

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

**ORIGINAL APPLICATION NO. 640 of 2024 (PB)**

SuoMotu : Applicant

Vs.

The Additional Chief Secretary to Government of Kerala,  
Department of Environment, Thiruvananthapuram  
andOrs : Respondents

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

Adv. Jogy Scaria

ADDITIONAL STANDING COUNSEL FOR THE FOURTH RESPONDENT

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**VOLUME 1**

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Dated this the 6<sup>th</sup> day of September 2024

Jogy Scaria Advocate

ADDITIONAL STANDING COUNSEL FOR THE FOURTH RESPONDENT:

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**VOLUME 2**

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Dated this the 6<sup>th</sup> day of September 2024

Jogy Scaria Advocate

ADDITIONALSTANDING COUNSEL FOR THE FOURTH RESPONDENT:

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BENCH, NEW DELHI**

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Applicant : Suo Motu  
Respondents : The Additional Chief Secretary to Government of  
Kerala, Environment Department,  
Thiruvananthapuram and others

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

1. I, Rachel Thomas, aged 41 years, D/o Sri.A. Thomas, now working as Environmental Engineer, Kerala State Pollution Control Board, District Office, Kollam. I am authorized to represent the Board (4<sup>th</sup> respondent) in the above O.A. I know the facts and circumstances of the case. The factual submissions are true and correct to the best of my knowledge, information and belief.
2. The Hon'ble National Green Tribunal (NGT) (PB) has registered a Suo Motu case O.A No. 640 of 2024 based on the news published in 'The Hindu', Chennai Edition dated 24.05.2024 titled "Micro plastics found in Ashtamudi Lake, alleging that a study conducted by the Department of Aquatic Biology and Fisheries, University of Kerala found micro plastics in the brackish water lake's fish, shellfish, sediment and water. This report is filed on behalf of the Kerala State Pollution Control Board, as directed by this Hon'ble NGT in its Order dated 28.05.2024.
3. Based on the same news published in the newspaper, the Hon'ble National Green Tribunal (NGT), Southern Zone, Chennai has registered a Suo Motu



*Rachel Thomas*

**RACHEL THOMAS**  
Environmental Engineer

case O.A No. 185 of 2024 and directed this respondent to file a report after making verification of the water quality and also analysis of the biota, vide its order dated 29.05.2024.

4. Based on the above orders, the Board conducted a preliminary meeting through video conference on 24.06.2024 with the researchers of the said study and Joint Director, Urban Directorate (Swag Cell). The researchers explained about the study in the six sample locations and their analytical method to identify micro plastics. The Board had informed that there is no existing facility for identification of micro plastics with Board's laboratories. Possibility of outsourcing micro plastic identification has to be sought for. On enquiry, it came to know that certain agencies/institutions have facility to do FTIR and Raman spectra analysis such as MG University, Kottayam, Sophisticated Test and Instrumentation Centre, CUSAT, Kerala Forest Research Institute, Peechi, etc. and action for the quantification study of micro plastics in identified vulnerable areas is to be done. Following decisions were taken during the above said meeting.
  - a. Possibility of outsourcing test on micro plastic in the place where FTIR and Raman spectra analysis.
  - b. To appraise the matter to the District Collector, who is the chairman of District Level Monitoring Committee (DLMC).
  - c. To issue instruction to all concerned stake holders explaining OA 185/2024 for the effective implementation of the remedial measures.
  - d. To issue instruction to Kollam Corporation seeking information regarding authorized collectors (Haritha Karma Sena-HKS), MCF, RRF, actions taken in the problematic area, and Enforcement Squad.
  - e. To issue instruction to the Harbour Department seeking the details regarding the plastic collected as part of SuchitwaSagaram campaign.
  - f. To conduct sampling in routine sampling stations near to the five



*Rachel Thomas*  
RACHEL THOMAS  
Environmental Engineer

locations from which the samples were collected for the study of micro plastics.

5. In order to bring the attention of District Administration and other departments concerned about the seriousness of micro plastic pollution and its possible sources, the details of O.A was discussed in the 17<sup>th</sup> District Level Monitoring Committee (DLMC) meeting conducted on 24.07.2024. Also report regarding the proximity of MCF/RRF or any garbage vulnerable points in the catchment of Ashtamudi Lake was sought from the local self institutions around the lake. Kollam Corporation and 12 other Grama Panchayats - Chavara, East Kallada, Panayam, Perayam, Perinadu, Munrothuruthu, Neendakara, Thekkumbhagam, Thevalakkara, Thrikkariva, Kundara, West Kallada are sharing the bank of Ashtamudi. No garbage vulnerable points were reported in the catchment of Ashtamudi from the Grama Panchayats. Also reported that they have practiced door to door collection of plastic waste material and other non-biodegradable waste materials. Details are tabulated and attached herewith and marked as **Annexure I**.
6. A joint inspection was conducted by the Member Secretary, KSPCB, Joint Director (WM Cell PD, LSGD) and Suchitwa Mission along with representative of Kollam Corporation for verification of the solid and liquid waste management facilities. During the inspection conducted on 29.07.2024, garbage vulnerable points were identified and heap of mixed waste materials were also noticed. The Secretary, Kollam Corporation was directed to rectify the defects noticed vide letter dated 27.08.2024. Copy of the same is attached and marked as **Annexure II**. Based on Board's direction, action has been taken to remove the waste. A copy of the communication in this regard from Clean Kerala Company Limited is marked as **Annexure III**.
7. As part of National Water quality Monitoring Programme (NWMP), water samples collected from 5 different points in Ashtamudi Lake for analysis of 32 physical and chemical parameters. Sampling stations cover both urban and



*Rachel Thomas*  
RACHEL THOMAS  
Environmental Engineer

rural areas and estuary near Neendakara. In addition, the Board has initiated sampling from additional stations near to the five locations from which the sample and the original study area where samples collected for the study of micro plastics. Since the sophisticated testing facilities FTIR-ATR, Raman Spectrum, SEM-EDAX are not available with the Board laboratories, possibility of outsourcing the micro plastic analysis was explored. In collaboration with educational institutions action is being initiated by the Board to collect samples from at least 10 stations and doing analysis of micro plastics.

8. It is humbly submitted that this respondent has taken all the efforts as per the rules and norms, and direct the local bodies and other institution with due consideration.

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

Dated this the 6<sup>th</sup> day of September 2024.



ENVIRONMENTAL ENGINEER

RACHEL THOMAS  
Environmental Engineer

**DETAILS OF NON BIODEGRADABLE WASTE HANDLING IN 12 GRAMAPANCHAYATHS  
SURROUNDING ASHTAMUDI LAKE**

Sl No	Local Body	Door-to-door Collection	Total MCFs/ RRFs	No. of wards near Ashtamudi Lake	MCFs/ RRFs near Ashtamudi Lake	Garbage Vulnerable Points	Remarks
1	Chavara Panchayath	100%	MCF-1 MCF-32 RRF-1	5 wards	MCF=0 RRF=0	Nil	Backwater cleaning campaign was conducted by the members of the Panchayath, Kudumbasree, CDS, Harithakarmasena & others. Monthly monitoring & fine imposition for dumping waste into lake.
2	East Kallada Panchayath	72%	MCF-1 Mini MCF-15 RRF-1	4 wards	MCF=0 RRF=0	Nil	Regular monitoring ensured to prevent dumping of plastics into lake. Appointed Harithakarmasena for collecting accumulated plastic waste from lake.
3	Kundara Panchayath	80%	MCF-1 Mini MCF-28	1 ward	MCF=0 RRF=0	Nil	Plastic waste from lake is collected by Harithakarmasena
4	Munroethuruth Panchayath	95%	Mini MCF -18 MCF-1 (temporary)	13 wards	Mini MCF -18 MCF-1 (temporary)	Nil	Plan proposal taken for new MCF. Implemented "Bottle booth project" to collect plastic wastes at tourist centers in panchayath
5	Neendakara Panchayath	100%	MCF-1 Mini MCF-23	4 wards	MCF=0 RRF=0	Nil	Plastic waste from lake is collected by Harithakarmasena.

6	Panayam Panchayath	80%	RRF-1 MCF-3 Mini MCF-15	7 wards	MCF=0 RRF=0	Nil	Plastic waste from lake is collected by Harithakarmasena
7	Perayam Panchayath	98%	MCF-2 Mini MCF-11 RRF -1	9 wards	MCF=0 RRF=0	Nil	Plastic waste from lake is collected by Harithakarmasena Implemented various projects like ODF Plus, Nirmalatheeram, etc..
8	Perinadu Panchayath	85%	MCF-1 Mini MCF-20 RRF -1	8 wards	MCF=0 RRF=0	Nil	Plastic waste from lake is collected by Harithakarmasena
9	Thekkumbhagam Panchayath	100%	MCF-1 Mini MCF-10	13 wards	MCF=0 RRF=0	Nil	Plastic waste from lake is collected by Harithakarmasena. Implemented various projects to collect the disposed plastic wastes from lake
10	Thevalakkara Panchayath	100%	MCF-1 Mini MCF-42	6 wards	MCF=0 RRF=0	Nil	Plastic waste from lake is collected by Harithakarmasena. Conducted awareness classes.
11	Thrikkaruva Panchayath	100%	MCF-1 Mini MCF-16	9 wards	MCF=0 RRF=0	Nil	Regular inspection & fine imposition for use of banned plastics. Conducted awareness classes to public.
12	West Kallada Panchayath	98%	MCF-1 Mini MCF- 3	1 ward	MCF=0 RRF=0	Nil	Plastic waste from lake is collected by Harithakarmasena.

General: 0471- 2312910, 2318153, 2318154, 2318155 Chairman: 2318150 Member Secretary: 2318151  
e-mail: [cha.kspcb@gov.in](mailto:cha.kspcb@gov.in); [ms.kspcb@gov.in](mailto:ms.kspcb@gov.in) FAX: 2318152 web: [kspcb.kerala.gov.in](http://kspcb.kerala.gov.in)

**KERALA STATE POLLUTION CONTROL BOARD**

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്



Pattom P.O., Thiruvananthapuram – 695 004

പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004



File No. KSPCB/198/2023-AE-10

Dated: 27-08-2024

From

The Member Secretary

To

The Secretary  
Kollam Corporation

Sub:- Hearing Notice- Action plan in OA 147/2022 -reg

Ref:- 1. Lr No. LSGD/PD/27498/2024-SWAG1 dated 27.07.2024 from ACS LSGD  
2. Joint inspection conducted on 29-7-2024 in Kollam Corporation and areas near the Ashtamudi lake

Sir,

Attention is invited to the subject matter. A joint inspection was conducted on 29.7.2024 in Kollam Corporation and areas near the Ashtamudi lake as per ref(1). The following lapse in waste management practices of both liquid and solid waste were observed during the visit.

1) In **Asramom link road**, dredged material heaps of unsegregated solid wastes including biodegradable waste, plastic, diapers, syringes was found in areas where Manichithodu joins to the lake. Manichithodu was seen covered with plastic wastes.

2) In **Shanthi Nagar**, floating wastes including plastic bottles and other banned plastics were seen in Manichithodu

3) In **Pullikada Colony**, the outlets from toilets of residential area were seen directly discharged to Manichithodu

4) In **Alakkukadavu**, washed water was found directly discharged to Manichithodu, for which facility for waste management are to be provided.

5) Aerobins were not operated

6) In **Five wards in Fishing Harbour area**, large stretch of heaps of unsegregated solid wastes was seen and no facility for solid waste disposal has been provided. Wastewater from areas in five wards were also not treated and the same discharged into the sea through gutter in harbour.

6) In **Pallithottam Road**, the solid wastes was seen disposed along the banks of Kollam thodu (TS Canal). There was no fencing provided along the banks of Kollam thodu for

preventing throwing of wastes from the road.

Please report the details of existing waste management facilities with their status of operation and proposed projects with time line for implementation for rectifying the issues mentioned above.

Yours faithfully,

MEMBER SECRETARY

Copy To:

1. The Chief Environmental Engineer- Regional Office, Trivandrum Please conduct a meeting and submit report
2. The Environmental Engineer- District Office Kollam
3. The EE3, Head office

Signed by

Sheela A M

Date: 27-08-2024 22:13:43



LSGI Name	Lifting Date	Lifting Time	Item Type	Quantity
KERALA STATE COSTAL AREA DEVELOPMENT CORPORATION	06-06-2024	11 TO 2	Rejects	20350
KERALA STATE COSTAL AREA DEVELOPMENT CORPORATION	06-06-2024	2 TO 12	Rejects	19910
KERALA STATE COSTAL AREA DEVELOPMENT CORPORATION	11-06-2024	10 TO 2	Rejects	18810
KERALA STATE COSTAL AREA DEVELOPMENT CORPORATION	11-06-2024	3 TO 5	Rejects	20210
KERALA STATE COASTAL AREA DEVELOPMENT CORPORATION	12-08-2024	10 TO 8	Rejects	22730
KERALA STATE COASTAL AREA DEVELOPMENT CORPORATION	12-08-2024	10 TO 8	Rejects	21840

**TOTAL 123850**

ജൂൺ ഓഗസ്റ്റ് മാസങ്ങളിലാണ് ആദ്യമായി അവിടെ നിന്നും മാലിന്യങ്ങൾ നീക്കം ചെയ്തത് . TIFFOT PVT LTD എന്ന ഏജൻസി ആണ് മാലിന്യങ്ങൾ കൊണ്ട് പോയത്. ശേഖരിച്ച എല്ലാ മാലിന്യങ്ങളും സിമന്റ് ഫാക്ടറിയിലേക്ക് കൊണ്ട് പോയിട്ടുണ്ട്.

Registered Office : TC-29/1732, Second Floor, State Municipal House,

Vazhuthacaud, Trivandrum - 10, Kerala

CIN : U90000KL2013SGC035624

Phone : 0471-2724600 || Website : [www.cleankeralacompany.com](http://www.cleankeralacompany.com)

Email : [cleankeralacompany@gmail.com](mailto:cleankeralacompany@gmail.com) | [info@cleankeralacompany.com](mailto:info@cleankeralacompany.com)

**TRANSLATION ENGLISH:**

LSGI Name	Lifting Date	Lifting Time	Item Type	Quantity
KERALA STATE COSTAL AREA DEVELOPMENT CORPORATION	06-06-2024	11 TO 2	Rejects	20350
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KERALA STATE COASTAL AREA DEVELOPMENT CORPORATION	12-08-2024	10 TO 8	Rejects	21840
<b>TOTAL</b>				<b>123850</b>

Waste was removed from the area in the months of June and August. TIFFOT PVT LTD was the agency which has collected the waste. All collected waste has been transported to cement factory