Rs: 284060   |
|  | Mukkom  |   |       |      | STP - Sarovaram - AMRUT-2.0, 27MLD & Cotreatment 220KLD (Dec-27)  |  |            |   |            | LSG: Notices Issued: 72, Cases Fined: 35, Total Fine Amount in Rs: 102000   |
|  | Payyoli   |   |       |      | STP - Sarovaram - AMRUT-2.0, 27MLD & Cotreatment 220KLD (Dec-27)  |  |            |   |            | LSG: Notices Issued: 55, Cases Fined: 48, Total Fine Amount in Rs: 119500   |
| Wayanad  | Kalpatta  |   |       |      | FSTP- Kalpetta- SBM(U) Operational 10 KLD   | 1. FSTPs - 5   |            |   |            | LSG: Notices Issued: 67, Cases Fined: 31, Total Fine Amount in Rs: 201000   |
|  | Sultan Betheri  |   |       |      | FSTP - Aarattupura- Ambalavayal - SBM(G) 30KLD (Dec-27)   |  |            |   |            | LSG: Notices Issued: 97, Cases Fined: 49, Total Fine Amount in Rs: 242510   |
|  | Mananthavadi  |   |       |      | FSTP- Kalpetta- SBM(U) Operational 10 KLD   |  |            |   |            | LSG: Notices Issued: 70, Cases Fined: 39, Total Fine Amount in Rs: 177520   |
| Kannur   | Kannur (MC)   | -   | -     | -    | STP - Maithanapally - AMRUT-2.0, 5MLD Cotreatment & 130KLD (Dec-27)<br>FSTP - Chelora - AMRUT-1.0, 100KLD (March-26)<br>FSTP- kannur oushadhi 100 KLD(Dec-27) | 1. STPs - 143.21<br>2. FSTPs - 19.197<br>3. MTU - 0.45 | Nil        | SCN issued to CSTP on 18/11/25 for not operating properly. Rectified defects and replied on 3/12/25 | Nil        | LSG: Notices Issued: 530, Cases Fined: 256, Total Fine Amount in Rs: 884510 |
|  | Thaliparambu  |   |       |      | FSTP-Panoor-SBM(R) 50 KLD(Jun-27)   |  | Nil        | SCN issued on 25/11/25  | Nil        | LSG: Notices Issued: 81, Cases Fined: 30, Total Fine Amount in Rs: 271500   |
|  | Thalasseri  |   |       |      | STP - Maithanapally - AMRUT-2.0, 5MLD Cotreatment & 130KLD (Dec-27)   |  | Nil        | Nil   | Nil        | LSG: Notices Issued: 97, Cases Fined: 44, Total Fine Amount in Rs: 206000   |
|  | Koothuparambu   |   |       |      | FSTP-Panoor-SBM(R) 50 KLD(Jun-27)   |  | Nil        | Nil   | Nil        | LSG: Notices Issued: 109, Cases Fined: 56, Total Fine Amount in Rs: 176750  |
|  | Mattannur   |   |       |      | FSTP - Chelora - AMRUT-1.0, 100KLD (Mar-26)   |  | Nil        | Nil   | Nil        | LSG: Notices Issued: 96, Cases Fined: 76, Total Fine Amount in Rs: 411250   |

| Daily Liquid Waste (Sewage) generation & treatment details:- |   |                |  |   |             |                            |   |  |                               |                              |                                  |      |
|--|---|----------------|--|---|-------------|----------------------------|---|--|-------------------------------|------------------------------|----------------------------------|------|
| (i) Names of Districts                                       | (ii) Sewage Generation District Wise with Population (2026) | Population     | (iii) Sewage Generation in MLD (Urban) | (iv) Details of Treatment of Sewage (District Wise) |             |                            |   |  |                               |                              | (v) Details of disposal (in MLD) |      |
|  |   |                |  | By STP (MLD)  | Type of STP | Disinfection method in STP | Discharge Water Quality from STP including Fecal & E-Coli | Final discharge of Treated STP Water (MLD) | Other mode of Treatment (MLD) |                              | Wet land                         | Pond |
|  |   |                |  |   |             |                            |   |  | (11) STPs in Establishment    | (12) Individual septic Tanks |                                  |      |
| [1]  | (2)   | (3)            | (6)                                    | (7)   | (8)         | (9)                        | (10)  | (11) STPs in Establishment                 | (12) Individual septic Tanks  | (13)                         | (14)                             |      |
| Payyannur  | Payyannur   | 77288          | 8.35                                   |   |             |                            |   |  |                               | 8.35                         |                                  |      |
|  | Panur   | 18690          | 2.02                                   |   |             |                            |   |  |                               | 2.02                         |                                  |      |
|  | Iritti  | 43267          | 4.68                                   |   |             |                            |   |  |                               | 4.68                         |                                  |      |
|  | Srikandapuram   | 35893          | 3.88                                   |   |             |                            |   |  |                               | 3.88                         |                                  |      |
|  | Anthur  | 30321          | 3.28                                   |   |             |                            |   |  |                               | 3.28                         |                                  |      |
| Kasaragod  | Neeleswaram   | 44977          | 4.86                                   |   |             |                            |   |  |                               | 4.86                         |                                  |      |
|  | Kanjangadu  | 82981          | 8.97                                   |   |             |                            |   |  |                               | 8.97                         |                                  |      |
|  | Kasaragod   | 61292          | 6.62                                   |   |             |                            |   | 1.435                                      | 5.185                         |                              |                                  |      |
| <b>Total</b>   |   | <b>8167695</b> | <b>1032</b>                            |   |             |                            |   |  |                               |                              |                                  |      |

| Daily Liquid Waste (Sewage) generation & treatment details:- |  |  |       |      |  |  |            |                        |               |  |
|--|--|--|-------|------|--|--|------------|------------------------|---------------|--|
| (i)<br>Names<br>of<br>Distric<br>ts                          | (ii) Sewage<br>Generation<br>District Wise<br>with<br>Population<br>(2026) | (iii) Disposal of untreated Sewage<br>(LD) (ULB Wise)                      |       |      | (vi) Action Plan to treat untreated sewage (District<br>Wise).                                     | (vii)<br>Action Taken against the defaulting authority |            |                        |               |  |
|  |  | (a) Final<br>Discharge of untreated<br>sewage<br>is let out in its quality | River | Sea  |  | Other water<br>body                                    | Time lines | Budget<br>outlay (Cr.) | EC<br>imposed | Show Cause<br>Notice Issued  |
| [1]  |  | (15)   | (16)  | (17) | (18)   | (19)   | (20)       | (21)                   | (22)          | [23]   |
|  | Payyannur  |  |       |      | FSTP- kannur oushadhi<br>100 KLD(Dec-27)   |  | Nil        | Nil                    | Nil           | LSG:<br>Notices Issued: 63,<br>Cases Fined: 65,<br>Total Fine Amount in<br>Rs: 439020  |
|  | Panur  |  |       |      | FSTP-Panoor-SBM(R)<br>50 KLD(Jun-27)   |  | Nil        | v                      | Nil           | LSG:<br>Notices Issued: 59,<br>Cases Fined: 26,<br>Total Fine Amount in<br>Rs: 132050  |
|  | Iritti   |  |       |      | MTU - Iritty Municipality - SBM(U)<br>(March-26)<br>FSTP - Chelora - AMRUT-1.0,<br>100KLD (Mar-26) |  | Nil        | Nil                    | Nil           | LSG:<br>Notices Issued: 107,<br>Cases Fined: 87,<br>Total Fine Amount in<br>Rs: 243250 |
|  | Srikandapur<br>am  |  |       |      | STP - Maithanapally - AMRUT-2.0,<br>5MLD Cotreatment & 130KLD (Dec-27)                             |  | Nil        | Nil                    | Nil           | LSG:<br>Notices Issued: 88,<br>Cases Fined: 45,<br>Total Fine Amount in<br>Rs: 127500  |
|  | Anthur   |  |       |      | STP - Maithanapally - AMRUT-2.0,<br>5MLD Cotreatment & 130KLD (Dec-27)                             |  | Nil        | Nil                    | Nil           | LSG:<br>Notices Issued: 53,<br>Cases Fined: 37,<br>Total Fine Amount in<br>Rs: 199000  |
| Kasar<br>agod  | Neeleswara<br>m  |  |       |      | FSTP - Mangalpady- SBM(G)<br>50KLD (Dec-26)<br>FSTP - Manjeswaram- SBM(G)<br>40KLD (Dec-27)        | 1. FSTPs -<br>18.1                                     | Nil        | Nil                    | Nil           | LSG:<br>Notices Issued: 81,<br>Cases Fined: 56,<br>Total Fine Amount in<br>Rs: 207002  |
|  | Kanjangadu   |  |       |      | FSTP - Mangalpady- SBM(G)<br>50KLD (Dec-26)  |  | Nil        | Nil                    | Nil           | LSG:<br>Notices Issued: 60,<br>Cases Fined: 34,<br>Total Fine Amount in<br>Rs: 202500  |
|  | Kasaragod  |  |       |      | FSTP - Manjeswaram- SBM(G)<br>40KLD (Dec-27)   |  | Nil        | Nil                    | Nil           | LSG:<br>Notices Issued: 77,<br>Cases Fined: 43,<br>Total Fine Amount in<br>Rs: 221000  |
| <b>Total</b>   |  |  |       |      |  |  |            |                        |               |  |



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**TEST REPORT**

ULR NO: TC143072500000953F

Page 1 of 2

Report No: AARC/TR/2025/0900

Date of sampling: 23.12.2025

Sample Code: AARC/W/12/25/0900

Date of sample receipt: 23.12.2025

Analysis started on: 23.12.2025

Report date: 27.12.2025

Analysis completed on: 27.12.2025

Name and address of customer: The Secretary,

Vellangallur Block Panchayath,

Thrissur-680662.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 45 Y4269

Sample description: Clear

Sampled quantity: 2.25 L

Sample condition: Fit for analysis

Sample submitted by: Customer

Sampling location: NA

Sampling procedure: NA

Temperature of sample :29.7°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                                 | METHOD OF ANALYSIS          | RESULTS  |
|--------|--|-----------------------------|----------|
| 1      | pH @ 25°C                                  | IS 3025(Part 11):2022       | 6.98     |
| 2      | Total suspended solids                     | IS 3025(Part 17):2022       | BDL      |
| 3      | Biochemical oxygen demand<br>3 days @ 27°C | IS 3025(Part 44):2023       | 5.2 mg/L |
| 4      | Chemical oxygen demand                     | IS 3025(Part 58):2023       | 14 mg/L  |
| 5      | Oil & grease                               | IS 3025(Part 39):2021       | BDL      |
| 6      | Phosphorous as P                           | IS 3025(Part 31/sec-1):2022 | BDL      |

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For **Axiom Analytical and Research Centre LLP**  
JAYAKALA S

QUALITY MANAGER

Authorized Signatory

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**TEST REPORT**

ULR NO: TC143072500000953F

Page 2 of 2

Report No: AARC/TR/2025/0900

Date of sampling: 23.12.2025

Sample Code: AARC/W/12/25/0900

Date of sample receipt: 23.12.2025

Analysis started on: 23.12.2025

Report date: 27.12.2025

Analysis completed on: 25.12.2025

Name and address of customer: The Secretary,

Vellangallur Block Panchayath,

Thrissur-680662.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 45 Y4269

Sample description: Clear

Sampled quantity: 250 ml

Sample condition: Fit for analysis

Sample submitted by: Customer

Sampling location: NA

Sampling procedure: NA

Temperature of sample :29.7°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

END OF REPORT

Secretary  
Block Panchayath  
Vellangallur

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CHINJU A SA  
Sr. Microbiolo

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**TEST REPORT**

**ULR NO: TC143072500000952F**

Page 1 of 2

Report No: AARC/TR/2025/0899  
Sample Code: AARC/W/12/25/0899  
Analysis started on: 23.12.2025  
Analysis completed on: 27.12.2025

Date of sampling: 23.12.2025  
Date of sample receipt: 23.12.2025  
Report date: 27.12.2025

Name and address of customer: The Secretary,  
Kodungallur Municipality,  
Thrissur-680664.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 47 M 0631  
Sample description: Clear  
Sampled quantity: 2.25 L  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.8°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                              | METHOD OF ANALYSIS          | RESULTS  |
|--------|---|-----------------------------|----------|
| 1      | pH @ 25°C                               | IS 3025(Part 11):2022       | 6.59     |
| 2      | Total suspended solids                  | IS 3025(Part 17):2022       | BDL      |
| 3      | Biochemical oxygen demand 3 days @ 27°C | IS 3025(Part 44):2023       | 3.6 mg/L |
| 4      | Chemical oxygen demand                  | IS 3025(Part 58):2023       | 16 mg/L  |
| 5      | Oil & grease                            | IS 3025(Part 39):2021       | BDL      |
| 6      | Phosphorous as P                        | IS 3025(Part 31/sec-1):2022 | BDL      |

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**ULR NO: TC143072500000952F**

Page 2 of 2

Report No: AARC/TR/2025/0899  
Sample Code: AARC/W/12/25/0899  
Analysis started on: 23.12.2025  
Analysis completed on: 25.12.2025

Date of sampling: 23.12.2025  
Date of sample receipt: 23.12.2025  
Report date: 27.12.2025

Name and address of customer: The Secretary,  
Kodungallur Municipality,  
Thrissur-680664.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 47 M 0631  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.8°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

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**TEST REPORT**

ULR NO: TC143072500000947F

Page 1 of 2

Report No: AARC/TR/2025/0892  
Sample Code: AARC/W/12/25/0892 Analysis started on: 08.11.2025  
Analysis completed on: 25.11.2025  
Name and address of customer: The Secretary,  
Chalakkudy Municipality,  
Thrissur-680307.

Date of sampling: 07.11.2025  
Date of sample receipt: 07.11.2025  
Report date: 26.11.2025

Sample name: Treated FSTP water -Mobile treatment unit water-KL 64 M 3021  
Sample description: Clear  
Sampled quantity: 2.25 L  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :30.1°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                              | METHOD OF ANALYSIS          | RESULTS  |
|--------|---|-----------------------------|----------|
| 1      | pH @ 25°C                               | IS 3025(Part 11):2022       | 6.85     |
| 2      | Total suspended solids                  | IS 3025(Part 17):2022       | BDL      |
| 3      | Biochemical oxygen demand 3 days @ 27°C | IS 3025(Part 44):2023       | 4.6 mg/L |
| 4      | Chemical oxygen demand                  | IS 3025(Part 58):2023       | 16 mg/L  |
| 5      | Oil & grease                            | IS 3025(Part 39):2021       | BDL      |
| 6      | Phosphorous as P                        | IS 3025(Part 31/sec-1):2022 | BDL      |

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**TEST REPORT**

**ULR NO: TC143072500000947F**

Page 2 of 2

Report No: AARC/TR/2025/0892  
Sample Code: AARC/W/12/25/0892 Analysis started on: 08.11.2025  
Analysis completed on: 25.11.2025  
Name and address of customer: The Secretary,  
Chalakkudy Municipality,  
Thrissur-680307.

Date of sampling: 07.11.2025  
Date of sample receipt: 07.11.2025  
Report date: 26.11.2025

Sample name: Treated FSTP water -Mobile treatment unit water-KL 64 M 3021  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :30.1°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

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Sr. Microbiologist

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**TEST REPORT**

ULR NO: TC143072500000977F

Page 1 of 2

Report No: AARC/TR/2025/0926  
Sample Code: AARC/W/12/25/0926  
Analysis started on: 24.12.2025  
Analysis completed on: 29.12.2025

Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025

Name and address of customer: The Secretary,  
Parakode Block panchayath,  
Pathanamthitta-691554.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 26 P 6343  
Sample description: Clear  
Sampled quantity: 2.25 L  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.3°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                                 | METHOD OF ANALYSIS          | RESULTS  |
|--------|--|-----------------------------|----------|
| 1      | pH @ 25°C                                  | IS 3025(Part 11):2022       | 6.99     |
| 2      | Total suspended solids                     | IS 3025(Part 17):2022       | BDL      |
| 3      | Biochemical oxygen demand<br>3 days @ 27°C | IS 3025(Part 44):2023       | 5.8 mg/L |
| 4      | Chemical oxygen demand                     | IS 3025(Part 58):2023       | 16 mg/L  |
| 5      | Oil & grease                               | IS 3025(Part 39):2021       | BDL      |
| 6      | Phosphorous as P                           | IS 3025(Part 31/sec-1):2022 | BDL      |

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**JAYAKALA S**  
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**TEST REPORT**

ULR NO: TC143072500000977F

Page 2 of 2

Report No: AARC/TR/2025/0926  
Sample Code: AARC/W/12/25/0926  
Analysis started on: 24.12.2025  
Analysis completed on: 26.12.2025

Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025

Name and address of customer: The Secretary,  
Parakode Block panchayath,  
Pathanamthitta-691554.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 26 P 6343  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.3°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

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For Axiom Analytical and Research Centre LLP

**CHINJU A SA**  
Sr. Microbiolo

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e mail : axiomiabkochi@gmail.com Web: www.axiomiabkochi.in



**TEST REPORT**

ULR NO: TC143072500000981F

Page 1 of 2

Report No: AARC/TR/2025/0930  
Sample Code: AARC/W/12/25/0930  
Analysis started on: 24.12.2025  
Analysis completed on: 29.12.2025

Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025

Name and address of customer: The Secretary,  
Purathur Grama Panchayath,  
Malappuram-676102.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 55 AL 8950  
Sample description: Clear  
Sampled quantity: 2.25 L  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.7°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                              | METHOD OF ANALYSIS          | RESULTS |
|--------|---|-----------------------------|---------|
| 1      | pH @ 25°C                               | IS 3025(Part 11):2022       | 6.59    |
| 2      | Total suspended solids                  | IS 3025(Part 17):2022       | BDL     |
| 3      | Biochemical oxygen demand 3 days @ 27°C | IS 3025(Part 44):2023       | 4.2mg/L |
| 4      | Chemical oxygen demand                  | IS 3025(Part 58):2023       | 12 mg/L |
| 5      | Oil & grease                            | IS 3025(Part 39):2021       | BDL     |
| 6      | Phosphorous as P                        | IS 3025(Part 31/sec-1):2022 | BDL     |

*[Signature]*  
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**JAYAKALA S**  
**QUALITY MANAGER**  
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**TEST REPORT**

**ULR NO: TC143072500000981F**

Page 2 of 2

Report No: AARC/TR/2025/0930  
Sample Code: AARC/W/12/25/0930  
Analysis started on: 24.12.2025  
Analysis completed on: 26.12.2025

Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025

Name and address of customer: The Secretary,  
Purathur Grama Panchayath,  
Malappuram-676102.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 55 AL 8950  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.7°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

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**Sr. Microbiologist**



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**TEST REPORT**

ULR NO: TC143072500000948F

Page 1 of 2

Report No: AARC/TR/2025/0893  
Sample Code: AARC/W/12/25/0893  
Analysis started on: 22.12.2025  
Analysis completed on: 26.12.2025

Date of sampling: 22.12.2025  
Date of sample receipt: 22.12.2025  
Report date: 26.12.2025

Name and address of customer: The Secretary,  
Changanassery Municipality,  
Kottayam-686101.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 33 Q 7265  
Sample description: Clear  
Sampled quantity: 2.25 L  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :30.6°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                                 | METHOD OF ANALYSIS          | RESULTS   |
|--------|--|-----------------------------|-----------|
| 1      | pH @ 25°C                                  | IS 3025(Part 11):2022       | 6.92      |
| 2      | Total suspended solids                     | IS 3025(Part 17):2022       | BDL       |
| 3      | Biochemical oxygen demand<br>3 days @ 27°C | IS 3025(Part 44):2023       | 5.5 mg/L  |
| 4      | Chemical oxygen demand                     | IS 3025(Part 58):2023       | 21.0 mg/L |
| 5      | Oil & grease                               | IS 3025(Part 39):2021       | BDL       |
| 6      | Phosphorous as P                           | IS 3025(Part 31/sec-1):2022 | BDL       |

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**TEST REPORT**

Page 2 of 2

ULR NO: TC143072500000948F

Report No: AARC/TR/2025/0893  
Sample Code: AARC/W/12/25/0893  
Analysis started on: 22.12.2025  
Analysis completed on: 24.12.2025  
Name and address of customer: The Secretary,  
Changanassery Municipality,  
Kottayam-686101.

Date of sampling: 22.12.2025  
Date of sample receipt: 22.12.2025  
Report date: 26.12.2025

Sample name: Treated FSTP water -Mobile treatment unit water-KL 33 Q 7265  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :30.6°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

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For **Axiom Analytical and Research Centre LLP**  
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ജില്ലാ ഓഫീസ്, ആലപ്പുഴ  
കേരളസംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്  
**KERALA STATE POLLUTION CONTROL BOARD**  
**DISTRICT OFFICE, ALAPPUZHA**

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SNV Sadhanam, New Chathanad, Head Post Office, Alappuzha - 688001



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“ഭരണഭാഷ- മാതൃഭാഷ”

|   |                                      |                      |                  |  |
|---|--------------------------------------|----------------------|------------------|--|
| ANALYSIS REPORT<br>(WATER/EFFLUENT/SOLID WASTE) |                                      | No. 440              | Date: 22/11/2025 |  |
| Source  | Mobile STP of Alappuzha Municipality |                      |                  |  |
| Date of sample Collection                       | 15/11/2025                           | Sample received from | AS               |  |
| Ref.No.   |                                      | Period of analysis   |                  |  |
| Date of Receipt                                 | 15/11/2025                           |                      |                  |  |
| Scientist-in-charge of analysis                 |                                      | ASSISTANT SCIENTIST  |                  |  |

| Sl.no   | Parameter        | Unit       | Value      |       |       |  | Limit*  |
|---|------------------|------------|------------|-------|-------|--|---------|
|   |                  |            | Sample No. |       |       |  |         |
|   |                  |            | INLET      | OUT 1 | OUT 2 |  |         |
| 1   | pH               |            | 7.8        | 8.2   | 8.4   |  | 6.5-8.5 |
| 2   | Suspended Solids | mg/L       | BDL        | BDL   | BDL   |  | <20     |
| 3   | BOD              | mg/L       | 105        | 2.06  | 0.38  |  | <10     |
| 4   | Oil and grease   | mg/L       | BDL        | BDL   | BDL   |  | <10     |
| 5   | Fecal coliform   | Cfu/100 ml | 32400      | 0     | 0     |  | <100    |
|   |                  |            |            |       |       |  |         |
|   |                  |            |            |       |       |  |         |
|   |                  |            |            |       |       |  |         |
|   |                  |            |            |       |       |  |         |
|   |                  |            |            |       |       |  |         |
| Details of samples:<br>OUT 1- Outlet water from vehicle No. KL 04AV3415<br>OUT 2- Outlet water from vehicle No. KL 04AV6592 |                  |            |            |       |       |  |         |
| Remarks:  |                  |            |            |       |       |  |         |

\*- Limit as per the circular of treated effluent standards for sewage treatment plants

Verified   
22/11/2025

**AJIS MARIA**  
ASSISTANT SCIENTIST



**AXIOM**  
ANALYTICAL AND RESEARCH CENTRE LLP

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**TEST REPORT**

Page 1 of 2

ULR NO: TC143072500000979F

Report No: AARC/TR/2025/0928  
Sample Code: AARC/W/12/25/0928  
Analysis started on: 24.12.2025  
Analysis completed on: 29.12.2025  
Name and address of customer: The Secretary,  
Kollam District Panchayath 1,  
Kollm-691001.

Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025

Sample name: Treated FSTP water -Mobile treatment unit water-KL 02 BY 4304  
Sample description: Clear  
Sampled quantity: 2.25 L  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.3°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                                 | METHOD OF ANALYSIS          | RESULTS  |
|--------|--|-----------------------------|----------|
| 1      | pH @ 25°C                                  | IS 3025(Part 11):2022       | 7.29     |
| 2      | Total suspended solids                     | IS 3025(Part 17):2022       | BDL      |
| 3      | Biochemical oxygen demand<br>3 days @ 27°C | IS 3025(Part 44):2023       | 3.9 mg/L |
| 4      | Chemical oxygen demand                     | IS 3025(Part 58):2023       | 12 mg/L  |
| 5      | Oil & grease                               | IS 3025(Part 39):2021       | BDL      |
| 6      | Phosphorous as P                           | IS 3025(Part 31/sec-1):2022 | BDL      |

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## TEST REPORT

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ULR NO: TC143072500000979F

Report No: AARC/TR/2025/0928  
Sample Code: AARC/W/12/25/0928  
Analysis started on: 24.12.2025  
Analysis completed on: 26.12.2025  
Name and address of customer: The Secretary,  
Kollam District Panchayath 1,  
Kollm-691001.

Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025

Sample name: Treated FSTP water -Mobile treatment unit water-KL 02 BY 4304  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.3°C

### RESULTS OF ANALYSIS

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

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## TEST REPORT

Page 1 of 2

ULR NO: TC143072500000980F

Report No: AARC/TR/2025/0929  
Sample Code: AARC/W/12/25/0929  
Analysis started on: 24.12.2025  
Analysis completed on: 29.12.2025

Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025

Name and address of customer: The Secretary,  
Kollam District Panchayath 2,  
Kollm-691001.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 02 BY 4370  
Sample description: Clear  
Sampled quantity: 2.25 L  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.6°C

### RESULTS OF ANALYSIS

| SL NO. | PARAMETERS                                 | METHOD OF ANALYSIS          | RESULTS |
|--------|--|-----------------------------|---------|
| 1      | pH @ 25°C                                  | IS 3025(Part 11):2022       | 7.12    |
| 2      | Total suspended solids                     | IS 3025(Part 17):2022       | BDL     |
| 3      | Biochemical oxygen demand<br>3 days @ 27°C | IS 3025(Part 44):2023       | 5.2mg/L |
| 4      | Chemical oxygen demand                     | IS 3025(Part 58):2023       | 16 mg/L |
| 5      | Oil & grease                               | IS 3025(Part 39):2021       | BDL     |
| 6      | Phosphorous as P                           | IS 3025(Part 31/sec-1):2022 | BDL     |

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### TEST REPORT

Page 2 of 2

ULR NO: TC143072500000980F

Report No: AARC/TR/2025/0929  
Sample Code: AARC/W/12/25/0929  
Analysis started on: 24.12.2025  
Analysis completed on: 26.12.2025

Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025

Name and address of customer: The Secretary,  
Kollam District Panchayath 2,  
Kollm-691001.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 02 BY 4370  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.6°C

### RESULTS OF ANALYSIS

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

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Sr. Microbiolo

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ANALYTICAL AND RESEARCH CENTRE LLP

# 103

## Kayamkulam Municipality

NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025 2017  
(CERTIFICATE No: TC 14307)

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### TEST REPORT

ULR NO: TC143072500000956F

Page 1 of 2

Report No: AARC/TR/2025/0903

Date of sampling: 23.12.2025

Sample Code: AARC/W/12/25/0903

Date of sample receipt: 23.12.2025

Analysis started on: 23.12.2025

Report date: 27.12.2025

Analysis completed on: 27.12.2025

Name and address of customer: The Secretary,  
Kayamkulam Municipality,  
Alappuzha-690502.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 29 X 6897

Sample description: Clear

Sampled quantity: 2.25 L

Sample condition: Fit for analysis

Sample submitted by: Customer

Sampling location: NA

Sampling procedure: NA

Temperature of sample :29.3°C

### RESULTS OF ANALYSIS

| SL NO. | PARAMETERS                                 | METHOD OF ANALYSIS          | RESULTS  |
|--------|--|-----------------------------|----------|
| 1      | pH @ 25°C                                  | IS 3025(Part 11):2022       | 7.43     |
| 2      | Total suspended solids                     | IS 3025(Part 17):2022       | BDL      |
| 3      | Biochemical oxygen demand<br>3 days @ 27°C | IS 3025(Part 44):2023       | 6.0 mg/L |
| 4      | Chemical oxygen demand                     | IS 3025(Part 58):2023       | 21 mg/L  |
| 5      | Oil & grease                               | IS 3025(Part 39):2021       | BDL      |
| 6      | Phosphorous as P                           | IS 3025(Part 31/sec-1):2022 | BDL      |

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For **Axiom Analytical and Research Centre LLP**

**JAYAKALA S**  
**QUALITY MANAGER**

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**TEST REPORT**

**ULR NO: TC143072500000956F**

Page 2 of 2

Report No: AARC/TR/2025/0903  
Sample Code: AARC/W/12/25/0903  
Analysis started on: 23.12.2025  
Analysis completed on: 25.12.2025

Date of sampling: 23.12.2025  
Date of sample receipt: 23.12.2025  
Report date: 27.12.2025

Name and address of customer: The Secretary,  
Kayamkulam Municipality,  
Alappuzha-690502.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 29 X 6897  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample : 29.3°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

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**CHINJU A SAJU**  
Sr. Microbiologist

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**TEST REPORT**

ULR NO: TC143072500000976F

Page 1 of 2

Report No: AARC/TR/2025/0925  
Sample Code: AARC/W/12/25/0925  
Analysis started on: 24.12.2025  
Analysis completed on: 29.12.2025

Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025

Name and address of customer: The Secretary,  
Kumarakom Grama panchayath,  
Kottayam-686563.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 05 BB 5870  
Sample description: Clear  
Sampled quantity: 2.25 L  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.9°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                                 | METHOD OF ANALYSIS          | RESULTS  |
|--------|--|-----------------------------|----------|
| 1      | pH @ 25°C                                  | IS 3025(Part 11):2022       | 7.07     |
| 2      | Total suspended solids                     | IS 3025(Part 17):2022       | BDL      |
| 3      | Biochemical oxygen demand<br>3 days @ 27°C | IS 3025(Part 44):2023       | 4.9 mg/L |
| 4      | Chemical oxygen demand                     | IS 3025(Part 58):2023       | 12 mg/L  |
| 5      | Oil & grease                               | IS 3025(Part 39):2021       | BDL      |
| 6      | Phosphorous as P                           | IS 3025(Part 31/sec-1):2022 | BDL      |

*[Signature]*  
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For **Axiom Analytical and Research Centre LLP**  
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**QUALITY MANAGER**  
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**TEST REPORT**

ULR NO: TC143072500000976F

Page 2 of 2

Report No: AARC/TR/2025/0925  
Sample Code: AARC/W/12/25/0925  
Analysis started on: 24.12.2025  
Analysis completed on: 26.12.2025Date of sampling: 24.12.2025  
Date of sample receipt: 24.12.2025  
Report date: 29.12.2025Name and address of customer: The Secretary,  
Kumarakom Grama panchayath,  
Kottayam-686563.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 05 BB 5870

Sample description: Clear

Sampled quantity: 250 ml

Sample condition: Fit for analysis

Sample submitted by: Customer

Sampling location: NA

Sampling procedure: NA

Temperature of sample :29.9°C

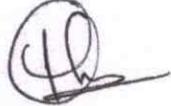
**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

END OF REPORT



Verified by

For **Axiom Analytical and Research Centre LLP**  
**CHINJU A SAJU**  
Sr. Microbiologist

Authorized Signatory



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KOCHI - 682 016, KERALA. PHONE : 0484 4067221, 7025167221  
e mail : axiombkochi@gmail.com Web: www.axiomlabs.in



**TEST REPORT**

ULR NO: TC143072500000955F

Page 1 of 2

Report No: AARC/TR/2025/0902  
Sample Code: AARC/W/12/25/0902  
Analysis started on:23.12.2025  
Analysis completed on:27.12.2025

Date of sampling: 23.12.2025  
Date of sample receipt: 23.12.2025  
Report date: 27.12.2025

Name and address of customer: The Secretary,  
Perambra Grama Panchayath,  
Kozhikode-673525.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 77 E 3532  
Sample description: Clear  
Sampled quantity: 2.25 L  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.3°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                              | METHOD OF ANALYSIS          | RESULTS  |
|--------|---|-----------------------------|----------|
| 1      | pH @ 25°C                               | IS 3025(Part 11):2022       | 7.69     |
| 2      | Total suspended solids                  | IS 3025(Part 17):2022       | BDL      |
| 3      | Biochemical oxygen demand 3 days @ 27°C | IS 3025(Part 44):2023       | 5.7 mg/L |
| 4      | Chemical oxygen demand                  | IS 3025(Part 58):2023       | 19 mg/L  |
| 5      | Oil & grease                            | IS 3025(Part 39):2021       | BDL      |
| 6      | Phosphorous as P                        | IS 3025(Part 31/sec-1):2022 | BDL      |

*[Signature]*  
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For **Axiom Analytical and Research Centre LLP**  
**JAYAKALA S**  
**QUALITY MANAGER**  
Authorized Signatory

*[Signature]*

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**TEST REPORT**

**ULR NO: TC143072500000955F**

Page 2 of 2

Report No: AARC/TR/2025/0902  
Sample Code: AARC/W/12/25/0902  
Analysis started on: 23.12.2025  
Analysis completed on: 25.12.2025

Date of sampling: 23.12.2025  
Date of sample receipt: 23.12.2025  
Report date: 27.12.2025

Name and address of customer: The Secretary,  
Perambra Grama Panchayath,  
Kozhikode-673525.

Sample name: Treated FSTP water -Mobile treatment unit water-KL 77 E 3532  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.3°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

END OF REPORT

Verified by



**CHINJU A SAJU**  
Sr. Microbiologist

Authorized Signatory

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**TEST REPORT**

**ULR NO: TC143072500000949F**

Page 1 of 2

Report No: AARC/TR/2025/0894

Date of sampling: 22.12.2025

Sample Code: AARC/W/12/25/0894

Date of sample receipt: 22.12.2025

Analysis started on: 22.12.2025

Report date: 26.12.2025

Analysis completed on: 26.12.2025

Name and address of customer: The Secretary,

Sreenarayanapuram Grama Panchayath,

Thrissur-680668.

Sample name: Treated FSTP water -Mobile treatment unit water- KL 47 M 5952

Sample description: Clear

Sampled quantity: 2.25 L

Sample condition: Fit for analysis

Sample submitted by: Customer

Sampling location: NA

Sampling procedure: NA

Temperature of sample :29.4°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS                                 | METHOD OF ANALYSIS          | RESULTS  |
|--------|--|-----------------------------|----------|
| 1      | pH @ 25°C                                  | IS 3025(Part 11):2022       | 6.89     |
| 2      | Total suspended solids                     | IS 3025(Part 17):2022       | BDL      |
| 3      | Biochemical oxygen demand<br>3 days @ 27°C | IS 3025(Part 44):2023       | 5.2 mg/L |
| 4      | Chemical oxygen demand                     | IS 3025(Part 58):2023       | 16 mg/L  |
| 5      | Oil & grease                               | IS 3025(Part 39):2021       | BDL      |
| 6      | Phosphorous as P                           | IS 3025(Part 31/sec-1):2022 | BDL      |

*[Signature]*  
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For **Axiom Analytical and Research Centre LLP**

**JAYAKALA S**  
**QUALITY MANAGER**

Authorized Signatory

*[Signature]*

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**TEST REPORT**

**ULR NO: TC143072500000949F**

Page 2 of 2

Report No: AARC/TR/2025/0894  
Sample Code: AARC/W/12/25/0894  
Analysis started on: 22.12.2025  
Analysis completed on: 24.12.2025  
Name and address of customer: The Secretary,  
Sreenarayanapuram Grama Panchayath,  
Thrissur-680668.

Date of sampling: 22.12.2025  
Date of sample receipt: 22.12.2025  
Report date: 26.12.2025

Sample name: Treated FSTP water -Mobile treatment unit water-KL 47 M 5952  
Sample description: Clear  
Sampled quantity: 250 ml  
Sample condition: Fit for analysis  
Sample submitted by: Customer  
Sampling location: NA  
Sampling procedure: NA  
Temperature of sample :29.4°C

**RESULTS OF ANALYSIS**

| SL NO. | PARAMETERS       | METHOD OF ANALYSIS                        | RESULTS        |
|--------|------------------|---|----------------|
| 1      | Faecal coliforms | APHA 24 <sup>th</sup> edition 9221 E:2023 | <1.8 MPN/100ml |

END OF REPORT

Verified by



**CHINJU A SA**  
**Sr. Microbiologist**

Authorized Signatory



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| Urban Local Body - Wastewater Generation and its Management |                    |                         |                 |                                   |   |                   |                    |   |  |                    |  |  |  |
|---|--------------------|-------------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|--|--|
| Sl. No.   | District           | Urban Local Body        | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan                                  | Current status                                   |
| 1   | Thiruvananthapuram | Thiruvananthapuram (MC) | 997032          | 143.58                            | 123.452   | 0                 | 0.52               | 19.608  | 500  | 0                  | 0  | Existing 107 MLD STP at Muttathara -TVM (CoTreatment) cluster & 5 MLD STP at Medical College | Operational                                      |
| 2   |                    | Neyyatinkara            | 73062           | 7.9                               | 0   | 0                 | 0                  | 7.9   | 0  | 0                  | 0  | Proposed 80 KLD FSTP at Nettukaltheri-Kallikadu GP cluster                                   | DPR Preparation                                  |
| 3   |                    | Nedumangad              | 62039           | 6.71                              | 0   | 0                 | 0                  | 6.71  | 0  | 0                  | 0  | Proposed 80 KLD FSTP at Nettukaltheri-Kallikadu GP cluster                                   | DPR Preparation                                  |
| 4   |                    | Attingal                | 38512           | 4.16                              | 0   | 0                 | 0                  | 4.16  | 0  | 0                  | 10   | Proposed 10 KLD FSTP at chudukadu  | To be tendered after Site Clearance ( Biomining) |
| 5   |                    | Varkala                 | 41298           | 4.47                              | 0   | 0                 | 0                  | 4.47  | 0  | 50                 | 0  | Ongoing 50 KLD FSTP in Varkala Municipality  | 70% Completed                                    |
| 6   | Kollam             | Kollam (MC)             | 399464          | 57.53                             | 5.394   | 12                | 0                  | 40.136  | 0  | 0                  | 50   | Proposed 50 KLD FSTP at Kureepuzha , Proposed MTU  | To be Tendered                                   |
| 7   |                    | Paravur                 | 38335           | 4.15                              | 0   | 0                 | 0                  | 4.15  | 0  | 0                  | 9  | Proposed 20 KLD Nedumgolam Taluk Hopital   | Awaiting No Objection Certificate (NOC) for Land |
| 8   |                    | Punalur                 | 48068           | 5.2                               | 0   | 0                 | 0                  | 5.2   | 0  | 0                  | 15   | Ongoing 25 KLD FSTP at Karungapally  | PCB Conccent Received, Work started              |
| 9   |                    | Karunagapally           | 51055           | 5.52                              | 0   | 0                 | 0                  | 5.52  | 0  | 25                 | 0  | Ongoing 25 KLD FSTP at Karungapally  | PCB Conccent Received, Work started              |

| Urban Local Body - Wastewater Generation and its Management |                |                  |                 |                                   |   |                   |                    |   |  |                    |  |   |   |
|---|----------------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|---|---|
| Sl. No.   | District       | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan | Current status  |
| 10  |                | Kottarakkara     | 30934           | 3.35                              | 0   | 0                 | 0                  | 3.35  | 0  | 0                  | 0  | Proposed 20 KLD FSTP At Paravur, Nedumgolaam, Proposed MTU  | Awaiting No Objection Certificate (NOC) for Land                  |
| 11  | Pathanamthitta | Adoor            | 27882           | 3.02                              | 2   | 0                 | 0                  | 1.02  | 0  | 0                  | 0  | Proposed 100 KLD FSTP at Kodumon Plantation                 | Awaiting No Objection Certificate (NOC) for Land                  |
| 12  |                | Pathanamthitta   | 35879           | 3.88                              | 2.748   | 0                 | 0                  | 1.132   | 0  | 0                  | 0  | Proposed 150 KLD FSTP at Nilackal, Proposed MTU             | Awaiting No Objection Certificate (NOC) for Land, DPR preparation |
| 13  |                | Thiruvalla       | 50545           | 5.46                              | 2   | 0                 | 0                  | 3.46  | 0  | 0                  | 0  | Proposed 100 KLD FSTP at Kodumon Plantation                 | Awaiting No Objection Certificate (NOC) for Land                  |
| 14  |                | Pandalam         | 39755           | 4.3                               | 2.1   | 0                 | 0                  | 2.2   | 0  | 0                  | 0  | Proposed 100 KLD FSTP at Kodumon Plantation, Existing MTU   | Awaiting No Objection Certificate (NOC) for Land                  |
| 15  |                | Kayamkulam       | 69542           | 7.52                              | 0   | 0                 | 0                  | 7.52  | 0  | 0                  | 0  | Proposed 30 KLD FSTP at Chengannur, Existing MTU            | Land received, further processes initiated                        |
| 16  |                | Mavelikara       | 26771           | 2.9                               | 0   | 0                 | 0                  | 2.9   | 0  | 0                  | 0  | Proposed 70 KLD FSTP at Mavelikkara Thekkekara              | Land Acquisition process ongoing                                  |

| Urban Local Body - Wastewater Generation and its Management |           |                  |                 |                                   |   |                   |                    |   |  |                    |  |   |  |
|---|-----------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|---|--|
| Sl. No.   | District  | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan   | Current status   |
| 17  | Alappuzha | Chengannur       | 23777           | 2.57                              |   |                   | 0                  | 2.57  | 0  | 0                  | 40   | Proposed 30 KLD FSTP at Chengannur, Proposed MTU  | Land received, further processes initiated   |
| 18  |           | Alappuzha        | 176469          | 25.42                             | 2.802   | 0                 | 5.012              | 17.606  | 0  | 0                  | 13   | Proposed 5 MLD STP with 13 KLD at Alliseery (CoTreatment), Existing MTU - 2 nos                                       | TS was issued on 04.11.2025, and the tender was floated by KWA on 05.11.2025 with the opening on 10.12.2025. |
| 19  |           | Cherthala        | 46434           | 5.02                              | 0   | 0                 | 0                  | 5.02  | 250  | 0                  | 0  | Existing 250 KLD FSTP at Cherthala  | Operational in Limited phase   |
| 20  |           | Haripad          | 15899           | 1.72                              | 0   | 0                 | 0                  | 1.72  | 0  | 0                  | 0  | Proposed 30 KLD FSTP at Chengannur  | Land identified, Awaiting for No objection Certificate (NOC) for land  |
| 21  |           | Changanacherry   | 48453           | 5.24                              | 0   | 0                 | 0                  | 5.24  | 0  | 0                  | 0  | Proposed 30 KLD FSTP at Chengannur, Existing MTU  | Land identified, Awaiting for No objection Certificate (NOC) for land  |
| 22  |           | Kottayam         | 140667          | 20.26                             | 6.613   | 0                 | 0                  | 13.647  | 0  | 0                  | 50   | Proposed 20 KLD FSTP at Vadavathoor, Proposed 30 KLD FSTP at KPPL Land, Proposed 105 KLD FSTP at Erumeli Proposed MTU | Land identification process ongoing  |

| Urban Local Body - Wastewater Generation and its Management |          |                  |                 |                                   |   |                   |                    |   |  |                    |  |   |   |
|---|----------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|---|---|
| Sl. No.   | District | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan   | Current status  |
| 23  | Kottayam | Vaikom           | 23608           | 2.55                              | 0   | 0                 | 0                  | 2.55  | 0  | 0                  | 0  | Proposed 30 KLD FSTP at KPPL Land   | Land identified. Lease procedure ongoing                        |
| 24  |          | Pala             | 22411           | 2.43                              | 0   | 0                 | 0                  | 2.43  | 0  | 0                  | 0  | Proposed 105 KLD FSTP at Erumeli  | Work awarded to Contractor. Site Handover Procedure in progress |
| 25  |          | Erattupetta      | 30184           | 3.26                              | 0   | 0                 | 0                  | 3.26  | 0  | 0                  | 0  | Proposed 30 KLD FSTP at KPPL Land   | Land identified. Lease procedure ongoing                        |
| 26  |          | Ettumanoor       | 46575           | 5.04                              | 0   | 0                 | 0                  | 5.04  | 0  | 0                  | 0  | Proposed 20 KLD FSTP at Vadavathoor   | Land to be finalised  |
| 27  | Idukki   | Thodupuzha       | 50654           | 5.48                              | 1.365   | 0                 | 0                  | 4.115   | 0  | 0                  | 0  | Proposed 20 KLD FSTP at Chathanmala   | TENDERING stage   |
| 28  |          | Kattappana       | 39960           | 4.32                              | 0   | 0                 | 0                  | 4.32  | 0  | 0                  | 0  | Proposed 20 KLD FSTP at Chathanmala   | TENDERING stage   |
| 29  |          | Kochi (MC)       | 654155          | 94.2                              | 29.994  | 1.205             | 95.18              | -32.179   | 200  | 0                  | 1024   | Proposed 20 KLD STP Elamkulam (CoTreatment), Existing 100 KLD FSTP at Wellington, Kochi Corporation & existing 100 KLD FSTP at Brahmapuram, Existing 0.75 MLD at GCDA, Existing 0.900 MLD at GCDA | Elamkulam - Tendering stage                                     |

| Urban Local Body - Wastewater Generation and its Management |           |                  |                 |                                   |   |                   |                    |   |  |                    |  |   |  |
|---|-----------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|---|--|
| Sl. No.   | District  | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan | Current status   |
| 30  | Ernakulam | Thrippunithura   | 100561          | 14.49                             | 0   | 0                 | 0.68               | 13.81   | 0  | 0                  | 0  | Proposed 1000 KLD FSTP at Brahmapuram                       | Work to be awarded, The agreement was executed on 29.10.2025 and the site is to be handed over to the contractor |
| 31  |           | Thrikkakkarā     | 84012           | 9.08                              | 0   | 0                 | 7.58               | 1.5   | 0  | 0                  | 0  | Proposed 1000 KLD FSTP at Brahmapuram                       | Work to be awarded, The agreement was executed on 29.10.2025 and the site is to be handed over to the contractor |
| 32  |           | Maradu           | 48574           | 5.25                              | 0   | 0                 | 0                  | 5.25  | 0  | 0                  | 0  | Proposed 1000 KLD FSTP at Brahmapuram, Proposed MTU         | Work to be awarded, The agreement was executed on 29.10.2025 and the site is to be handed over to the contractor |
| 33  |           | Muvattupuzha     | 33028           | 3.57                              | 0   | 0                 | 0                  | 3.57  | 0  | 0                  | 0  | Proposed 20 KLD FSTP at Muvattupuzha                        | Land to be finalised   |

| Urban Local Body - Wastewater Generation and its Management |          |                  |                 |                                   |   |                   |                    |   |  |                    |  |   |  |
|---|----------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|---|--|
| Sl. No.   | District | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan | Current status   |
| 34  |          | Kothamangalam    | 42199           | 4.56                              | 0   | 0                 | 0                  | 4.56  | 0  | 0                  | 0  | Proposed 1000 KLD FSTP at Brahmapuram                       | Work to be awarded, The agreement was executed on 29.10.2025 and the site is to be handed over to the contractor |
| 35  |          | Perumbavoor      | 30544           | 3.3                               | 0   | 0                 | 0                  | 3.3   | 0  | 0                  | 0  | Proposed 20 KLD FSTP at Aluva.                              | Awaiting No Objection Certificate (NOC) for Land   |
| 36  |          | Eloor            | 39901           | 4.31                              | 0   | 0                 | 0                  | 4.31  | 0  | 0                  | 20   | Proposed 20 KLD FSTP at Aluva.                              | Awaiting No Objection Certificate (NOC) for Land   |
| 37  |          | Aluva            | 24370           | 2.64                              | 0   | 0                 | 0                  | 2.64  | 0  | 0                  | 0  | Proposed 50 KLD FSTP at Vedimara                            | DPR Preparation  |
| 38  |          | Kalamasseri      | 77187           | 8.34                              | 0.01  | 0                 | 6.56               | 1.77  | 0  | 0                  | 0  | Existing 100 KLD FSTP at Wellington, Kochi Corporation      | Operational  |
| 39  |          | Paravur          | 34230           | 3.7                               | 0   | 0                 | 0                  | 3.7   | 0  | 0                  | 50   | Proposed 50 KLD FSTP at Vedimara                            | DPR Preparation  |
| 40  |          | Angamali         | 36362           | 3.93                              | 0   | 0                 | 0                  | 3.93  | 0  | 0                  | 0  | Proposed 50 KLD FSTP at Vedimara                            | DPR Preparation  |
| 41  |          | Piravam          | 29586           | 3.2                               | 0   | 0                 | 0                  | 3.2   | 0  | 0                  | 0  | Existing 100 KLD FSTP at Wellington, Kochi Corporation      | Operational  |
| 42  |          | Koothattukulam   | 18747           | 2.03                              | 0   | 0                 | 0                  | 2.03  | 0  | 0                  | 20   | Proposed 20 KLD FSTP at Muvattupuzha                        | Land to be finalised   |

| Urban Local Body - Wastewater Generation and its Management |          |                         |                 |                                   |   |                   |                    |   |  |                    |  |   |                                       |
|---|----------|-------------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|---|---------------------------------------|
| Sl. No.   | District | Urban Local Body        | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan         | Current status                        |
| 43  | Thrissur | Thrissur (MC)           | 339657          | 48.92                             | 10.491  | 0                 | 5                  | 33.429  | 10   | 100                | 22   | Existing 10KLD FSTP at Madakkathara                                 | Operational                           |
| 44  |          | Kodungaloor             | 76774           | 8.3                               | 0   | 0                 | 0                  | 8.3   | 0  | 0                  | 0  | Proposed 20 KLD (Co-treatment) at Chakkamkadam. , Existing MTU      | AS to be issued                       |
| 45  |          | Chalakkudi              | 53240           | 5.75                              | 0   | 0                 | 0                  | 5.75  | 0  | 0                  | 0  | Proposed 20 KLD FSTP at Gandhigram hospital , Existing MTU          | Land identified, awaiting for consent |
| 46  |          | Iringalakkuda           | 67223           | 7.27                              | 0   | 0                 | 0                  | 7.27  | 0  | 0                  | 0  | Proposed 20 KLD FSTP (Co-treatment) at Chakkamkadam. , Existing MTU | AS to be issued                       |
| 47  |          | Chavakkadu              | 42031           | 4.54                              | 0   | 0                 | 0                  | 4.54  | 0  | 0                  | 0  | Existing MTU  | Operational                           |
| 48  |          | Guruvayoor              | 75264           | 8.13                              | 3   | 0                 | 2                  | 3.13  | 0  | 0                  | 20   | Proposed 20 KLD (Co-treatment) at Chakkamkadam. , Existing MTU      | AS to be issued                       |
| 49  |          | Kunnamkulam             | 58127           | 6.28                              | 0   | 0                 | 0                  | 6.28  | 0  | 0                  | 0  | Proposed 20 KLD FSTP at Erumapetty , Existing MTU                   | DPR under preparation                 |
| 50  |          | Wadakkanchery           | 65943           | 7.13                              | 0   | 0                 | 0                  | 7.13  | 0  | 0                  | 10   | Proposed 40 KLD FSTP at Wadakkanchery                               | Land to be finalised                  |
| 51  |          | Shornur                 | 48420           | 5.23                              | 0   | 0                 | 0                  | 5.23  | 0  | 0                  | 50   | Proposed 50 KLD FSTP Shornur  | DPR under preparation                 |
| 52  | Palakkad | Ottappalam              | 59831           | 6.47                              | 0   | 1.5               | 0                  | 4.97  | 0  | 0                  | 0  | Ongoing 1.5 MLD STP Ottappalam & Proposed 50 KLD FSTP Shornur       | DPR under preparation                 |
| 53  |          | Palakkad                | 145655          | 20.98                             | 4.224   | 0                 | 0.03               | 16.726  | 0  | 100                | 0  | Ongoing 100 KLD FSTP at Yakkara                                     | 95 % Completed                        |
| 54  |          | Chittur-Thanthamangalam | 35924           | 3.88                              | 0   | 0                 | 0                  | 3.88  | 0  | 0                  | 40   | Proposed 20 KLD FSTP at Chittur Thanthamangalam                     | DPR under preparation                 |

| Urban Local Body - Wastewater Generation and its Management |            |                  |                 |                                   |   |                   |                    |   |  |                    |  |   |                                     |
|---|------------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|---|-------------------------------------|
| Sl. No.   | District   | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan   | Current status                      |
| 55  |            | Pattambi         | 31846           | 3.44                              | 2   | 0                 | 2.99               | -1.55   | 0  | 0                  | 0  | Proposed 10 KLD (CoTreatment) at Pattabi  | Awaiting for sewer network approval |
| 56  |            | Cherpulasseri    | 38817           | 4.2                               | 0   | 0                 | 0                  | 4.2   | 0  | 0                  | 0  | Proposed 50 KLD FSTP Shornur  | DPR Preparation                     |
| 57  |            | Mannarcadu       | 31830           | 3.44                              | 0   | 0                 | 0                  | 3.44  | 0  | 0                  | 0  | Proposed 100 KLD FSTP at iravimangalam, perinthalmanna  | DPR Preparation                     |
| 58  | Malappuram | Perinthalmanna   | 60085           | 6.49                              | 0   | 0                 | 0                  | 6.49  | 0  | 0                  | 100  | Proposed 100 KLD FSTP AT iravimangalam, perinthalmanna  | DPR Preparation                     |
| 59  |            | Ponnani          | 109349          | 15.75                             | 0   | 0                 | 0                  | 15.75   | 0  | 0                  | 0  | Proposed 100 KLD FSTP at Trenching ground , tirur   | Tendering                           |
| 60  |            | Thirur           | 67740           | 7.32                              | 0.5   | 0                 | 0                  | 6.82  | 0  | 0                  | 100  | Proposed 100 KLD FSTP at Trenching ground , tirur   | Tendering                           |
| 61  |            | Kottakkal        | 53631           | 5.8                               | 0   | 0                 | 0                  | 5.8   | 0  | 0                  | 0  | Ongoing 70 KLD FSTP at Valancheri   | 5% Completed                        |
| 62  |            | Malappuram       | 82324           | 8.9                               | 5.464   | 0                 | 0                  | 3.436   | 0  | 0                  | 0  | Ongoing 70 KLD FSTP at Valancheri, Proposed MTU at purathoor, Proposed MTU at AR Nagar, Proposed MTU at Edarikode | 5% Completed                        |
| 63  |            | Manjeri          | 117337          | 16.9                              | 0   | 0                 | 0                  | 16.9  | 0  | 0                  | 0  | Proposed 100 KLD FSTP at Trenching ground tirur , Existing MTU  | Tendering                           |
| 64  |            | Nilambur         | 56003           | 6.05                              | 0   | 0                 | 0                  | 6.05  | 0  | 0                  | 0  | Ongoing 70 KLD FSTP at Valancheri Proposed MTU  | 5% Completed                        |
| 65  |            | Valancheri       | 48720           | 5.27                              | 0   | 0                 | 0                  | 5.27  | 0  | 0                  | 70   | 0   | Ongoing 70 KLD FSTP at Valancheri   |
| 66  | Thanur     | 84431            | 9.12            | 0                                 | 0   | 0                 | 9.12               | 0   | 0  | 0                  | 0  | Ongoing 70 KLD FSTP at Valancheri   | 5% Completed                        |

| Urban Local Body - Wastewater Generation and its Management |           |                  |                 |                                   |   |                   |                    |   |  |                    |  |  |  |
|---|-----------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|--|--|
| Sl. No.   | District  | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan    | Current status   |
| 67  |           | Thirurangadi     | 68434           | 7.4                               | 0   | 0                 | 0                  | 7.4   | 0  | 0                  | 0  | Proposed 100 KLD FSTP at Trenching ground, tirur               | Tendering  |
| 68  |           | Kondotti         | 71605           | 7.74                              | 0   | 0                 | 0                  | 7.74  | 0  | 0                  | 0  | Ongoing 70 KLD FSTP at Valancheri, Proposed MTU                | 5% Completed   |
| 69  |           | Parappanangadi   | 85679           | 9.26                              | 0   | 0                 | 0                  | 9.26  | 0  | 0                  | 0  | Proposed 100 KLD FSTP at Trenching ground, tirur               | Tendering  |
| 70  | Kozhikode | Kozhikodu (MC)   | 675391          | 97.26                             | 21.261  | 0                 | 42                 | 33.999  | 100  | 0                  | 220  | Existing 2 MLD STP with 100 KLD cotreatment at Medical College | Operational  |
| 71  |           | Koilandy         | 79774           | 8.62                              | 0   | 0                 | 0                  | 8.62  | 0  | 0                  | 0  | Existing 2 MLD STP with 100 KLD cotreatment at Medical College | Operational  |
| 72  |           | Vadakara         | 83572           | 9.03                              | 0   | 0                 | 0.5                | 8.53  | 0  | 0                  | 0  | Proposed 50 KLD FSTP at Velom                                  | Land identified, awaiting No objection Certificate (NOC) |
| 73  |           | Farok            | 60018           | 6.49                              | 0   | 0                 | 0                  | 6.49  | 0  | 0                  | 0  | Proposed 12 MLD STP with 220 KLD (CoTreatment) at Sarovaram    | Tendering  |
| 74  |           | Ramanattukara    | 39888           | 4.31                              | 0   | 0                 | 0                  | 4.31  | 0  | 0                  | 0  | Proposed 12 MLD STP with 220 KLD (CoTreatment) at Sarovaram    | Tendering  |
| 75  |           | Mukkom           | 45141           | 4.88                              | 0   | 0                 | 0                  | 4.88  | 0  | 0                  | 0  | Proposed 12 MLD STP with 220 KLD (CoTreatment) at Sarovaram    | Tendering  |

| Urban Local Body - Wastewater Generation and its Management |          |                  |                 |                                   |   |                   |                    |   |  |                    |  |   |  |
|---|----------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|---|--|
| Sl. No.   | District | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan   | Current status   |
| 76  |          | Koduvalli        | 54039           | 5.84                              | 0   | 0                 | 0                  | 5.84  | 0  | 0                  | 0  | Existing 2MLD STP with 100 KLD Cotreatment at Medical College , Proposed 12 MLD STP with 220 KLD (CoTreatment) at Sarovaram | Operational  |
| 77  |          | Payyoli          | 54908           | 5.94                              | 0   | 0                 | 0                  | 5.94  | 0  | 0                  | 0  | Proposed 50 KLD FSTP at Velom   | Land identified, awaiting No objection Certificate ( NOC)          |
| 78  |          | Kalpatta         | 33838           | 3.66                              | 2.826   | 0                 | 0                  | 0.834   | 10   | 0                  | 0  | Existing 10 KLD FSTP at Kalpetta, Kalpetta Municipality   | Operational  |
| 79  | Wayana d | Sultan Betheri   | 48664           | 5.26                              | 0.14  | 0                 | 0                  | 5.12  | 0  | 0                  | 0  | Proposed 50 KLD FSTP at Ambalavayal   | Land identified further processes regarding the survey are ongoing |
| 80  |          | Mananthavadi     | 51403           | 5.56                              | 0   | 0                 | 0                  | 5.56  | 0  | 0                  | 0  | Existing 10 KLD FSTP at Kalpetta, Kalpetta Municipality   | Operational  |
| 81  |          | Kannur (MC)      | 292879          | 42.18                             | 8.22  | 0                 | 5                  | 28.96   | 0  | 100                | 130  | Ongoing 100 KLD FSTP at Chelora, Proposed 5MLD STP with 130 KLD Cotreatment at Maithanapally                                | Generator procurement ongoing for the trial run                    |
| 82  |          | Thalasseri       | 99203           | 10.72                             | 0   | 0                 | 0                  | 10.72   | 0  | 0                  | 0  | Proposed 5MLD STP with 130 KLD Cotreatment at Maithanapally   | Land identification process ongoing                                |

| Urban Local Body - Wastewater Generation and its Management |          |                  |                 |                                   |   |                   |                    |   |  |                    |  |  |   |   |
|---|----------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|--|---|---|
| Sl. No.   | District | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan                                  | Current status                                  |   |
| 83  | Kannur   | Koothuparambu    | 31746           | 3.43                              | 0   | 0                 | 0                  | 3.43  | 0  | 0                  | 0  | Proposed 50 KLD FSTP at panoor   | Tendering                                       |   |
| 84  |          | Mattannur        | 50458           | 5.45                              | 0   | 0                 | 0                  | 5.45  | 0  | 0                  | 0  | Ongoing 100 KLD FSTP at Chelora  | 95% Completed                                   |   |
| 85  |          | Thaliparambu     | 47424           | 5.13                              | 0.5   | 0                 | 0                  | 4.63  | 0  | 0                  | 0  | Proposed 100 KLD FSTP At kannur oushadhi   | Land identified further process ongoing.        |   |
| 86  |          | Payyannur        | 77288           | 8.35                              | 0   | 0                 | 0                  | 8.35  | 0  | 0                  | 0  | Proposed 100 KLD FSTP At kannur oushadhi   | Land identified further process ongoing.        |   |
| 87  |          | Panur            | 18690           | 2.02                              | 0   | 0                 | 0                  | 2.02  | 0  | 0                  | 0  | Proposed 50 KLD FSTP at panoor   | Tendering                                       |   |
| 88  |          | Iritti           | 43267           | 4.68                              | 0   | 0                 | 0                  | 4.68  | 0  | 0                  | 0  | Ongoing 100 KLD FSTP at Chelora , Proposed MTU   | Generator procurement ongoing for the trial run |   |
| 89  |          | Srikandapuram    | 35893           | 3.88                              | 0   | 0                 | 0                  | 3.88  | 0  | 0                  | 0  | Proposed 5MLD STP with 130 KLD Cotreatment at Maithanapally                                  | Land identification process ongoing             |   |
| 90  |          | Anthur           | 30321           | 3.28                              | 0   | 0                 | 0.4                | 2.88  | 0  | 0                  | 0  | Proposed 5MLD STP with 130 KLD Cotreatment at Maithanapally, Proposed 0.4 MLD STP at Anthur. | Land identification process ongoing             |   |
| 91  |          | Kasaragod        | Neeleswaram     | 44977                             | 4.86  | 0                 | 0                  | 0   | 4.86   | 0                  | 0  | 0  | Proposed 36 KLD FSTP at kayoor chimeni          | Work to be started, Awaiting CTE from PCB |
| 92  |          |                  | Kanjangadu      | 82981                             | 8.97  | 0                 | 0                  | 0   | 8.97   | 0                  | 0  | 40   | Ongoing 50 KLD FSTP at Mangalpady               | 5% Completed                              |

| Urban Local Body - Wastewater Generation and its Management         |              |                  |                 |                                   |   |                   |                    |   |  |                    |  |   |                    |
|---|--------------|------------------|-----------------|-----------------------------------|---|-------------------|--------------------|---|--|--------------------|--|---|--------------------|
| Sl. No.   | District     | Urban Local Body | Population 2026 | Total Wastewater Generation (MLD) | Existing STP facility in the LB including Common and Establishments (MLD) | Ongoing STP (MLD) | Proposed STP (MLD) | Wastewater Management through Onsite Sanitation Systems (MLD) | Existing FSTP and Cotreatment facility (KLD) | Ongoing FSTP (KLD) | Proposed FSTP and Cotreatment facility (KLD) | Name of the cluster to which ULB is linked as per FSSM Plan | Current status     |
| 93  |              | Kasaragod        | 61292           | 6.62                              | 1.64  | 0                 | 0                  | 4.98  | 0  | 0                  | 0  | Proposed 40 KLD FSTP at Manjeshwaram                        | Work to be started |
|   | <b>Total</b> |                  | <b>8167695</b>  | <b>1031.94</b>                    | <b>238.744</b>  | <b>14.705</b>     | <b>173.452</b>     | <b>605.039</b>  | <b>1070</b>                                  | <b>445</b>         | <b>2033</b>                                  |   |                    |
| * All the urban local bodies are linked to cluster as per FSSM Plan |              |                  |                 |                                   |   |                   |                    |   |  |                    |  |   |                    |



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## Annexure 10

| <b>Urban Local Body - Allocation and Expenditure for Various Liquid Waste Management Projects</b> |                    |                    |              |            |             |
|---|--------------------|--------------------|--------------|------------|-------------|
| Sl. No  | District           | ULB Name           | ULB Type     | Total      |             |
|   |                    |                    |              | Allocation | Expenditure |
| 1   | Thiruvananthapuram | Thiruvananthapuram | Corporation  | 413.04     | 247.29      |
| 2   | Thiruvananthapuram | Varkala            | Municipality | 10.57      | 0.82        |
| 3   | Thiruvananthapuram | Attingal           | Municipality | 2.72       | 0.12        |
| 4   | Thiruvananthapuram | Nedumangad         | Municipality | 4.21       | 1.57        |
| 5   | Thiruvananthapuram | Neyyattinkara      | Municipality | 3.75       | 0.43        |
| 6   | Kollam             | Kollam             | Corporation  | 246        | 33.68       |
| 7   | Kollam             | Paravoor           | Municipality | 5.33       | 0.43        |
| 8   | Kollam             | Punaloor           | Municipality | 8.04       | 0.37        |
| 9   | Kollam             | Karunagappally     | Municipality | 4.62       | 0.76        |
| 10  | Kollam             | Kottarakara        | Municipality | 3.12       | 0.16        |
| 11  | Pathanamthitta     | Adoor              | Municipality | 3.2        | 0.22        |
| 12  | Pathanamthitta     | Thiruvalla         | Municipality | 2.64       | 0.15        |
| 13  | Pathanamthitta     | Pathanamthitta     | Municipality | 5.02       | 0.77        |
| 14  | Pathanamthitta     | Pandalam           | Municipality | 4.09       | 0.62        |
| 15  | Alappuzha          | Chengannur         | Municipality | 3.97       | 0.89        |
| 16  | Alappuzha          | Mavelikkara        | Municipality | 3.31       | 0.16        |
| 17  | Alappuzha          | Cherthala          | Municipality | 15.33      | 7.71        |
| 18  | Alappuzha          | Kayamkulam         | Municipality | 9.62       | 2.59        |
| 19  | Alappuzha          | Alappuzha          | Municipality | 105.67     | 8.9         |
| 20  | Alappuzha          | Haripad            | Municipality | 3.97       | 0.2         |
| 21  | Kottayam           | Pala               | Municipality | 4.73       | 0.06        |
| 22  | Kottayam           | Vaikom             | Municipality | 3.82       | 0.32        |
| 23  | Kottayam           | Changanassery      | Municipality | 5.58       | 0.84        |
| 24  | Kottayam           | Kottayam           | Municipality | 9.28       | 1.39        |
| 25  | Kottayam           | Ettumanoor         | Municipality | 5.81       | 0.39        |
| 26  | Kottayam           | Erattupetta        | Municipality | 0.91       | 0.04        |
| 27  | Idukki             | Thodupuzha         | Municipality | 8.88       | 0.54        |
| 28  | Idukki             | Kattappana         | Municipality | 10.09      | 0.56        |
| 29  | Ernakulam          | Cochin             | Corporation  | 678.76     | 29.78       |
| 30  | Ernakulam          | Kalamassery        | Municipality | 0.96       | 0.24        |
| 31  | Ernakulam          | Kothamangalam      | Municipality | 4.22       | 0.29        |
| 32  | Ernakulam          | Angamaly           | Municipality | 4.32       | 0.72        |
| 33  | Ernakulam          | Tripunithura       | Municipality | 6.86       | 2.49        |
| 34  | Ernakulam          | Muvattupuzha       | Municipality | 1.75       | 0.02        |
| 35  | Ernakulam          | North Paravur      | Municipality | 4.63       | 0.71        |
| 36  | Ernakulam          | Perumbavoor        | Municipality | 2.29       | 0.26        |
| 37  | Ernakulam          | Aluva              | Municipality | 1.42       | 0.41        |
| 38  | Ernakulam          | Thrikkakara        | Municipality | 7.27       | 1.49        |
| 39  | Ernakulam          | Eloor              | Municipality | 3.49       | 0.36        |
| 40  | Ernakulam          | Maradu             | Municipality | 15.4       | 3.39        |
| 41  | Ernakulam          | Koothattukulam     | Municipality | 1.64       | 0.17        |

| <b>Urban Local Body - Allocation and Expenditure for Various Liquid Waste Management Projects</b> |            |                      |              |            |             |
|---|------------|----------------------|--------------|------------|-------------|
| Sl. No  | District   | ULB Name             | ULB Type     | Total      |             |
|   |            |                      |              | Allocation | Expenditure |
| 42  | Ernakulam  | Piravom              | Municipality | 0.86       | 0.08        |
| 43  | Thrissur   | Thrissur             | Corporation  | 198.35     | 10.77       |
| 44  | Thrissur   | Guruvayoor           | Municipality | 8.27       | 2.16        |
| 45  | Thrissur   | Chavakkad            | Municipality | 7.91       | 2.11        |
| 46  | Thrissur   | Kodungalloor         | Municipality | 7.8        | 0.81        |
| 47  | Thrissur   | Chalakkudy           | Municipality | 4.87       | 0.29        |
| 48  | Thrissur   | Irinjalakkuda        | Municipality | 12.15      | 0.42        |
| 49  | Thrissur   | Kunnamkulam          | Municipality | 10.78      | 1.83        |
| 50  | Thrissur   | Wadakanchery         | Municipality | 24.87      | 0.88        |
| 51  | Palakkad   | Ottappalam           | Municipality | 26.71      | 4.98        |
| 52  | Palakkad   | Shornur              | Municipality | 3.8        | 0.69        |
| 53  | Palakkad   | hittoor Thathamangal | Municipality | 8.61       | 1.89        |
| 54  | Palakkad   | Palakkad             | Municipality | 13.84      | 5.95        |
| 55  | Palakkad   | Pattambi             | Municipality | 23.82      | 0.09        |
| 56  | Palakkad   | Cherpulassery        | Municipality | 2.67       | 0.53        |
| 57  | Palakkad   | Mannarkad            | Municipality | 6.74       | 0.21        |
| 58  | Malappuram | Perinthalmanna       | Municipality | 6.71       | 0.55        |
| 59  | Malappuram | Ponnani              | Municipality | 11.01      | 1.59        |
| 60  | Malappuram | Manjeri              | Municipality | 11.55      | 2.4         |
| 61  | Malappuram | Thirur               | Municipality | 8.25       | 1.05        |
| 62  | Malappuram | Malappuram           | Municipality | 8.33       | 1.83        |
| 63  | Malappuram | Kottakkal            | Municipality | 3.23       | 0.01        |
| 64  | Malappuram | Nilambur             | Municipality | 3.69       | 0.4         |
| 65  | Malappuram | Kondotty             | Municipality | 4.84       | 0.31        |
| 66  | Malappuram | Valanchery           | Municipality | 13.66      | 0.08        |
| 67  | Malappuram | Tirurangadi          | Municipality | 1.86       | 0.31        |
| 68  | Malappuram | Parappanangadi       | Municipality | 13.6       | 2           |
| 69  | Malappuram | Tanur                | Municipality | 14.18      | 3.83        |
| 70  | Wayanad    | Kalpetta             | Municipality | 6.73       | 0.42        |
| 71  | Wayanad    | Mananthavady         | Municipality | 13.79      | 2.57        |
| 72  | Wayanad    | Sulthan Bathery      | Municipality | 13.06      | 1.73        |
| 73  | Kozhikode  | Kozhikkode           | Corporation  | 426.07     | 25.99       |
| 74  | Kozhikode  | Vadakara             | Municipality | 4.68       | 0.74        |
| 75  | Kozhikode  | Quilandy             | Municipality | 17.42      | 2.3         |
| 76  | Kozhikode  | Payyoli              | Municipality | 4.17       | 0.41        |
| 77  | Kozhikode  | Koduvally            | Municipality | 1.19       | 0.2         |
| 78  | Kozhikode  | Mukkam               | Municipality | 2.49       | 0.02        |
| 79  | Kozhikode  | Ramanattukara        | Municipality | 0.87       | 0.09        |
| 80  | Kozhikode  | Feroke               | Municipality | 5.87       | 1.01        |
| 81  | Kannur     | Kannur               | Corporation  | 261.7      | 32.9        |
| 82  | Kannur     | Mattannur            | Municipality | 8.89       | 1.13        |

## Annexure 10

| <b>Urban Local Body - Allocation and Expenditure for Various Liquid Waste Management Projects</b> |                 |                 |                 |                   |                    |
|---|-----------------|-----------------|-----------------|-------------------|--------------------|
| <b>Sl. No</b>   | <b>District</b> | <b>ULB Name</b> | <b>ULB Type</b> | <b>Total</b>      |                    |
|   |                 |                 |                 | <b>Allocation</b> | <b>Expenditure</b> |
| 83  | Kannur          | Thalipparamba   | Municipality    | 9.91              | 0.62               |
| 84  | Kannur          | Koothuparamba   | Municipality    | 1.13              | 0.06               |
| 85  | Kannur          | Payyannur       | Municipality    | 7.39              | 0.72               |
| 86  | Kannur          | Thalassery      | Municipality    | 11.99             | 1.93               |
| 87  | Kannur          | Sreekandapuram  | Municipality    | 2.4               | 0.19               |
| 88  | Kannur          | Panoor          | Municipality    | 0.98              | 0.19               |
| 89  | Kannur          | Iritty          | Municipality    | 4.37              | 0.11               |
| 90  | Kannur          | Anthoor         | Municipality    | 1.37              | 0.26               |
| 91  | Kasargod        | Kanjhangad      | Municipality    | 16.01             | 1.45               |
| 92  | Kasargod        | Kasargod        | Municipality    | 15.89             | 0.91               |
| 93  | Kasargod        | Nileshwar       | Municipality    | 3.97              | 0.34               |
| <b>Total in ( Cr)</b>   |                 |                 |                 | <b>2945.63</b>    | <b>476.65</b>      |



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