

**BEFORE THE NATIONAL GREEN TRIBUNAL  
(SOUTHERN ZONE) CHENNAI**

**ORIGINAL APPLICATION No. 34 OF 2024  
(Earlier O.A. No. 607/2023 (PB))**

**In the matter of:**

Tribunal on its own motion SUO MOTU based  
on the News Item in The New Indian Express  
Dt. 14.09.2023 titled **“Ramakkal lake in TN  
polluted & emits foul smell residents demand rejuvenation”**

..... Applicant (s)

Versus

Central Pollution Control Board  
Rep. by its Regional Director,  
Chennai and Others.

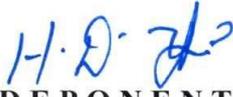
.....Respondent(s)

**INDEX**

S. No.	Particulars	Page No.
1.	Reply Affidavit filed on behalf of Central Pollution Control Board (CPCB), impleaded as Respondent No. 1	1 - 6
2	Annexure - I: Copy of the Committee Report submitted to Hon'ble Tribunal by District Collector, Dharmapuri.	7-38

**Place: Chennai**

**Date: 14.05.2024**

  
**DEPONENT**

**H.D. VARALAXMI**, M.Tech  
Regional Director  
CENTRAL POLLUTION CONTROL BOARD  
(MoEF & CC, Govt of India)  
Regional Directorate (Chennai)  
2nd Floor, 77-A, South Avenue Road,  
Ambattur Industrial Estate, Chennai - 600 058



**BEFORE THE NATIONAL GREEN TRIBUNAL  
(SOUTHERN ZONE) CHENNAI**

**ORIGINAL APPLICATION No. 34 OF 2024  
(Earlier O.A. No. 607/2023 (PB))**

**In the matter of:**

Tribunal on its own motion SUO MOTU based  
on the News Item in The New Indian Express  
Dt. 14.09.2023 titled **“Ramakkal lake in TN  
polluted & emits foul smell residents demand  
rejuvenation”**

..... Applicant (s)

Versus

Central Pollution Control Board  
Rep. by its Regional Director,  
Chennai and Ors.

.....Respondent(s)

**REPLY AFFIDAVIT FILED ON BEHALF OF RESPONDENT NO. 1,  
CENTRAL POLLUTION CONTROL BOARD**

I, H. D. Varalaxmi, D/o Shri H.S. Devaiah, Hindu, aged about 55 years currently working as Scientist ‘E’ in Central Pollution Control Board, Regional Directorate-Chennai, 2<sup>nd</sup> Floor, 77-A, Ambattur Industrial Estate, Chennai – 600 058, do hereby solemnly affirm, declare on oath and sincerely state as under: -

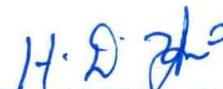
1. That it is humbly submitted that I am presently working as Scientist ‘E’ & holding charge of Regional Director (Chennai), Central Pollution Control Board (hereafter referred to as “CPCB”) have made myself acquainted with the facts and circumstances of the instant case due to the official capacity as mentioned above and on the basis of available records, I am well versed with the facts and circumstances of the matter and as such competent & authorised to submit this reply on behalf of Respondent No. 1.



**H.D. VARALAXMI**, M.Tech  
Regional Director  
CENTRAL POLLUTION CONTROL BOARD  
(MoEF & CC. Govt of India)  
Regional Directorate (Chennai)  
2nd Floor, 77-A, South Avenue Road,  
Ambattur Industrial Estate, Chennai - 600 058

2. That the Original Application No. 607/2023 has been registered on suo moto basis based on the news item titled "Ramakkal lake in TN polluted & emits foul smell residents demand rejuvenation" which had appeared in "The New Indian Express" on 14.09.2023 in the Hon'ble Tribunal, Principal Bench, Delhi and the said OA was transferred to Chennai Bench vide order dated 09.10.2023. Further the case was renumbered as OA NO. 34/2024 in the Southern Zone, Chennai.
3. That CPCB is a statutory Board which has been constituted under Section 3 of The Water (Prevention and Control of Pollution) Act, 1974. It performs the functions assigned to it under The Water (Prevention and Control of Pollution) Act, 1974 (hereinafter referred to as Water Act, 1974), The Air (Prevention and Control of Pollution) Act, 1981 (hereinafter referred to as Air Act, 1981) and The Environment (Protection) Act, 1986.
4. That the Hon'ble Tribunal vide order dated 09.10.2023 directed as follows:  
*"Paras 3 & 4 - hence, at this stage, we deem it proper to constitute a joint committee comprising of the nominee of the Regional Director, CPCB; Member Secretary, State PCB; Director, State Development Authority and the concerned District Magistrate. The District Magistrate will act as a coordinating officer. The joint committee will visit the site and ascertain the status of pollution in the Ramakkal Lake and will submit the action taken report".*
5. That it is humbly submitted that Regional Director, Chennai, CPCB is one of the committee member and the joint committee visited the site on 01.03.2024. During visit the committee took bird eye view of the surrounding areas of lake, activities involved around the lake and the samples were taken from the drains which are carrying the sewage and joining the lake and also taken the samples from different points of lake to verify the quality of lake water. The Facts, Conclusions and Suggestions of the joint committee are as below:



  
**H.D. VARALAXMI**, M.Tech  
 Regional Director  
 CENTRAL POLLUTION CONTROL BOARD  
 (MoEF & CC. Govt. of India)  
 Regional Directorate (Chennai)  
 2nd Floor, 77-A, South Avenue Road,  
 Ambattur Industrial Estate, Chennai - 600 058

**Facts & Conclusions based on the field observations and analysis of samples taken by the Committee:**

- (i) The surplus of sogathur lake through feeder channel reach the Ramakkal lake during rainy seasons only.
- (ii) All the drains joining the Ramakkal lake predominantly carries the sewage from the nearby habitations.
- (iii) Presence of Eutrophication and heavy Algae growth noticed in the entire lake water.
- (iv) Fencing provided only to the part of Ramakkal Lake boundary and the same was found to be in damaged condition.
- (v) The solid wastes are disposed in the banks of the Ramakkal Lake at Tirupathur road junction and Harichandran Burial Ground.
- (vi) Micro Compost Centre (MCC) is located in the bed of Ramakkal lake and solid wastes are disposed in haphazard manner outside the MCC.
- (vii) As per the analysis reports of samples taken inside the lake, the presence of Total Coliform and Fecal Coliform confirms the discharge of Domestic sewage into Ramakkal Lake. However, the concentration of Boron (<0.002mg/L), Sodium Absorption Ratio (SAR) (4.02-4.39) are found well within the limit of irrigation water quality.
- (viii) BOD of the sewage flowing through drain ranges between 120 - 280 mg/L. Due to natural oxidation, the average BOD of concentration 76.4 mg/l and 46.5 mg/L were observed after confluence and inside the Lake respectively.
- (ix) However, the average BOD (46.5 mg/l) inside the Lake water indicates that the quality of lake water is not meeting designated best use Water quality criteria of CPCB classification and confirms the accumulation of domestic sewage in the lake.

**Based on the above facts, it is concluded that**

- a. The domestic sewage from the nearby habitation is predominantly flows into the drains which joins the Ramakkal Lake.
- b. As per the analysis report, presence of total coliform, fecal coliform and BOD confirms the drain carrying untreated sewage into the Ramakkal Lake.



17.0.20  
**H.D. VARALAXMI**, M.Tech  
 Regional Director  
 CENTRAL POLLUTION CONTROL BOARD  
 (MoEF & CC, Govt of India)  
 Regional Directorate (Chennai)  
 2nd Floor, 77-A, South Avenue Road,  
 Ambattur Industrial Estate, Chennai - 600 058

- c. The accumulation of solid waste in the bank of the Ramakkal lake & the draining channels and water weeds in the Ramakkal Lake confirms the poor maintenance and least importance given to water body.
- d. The disposal of sewage and solid waste in the bank of Ramakkal lake leads to odour nuisance.
- e. The average BOD concentration (46.5 mg/l) in the Lake water indicates that the quality of lake water is not meeting any class of designated best use Water quality criteria of CPCB classification and confirms the accumulation of domestic sewage in the lake.

### **Suggestion of Committee to protect the water quality of Ramakkal Lake:**

To protect water quality of Ramakkal Lake, it is suggested to take following measures.\_

- Required to delineate the water tank area and steps to be taken to construct proper bund with fence wherever necessary, to protect the water body from human intervention to serve the purpose of improving ground water in the surrounding area as well as to meet the irrigation water demand of the nearby villages.
- Municipal authority may be directed to provide Under Ground Drainage system to collect all domestic sewage/sullage of Dharmapuri Municipality and to install Sewage Treatment Plant to treat the same and not to allow any discharge of domestic sewage/sullage into Ramakkal Lake.
- Panchayat Union authority may be directed to collect all domestic sewage/sullage generated from the habitation located near Ramakkal Lake and to treat the same and shall not allow any discharge of domestic sewage/sullage into Ramakkal Lake.
- The concerned local body shall ensure proper collection of solid waste from residential and commercial areas in their jurisdiction and process it as per the Solid Waste Management Rules,2016 and not to let any public or local body to throw any solid wastes / garbage into Ramakkal lake or any nearby water bodies.



  
**H.D. VARALAXMI, M.Tech**  
 Regional Director  
 CENTRAL POLLUTION CONTROL BOARD  
 (MoEF & CC, Govt of India)  
 Regional Directorate (Chennai)  
 2nd Floor, 77-A, South Avenue Road,  
 Ambattur Industrial Estate, Chennai - 600 058

- Municipality Authority may be directed to process the Municipal Solid Waste inside the shed of MCC at Harichandran burial ground and shall not segregate, store and dispose the same outside the MCC i.e Bed of Ramakkal Lake
  - Municipality Authority may be directed to explore the possibility of relocation of MCC constructed at the lake bed at Harichandran burial ground and proper storage facility to collect, segregate, store and dispose the Municipal Solid Waste inside the MCC.
  - Municipality Authority may be directed to revamp the existing filter bed and to provide new filter bed in all drains joining the Ramakkal Lake to filter/screen the rainwater/surface water runoff.
  - Periodical maintenance of water tank and channels shall be carried out by removing silt and water weeds from the lake so as to increase water storage capacity of Lake.
6. The committee report submitted to Hon'ble Tribunal by District Collector, Dharmapuri is attached as **Annexure I** for ready reference.
7. This answering Respondent further craves leave of this Hon'ble Tribunal to file further reply, if required, in future.
8. That this answering Respondent, CPCB, shall abide by any order or directions passed by the Hon'ble Tribunal.



H.D. Varalaxmi

**DEPONENT**  
**H.D. VARALAXMI, M.Tech**  
Regional Director  
CENTRAL POLLUTION CONTROL BOARD  
(MoEF & CC, Govt of India)  
Regional Directorate (Chennai)  
2nd Floor, 77-A, South Avenue Road,  
Ambattur Industrial Estate, Chennai - 600 058

**VERIFICATION**

I, H.D. Varalaxmi, the deponent do verify that the contents of this reply Affidavit are true and correct to the best of my knowledge and belief, based on the official records of the case and nothing has been concealed therein.

Signed and verified here at Chennai on this the 14<sup>th</sup> day of May, 2024.



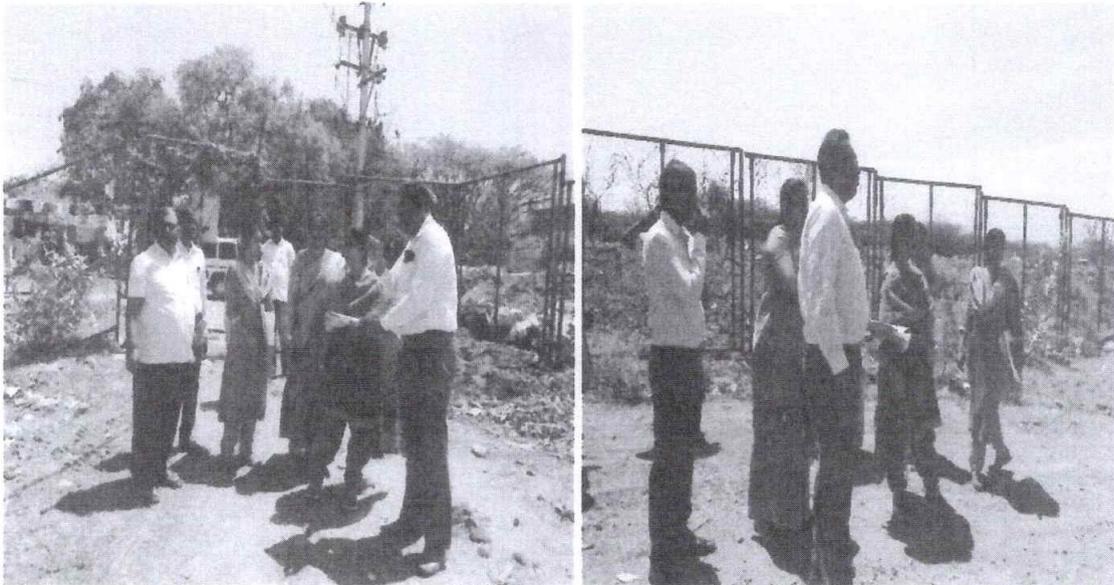
*H.D. Varalaxmi*  
**DEPONENT**  
**H.D. VARALAXMI, M.Tech**  
Regional Director  
CENTRAL POLLUTION CONTROL BOARD  
(MoEF & CC, Govt of India)  
Regional Directorate (Chennai)  
2nd Floor, 77-A, South Avenue Road,  
Ambattur Industrial Estate, Chennai - 600 058

*B. Sambanay*

**Counsel for the Respondent No.1**

**BEFORE**  
**THE HON'BLE NATIONAL GREEN TRIBUNAL**  
**SOUTHERN ZONE, CHENNAI**

**News item published in the Express News Service dated 14.09.2023 titled**  
**"Ramakkal Lake in TamilNadu polluted & emits foul smell residents**  
**demand rejuvenation"**



**Report of the Joint Committee on Status of Pollution in the Ramakkal**  
**Lake in the matter of O.A.No.34 of 2024 in the Hon'ble NGT (SZ)**  
**(Earlier O.A.No.607 of 2023 in the Hon'ble NGT (PB))**

**April, 2024**

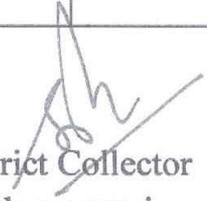
**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI**

Original Application No.34 of 2024 in the Hon'ble NGT (SZ)  
(Earlier O.A.No.607 of 2023 in the Hon'ble NGT (PB))

**In ref: News Item published in Express News Service dated 14.09.2023  
titled "Ramakkal Lake in TN polluted & emits foul smell residents demand  
rejuvenation"**

**INDEX**

S.No	Particulars	Page.No
01	Report of the Joint Committee comprising representatives of Central Pollution Control Board, State Pollution Control Board, District Magistrate, Municipal Administration and Water Resource Department.	01-26
02	Annexure-I : Copy of the Hon'ble NGT (PB) order dated 09.10.2023	27-28
03	Annexure-II : Copy of Joint Committee constituted by the RDO, Dharmapuri	29-30

  
District Collector  
Dharmapuri

Date :  
Place: Dharmapuri

**REPORT OF JOINT COMMITTEE ON STATUS OF POLLUTION IN THE RAMAKKAL LAKE IN THE MATTER OF ORIGINAL APPLICATION NO. 607 OF 2023 (PB) RE-NUMBERED AS O.A.NO.34 OF 2024 (SZ) “NEWS REPORT AS APPEARING IN EXPRESS NEWS SERVICE DATED 14.09.2023 TITLED “RAMAKKAL LAKE IN TN POLLUTED & EMITS FOUL SMELL, RESIDENTS DEMAND REJUVENATION”.**

**1.0 Preamble**

The Hon’ble National Green Tribunal (Principal Bench), New Delhi had registered a Suo Motu Original Application No. 607 of 2023 based on a news item published in the New Indian Express dated 14.09.2023 titled “Ramakkal lake in TN polluted & emits foul smell, residents demand rejuvenation” and passed an order dated 09th October, 2023 (Annexure-I) inter alia that;

*“1. This original application is registered on the basis of a news item published in the New Indian Express dated 14.09.2023 titled “Ramakkal lake in TN polluted & emits foul smell, residents demand rejuvenation”. The news item discloses that the pollution level has arisen in the Ramakkal Lake with a foul smell causing distress to the nearby residents. The view expressed in the news item is that Ramakkal Lake is the most prosperous lake in the district but the water is extremely polluted with sewage water draining into the lake. The news item also discloses that a filtration unit has been set up but filter beds have not been functioning for the last eight months resulting in increased pollution level.*

*2. The Learned Counsel for CPCB has also informed that the filtration unit is not working as a result of which the pollution in the lake has increased.*

*3. Considering the grievance raised in the news item, we are of the view that substantial issue relating to the environment is involved, hence, at this stage, we deem it proper to constitute a joint committee comprising of the nominee of the Regional Director, CPCB; Member Secretary, State PCB; Director, State Development Authority and the concerned District Magistrate. The District Magistrate will act as a coordinating officer.*

*4. The joint committee will visit the site and ascertain the status of pollution in the Ramakkal Lake and will submit the action taken report before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.*

*5. Let the action taken report be submitted before the concerned Bench of the Tribunal. Since, the matter relates to the Southern Zone Bench of the Tribunal, therefore, it is transferred to the said Bench.*

*6. The original application is accordingly disposed of with a direction of re-registration at the Southern Zone Bench, Chennai.”*

In compliance of above mentioned order, the District Collector, Dharmapuri has nominated the Revenue Divisional Officer, Dharmapuri as one of the committee member as well as to act as a Coordinating Officer for the Joint Committee vide Proc dated 14.11.2023. Accordingly, the Revenue Divisional Officer, Dharmapuri constituted a Joint Committee with the following officials as nominated by the Regional Director, CPCB, Member Secretary, State PCB and District Magistrate vide Proc dated 19.02.2024 (Annexure-II).

Sl.No	Name and designation of the Officer	Committee
1.	Tmt.R.Gayathri, Revenue Divisional Officer, Dharmapuri.	Member
2.	Smt. H.D. Varalaxmi, Regional Director, Central Pollution Control Board, Chennai	Member
3.	Er. A.Nithyalakshmi, District Environmental Engineer, Tamilnadu Pollution Control Board, Dharmapuri	Member
4.	Er. S.Senthil Kumar, Executive Engineer, Water Resources Division, Pennaiyar Basin Division, Dharmapuri	Member
5.	Thiru.S.Bhuvaneshwaran, Commissioner, Dharmapuri Municipality, Dharmapuri.	Member

The committee mutually decided to visit the area in question which is a subject matter in O.A. 607 of 2023 on March 01, 2024.

## **2.0 Meeting and Planning**

The committee met on 01.03.2024 at the office of District Environmental Engineer, Tamil Nadu Pollution Control Board (TNPCB), Dharmapuri for Pre-discussion. The DEE, TNPCB, Dharmapuri has welcomed the committee and introduced all the members and given a brief introduction about the case

including the objective of Joint Committee inspection. The committee also discussed the work plan in compliance of the Hon'ble NGT order.

During the Joint Committee inspection, the following officials were also present.

<b>Officials of TNPCB, Dharmapuri</b>	<b>Officials of Municipality, Dharmapuri</b>
1. Er.B.Lavanya Assistant Engineer 2. T.K.Ashmita Environmental Scientist	1. S. Buvaneswari Municipal Engineer 2. Thiru.G.Susindren Sanitary Inspector 3. Thiru.P.Ramanachandran Sanitary Inspector 4. Thiru.Chandrakumar Sanitary Inspector
<b>Officials of WRD, Dharmapuri</b>	<b>Revenue Department, Dharmapuri.</b>
1. S.Babu Assistant Executive Engineer 2. P Malathi Assistant Engineer	1. P.Jayaselvan Tahsildhar, Dharmapuri. 2. A.Jayaprasath Revenue Inspector, Dharmapuri 3. P. Saravanan VAO, Hale Dharmapuri

### **3.0 Brief description of Ramakkal Lake:**

The Ramakkal Lake is situated in Hale Dharmapuri Village in Dharmapuri Taluk of Dharmapuri District. This Tank is classified under System tank and surplus water of **Sogathur Lake** (Located at the Sogathur village, Dharmapuri Taluk & District comes under Kambainallur Sub-Basin and Pennaiyar Basin. Catchment area of sogathur lake is about 21.03 Square Kilometer. Having a bund of length 1290 m, four numbers of sluices and two numbers of weirs with an Ayacut of 347.99 acres. Discharge is about 3397 cusecs and capacity of the tank is 36.48 MCFT or 1.033MCM) and rainwater from Dharmapuri town is the main source of water inflow to the Ramakkal Lake and its natural free catchment area is about 14.01 Square Kilometer. This tank is having a bund of length 1050 m, with three numbers of sluices and two numbers of surplus weirs. This tank has an Ayacut of 107.24 acres. The discharge from the Ramakkal Lake is about 4096 cusecs and capacity of the tank is 33.51 MCFT or 0.949 MCM.



**Map no. 1 : Google earth map showing Ramakkal Lake**

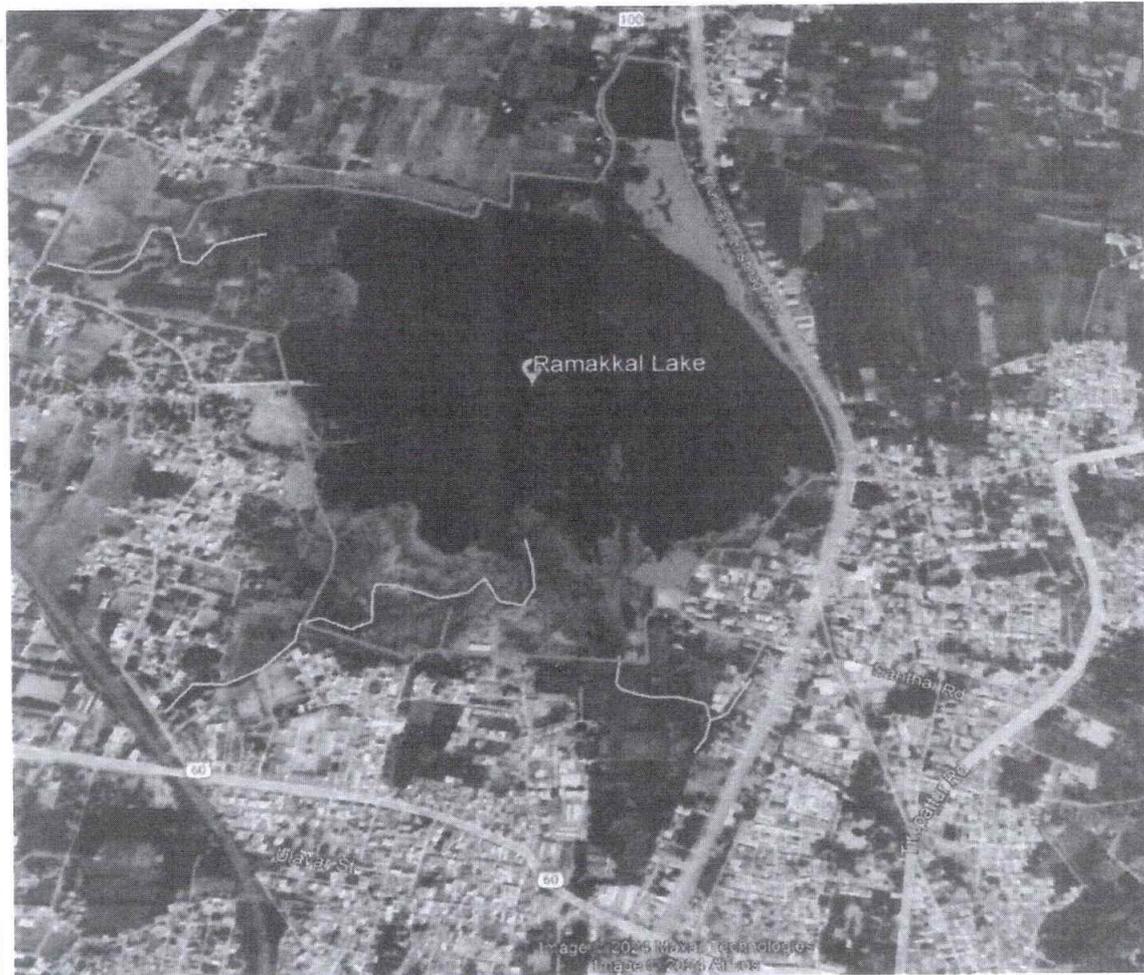
**Hydraulic Particulars of Ramakkal Lake is tabulated below;**

Latitude & Longitude	12°8'39.2"N 78°9'29.95"E
Ayacut Area	107.24 Ha or 264.99 Acres
Basin	Pennaiyar
Sub Basin	Kambainallur
Catchment area	14.01 Sq.Km
Water Spread Area	81.78 Ha or 202.08 Ac
Capacity of the tank at F.T.L	33.51 Mcft or 0.949 MCM
No. of Weir	2 nos
Weir Length	30.50m , 25.60m
Number of sluices	3
Standards of Tank	
Full Tank Level (FTL)	447.780 m
Maximum Water level (MWL)	448.920 m
Top Bund level(TBL)	449.830 m
Storage Depth	2.355 m
Bund Length	1050 m
Discharge	4096 Cusec



**Map no 2 : Showing diagram of Sogathur lake and feeder channel to Ramakkal Lake**

The surplus water of sogathur lake is the source to Ramakkal lake and it is the only feeder line to Ramakkal Lake. Ramakkal lake gets water through this feeder channel during rainy season only. Agricultural activities were carried out nearby feeder channel of Ramakkal lake occasionally. Also sewage/sullage from nearby habitation A.Reddihalli Village is flowing into the feeder channel of the Ramakkal lake. Other than this, four drains were also joining the Ramakkal Lake carrying domestic sewage from habitations such as Madhikonpalayam, Vattaravalarchi Colony-9th ward, Kumarasampettai of Dharmapuri Municipality and Savulupatti & A.Reddihalli Village of Dharmapuri Panchayat Union. The surplus of Ramakkal Lake flows into the Sanathkumar River, which ultimately joins the River Thennpennaiyaru.



*Map no. 3 : Google earth map showing the inflow of drains into Ramakkal Lake*

#### **4.0 Inspection and Observation of the Committee on Ramakkal Lake:**

The Committee had inspected the site around the Ramakkal Lake starting from all drain joining the Lake & the feeder inlet and outlet sluice of the Lake and the following field observations were made;

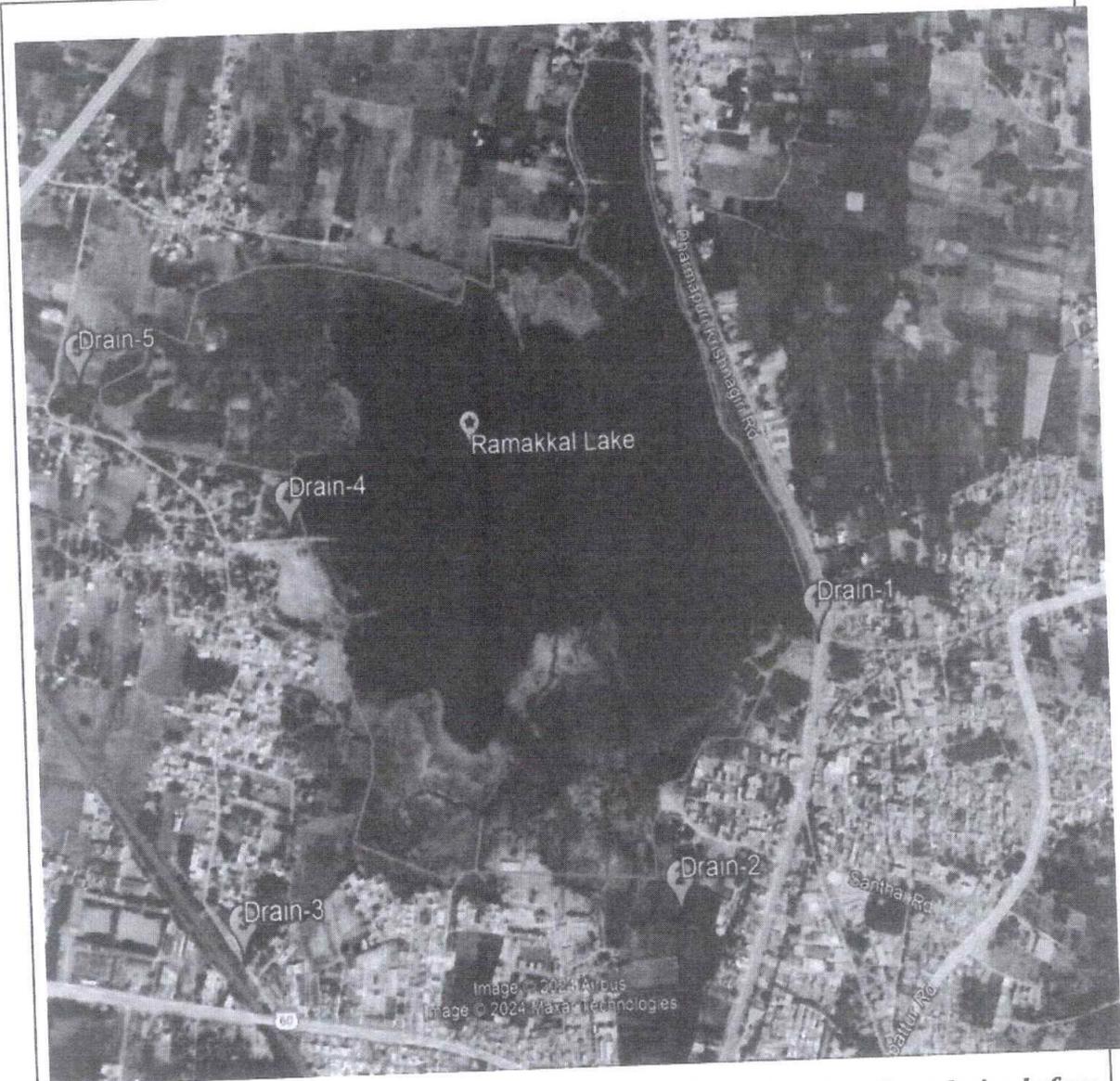
- ❖ Fencing along the bunds of Ramakkal Lake was provided about 30 m only near park area, in which some are found to be in damaged condition. The remaining banks of Ramakkal Lake was not provided with any fencing arrangements
- ❖ Domestic Sewage from the nearby habitations such as Tirupathur road junction, Vattara valarchi colony-9<sup>th</sup> ward, Kumarasamypettai-savulupatti road, A.Reddihalli village (near burial ground) and A,Reddihalli village (near

mariamman temple) were found draining into Ramakkal lake through 5 channels which includes the sogathur surplus channel.

- ❖ The physical appearance and odour of drains into Ramakkal lake confirms the presence of domestic sewage.
- ❖ Solid wastes were found dumped on the banks of Ramakkal Lake at the Tirupathur road junction and Harichandran burial ground.
- ❖ Filter bed structures in the channels at Tirupathur road junction and Harichandran burial ground joining the Ramakkal Lake are not in operable condition and not maintained. The Municipality authorities had informed that there are no records maintained for the same.
- ❖ There is a Micro Composting Centre functioning in Ramakkal Lake Bed at Harichandran burial ground to manage the Municipal waste from 9 to 16 wards of Dharmapuri Municipality. The dry solid wastes are not properly stored inside the closed shed of Micro Composting Centre and the same was stored/disposed near Lake bed outside the Micro Composting Centre in haphazard manner.
- ❖ Improper disposal of Municipal Solid wastes on the banks of the Ramakkal Lake causes odour nuisance.
- ❖ Birds were found in the lake area which indicates the presence of fish in the Ramakkal Lake and the fishing activity is also being carried out in the Ramakkal Lake.
- ❖ There is no industrial activity as well as no industrial waste water discharged into the Ramakkal Lake.
- ❖ There is no surplus flow of water noticed in the surplus weir of the lake.

There are 14 water samples were collected in and around the Ramakkal Lake during joint committee inspection to verify the (a) quality of water in the drains joining Ramakkal Lake (b) quality of water after confluence of drains into Ramakkal Lake (c) the quality of water stored in the Ramakkal Lake.

**a). Samples taken from the drains before confluence into Ramakkal Lake**



***Map no. 4 : Google earth map showing the location of samples taken from drains before confluence into Ramakkal Lake***

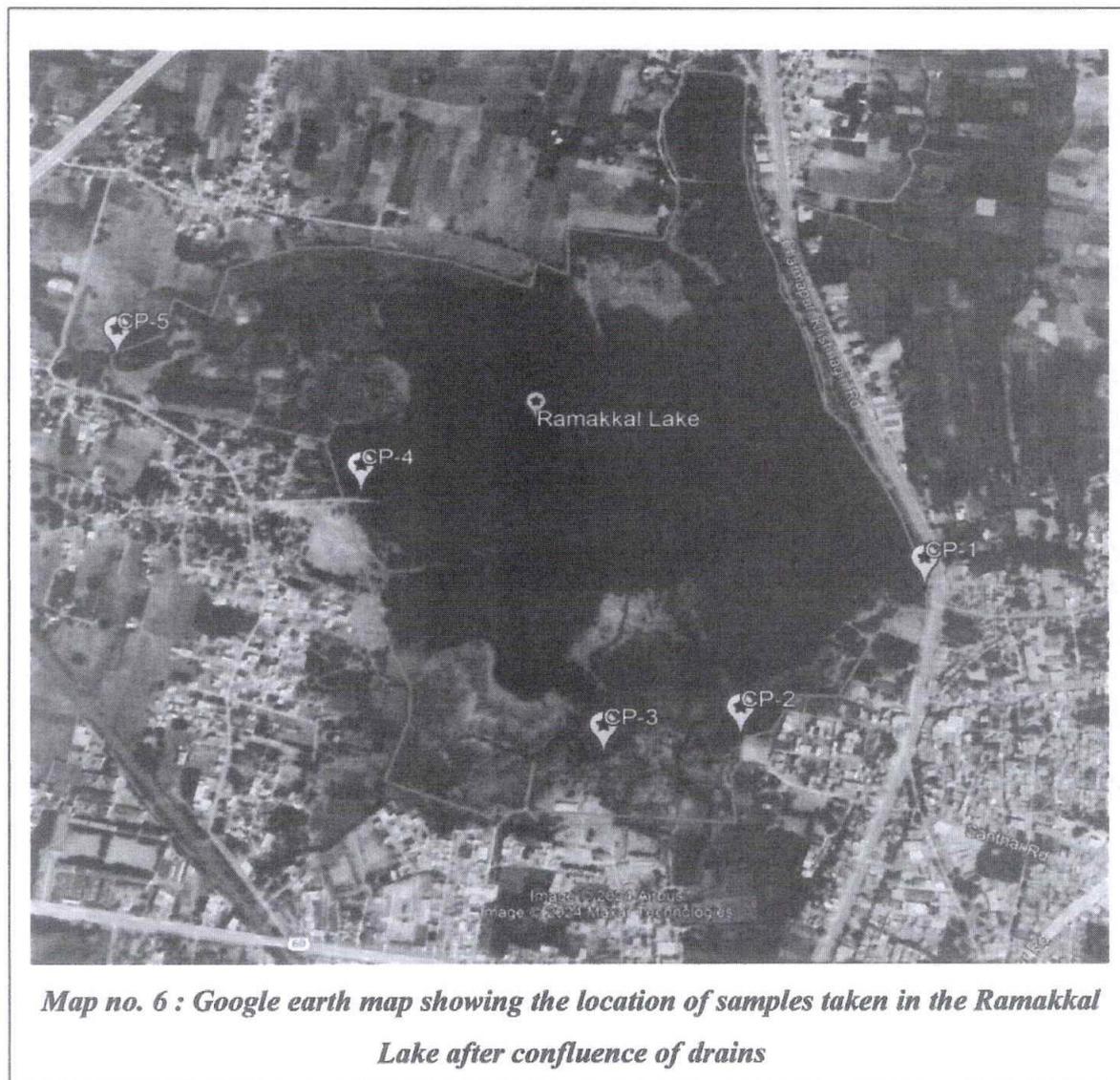
**Results and discussion on Report of Analysis of water samples.**

Sl. No	Parameters	Unit	Location of samples taken from the drains before confluence into Ramakkal Lake				
			Tirupathur Road Junction (Drain-1)	Vattara Valarchi Colony-9 <sup>th</sup> ward (Drain-2)	Kumara -samypettai, Sovulupatti road (Drain-3)	A.Reddihalli Village (near burial ground) (Drain-4)	A.Reddihalli Village (near mariamman Temple) (Drain-5)
1	pH at 25°C	Number	7.63	7.42	7.64	7.85	7.70
2	TSS at 103°C-105°C	mg/l	12	844	208	16	52
3	TDS at 108°C	mg/l	904	932	1924	1748	1572
4	Oil & Grease	mg/l	12	14	10	14	8
5	BOD (at 27°C for 3 days)	mg/l	210	280	120	150	130
6	COD	mg/l	560	720	336	360	304
7	Total Phosphate	mg/l	2.56	3.20	2.35	2.10	2.75
8	Total Nitrogen	mg/l	3.40	4.546	6.739	6.754	5.624
9	Fecal Coliform	MPN/100 ML	680	1100	2100	2200	1700
10	Total Coliform	MPN/100 ML	1200	3300	4700	3900	3200

From the above report of analysis, it is ascertained that the concentration of Total Dissolve Solids (TDS) ranges from 904 - 1924 mg/L, Oil & Grease ranges from 8 - 14 mg/L, BOD ranges from 120 - 280mg/L and COD ranges from 304 - 720 mg/L.

**Further, the presence of Total Coliform ranges from 1200 - 4700 MPN/100ml & Fecal Coliform ranges from 680 - 2200 MPN/100ml indicates that the drains carrying domestic sewage and confluences with the Ramakkal Lake.**

**b). Samples taken in the Ramakkal Lake after confluence of drains**



Sl. No	Parameters	unit	Location of samples taken in the Ramakkal Lake after confluence of drains				
			Tirupathur Road Junction (CP-1)	Vattara Valarchi Colony-9 <sup>th</sup> ward (CP-2)	Kumara -samypettai, Sovulupatti road (CP-3)	A.Reddihalli Village (near burial ground) (CP-4)	A.Reddihalli Village (near mariamman Temple) (CP-5)
1.	Conductivity at 25°C	µmhos/cm	1794	1589	3100	1970	2240
2.	pH at 25°C	Number	8.16	8.33	7.80	8.68	7.82
3.	TSS at 103°C – at 105°C	mg/l	32	120	120	12	20

Sl. No	Parameters	unit	Location of samples taken in the Ramakkal Lake after confluence of drains				
			Tirupathur Road Junction (CP-1)	Vattara Valarchi Colony-9 <sup>th</sup> ward (CP-2)	Kumara -samypettai, Sovulupatti road (CP-3)	A.Reddihalli Village (near burial ground) (CP-4)	A.Reddihalli Village (near mariamman Temple) (CP-5)
4.	TDS at 180°C	mg/l	1072	1064	1908	1572	1316
5.	BOD (at 27°C for 3 days)	mg/l	66	80	80	60	96
6.	COD	mg/l	336	592	256	280	208
7.	Dissolved Oxygen	mg/l	5.96	4.98	5.70	5.88	5.83
8.	Total Phosphate	mg/l	2.38	1.80	3.89	2.25	3.68
9.	Faecal Coliform	MPN/100 ML	21	11	11	12	11
10.	Total Coliform	MPN/100 ML	47	33	47	32	33
11.	SAR	mg/l	4.23	2.47	2.54	4.27	4.38
12.	Free Ammonia	mg/l	1.3664	1.3664	1.3664	0.6832	0.6832
13	Boron	mg/l	<0.002	<0.002	<0.002	<0.002	<0.002

The report of analysis of samples taken after confluence of the drain into Ramakkal Lake reveals that the concentration of TDS ranges from 1064 - 1908 mg/L, DO ranges from 4.98- 5.96 mg/L in spite of presence of BOD concentrations of 60 – 96 mg/L due to interference of Algal growth and Eutrophication.

**Total Coliform of 32 - 47 MPN/100ml, Fecal Coliform of 11 - 21 MPN/100ml, Free Ammonia of 1.3664 mg/L and BOD concentration more than 30 mg/L confirms the interference of domestic sewage.**

The concentration of Boron (<0.002 mg/) and Sodium Absorption Ratio (SAR) (2.47- 4.38 mg/L) are well within the irrigation water quality.

**c). Samples taken in the Ramakkal Lake (Away from the Confluence point)**



**Map no. 5 : Google earth map showing the location of Samples taken in the Ramakkal Lake (Away from the Confluence point)**

Sl. No	Parameters	unit	Location of samples taken in the Ramakkal Lake (Away from the Confluence point)			
			Location-1 Lat: 12.146736 Long: 78.156811	Location-2 Lat: 12.148171 Long: 78.162055	Location-3 Lat: 12.146596 Long: 78.162276	Location-4 Lat: 12.154754 Long: 78.160926
1	Conductivity at 25°C	µmhos/cm	1920	1920	1910	1806
2	pH at 25°C	Number	8.66	8.67	8.71	8.83
3	TSS at 103°C – at 105°C	mg/l	32	20	28	4
4	TDS at 180°C	mg/l	1132	1136	1100	1072
5	BOD (at 27°C for 3 days)	mg/l	54	40	50	42

Sl. No	Parameters	unit	Location of samples taken in the Ramakkal Lake (Away from the Confluence point)			
			Location-1 Lat: 12.146736 Long: 78.156811	Location-2 Lat: 12.148171 Long: 78.162055	Location-3 Lat: 12.146596 Long: 78.162276	Location-4 Lat: 12.154754 Long: 78.160926
6	COD	mg/l	304	384	360	304
7	Dissolved Oxygen	mg/l	6.28	6.30	6.29	7.10
8	Total Phosphate	mg/l	2.00	1.65	2.36	1.98
9	Faecal Coliform	MPN/100 ML	17	20	17	11
10	Total Coliform	MPN/100 ML	26	39	32	20
11	SAR	mg/l	4.24	4.18	4.02	4.39
12	Free Ammonia	mg/l	0.6832	0.6832	0.6832	0.6832
13	Boron	mg/l	<0.002	<0.002	<0.002	<0.002

The report of analysis of samples taken in the Ramakkal Lake (Away from the Confluence point) reveals that the concentration of pH ranges between 8.66-8.83 Numbers, TDS ranges from 1072 -1136 mg/L, DO ranges from 6.28 - 7.10 mg/L in spite presence of BOD concentrations of 40 - 54 mg/L due to interference of Algal growth and Eutrophication

Total Coliform of 20-39 MPN/100ml, Fecal Coliform ranges from 11-20 MPN/100ml and BOD concentration more than 30 mg/L in sample taken from lake (away from the confluence of drain) confirms the interference of domestic sewage causing Eutrophication and not meeting with the designated best use water quality criteria of Class A, B & C.

The concentration of Boron (<0.002 mg/) and Sodium Absorption Ratio (SAR) (4.02- 4.39 mg/L) are well within the irrigation water quality.

### **5.0 Sewage Management by the Dharmapuri Municipality**

The Population of Dharmapuri Municipality as per the 2011 census is 68619 Nos. The municipality comprises of 24568 households and 7468 commercial establishments in 33 wards of the Dharmapuri Municipality. The Municipality supplies 9.27 MLD of fresh water to the Dharmapuri Municipality and 80% of supplied water will be turned into sewage. i.e. 7.416 MLD.

As informed by the Municipal officials, the sewage generated from 19 wards of Dharmapuri Municipality is treated in the common STP having capacity of 4.86 MLD. The average quantity of sewage treated in the STP is 3.96 MLD.

The sewage from the remaining 14 wards are proposed to be treated in the Common STP - Phase II, yet to be established, for which the tender has been called on 13.02.2024 under TNCRUDP scheme.

As of now, the domestic sewage from the remaining 14 wards were discharged into the water bodies and this lake is one of the main receiver of those domestic sewage

### **6.0 Solid Waste Management by Dharmapuri Municipality**

Dharmapuri Municipality is having area of 11.65 Sq.Km with 33 wards comprises of 24568 households and 7468 commercial establishments. The total solid waste generated from the Dharmapuri Municipality is about 28 MT per day i.e, Dry waste-12 MT and Wet waste-16 MT.

As informed by the officials of Dharmapuri Municipality, the local body is carrying out 100 % door to door collection of Municipal Solid wastes, then segregates and disposes into the 04 No. of Micro Composting Centre at Manthikonpalyam, Sandaipettai Road, Pachiyamman Kovil Street and Harichandran Burial Ground. The capacity of each Micro Composting Centre (MCC) is about 4 MT per day.

The Wet waste collected from the Dharmapuri Municipality is composted in Micro Composting Centre and converted into Manure and sold to farmers.

The Dry wastes are divided two categories i.e resalable/recyclable and non-resalable/ non-recyclable.

The resale-able wastes such as cotton box, plastic covers, plastic packing items etc., are sold to local scrap vendors. The old clothes are sent to recyclers in Bangalore. The foam wastes from bed & pillow, lights & tubes, Glass bottles, Leather wastes, Plastic toys, of 350 Kg are stored in the Material Recovery Facility (MRF) at MCCs.

The non-resale-able/non-recyclable such as multilayer plastics etc., are sent for co incineration in Cement Kilns (M/s Ultra Tech, Ariyalur, M/s Dalmia, Trichy, M/s KSD Eco Auro LLP Pvt Ltd, Udumalaipettai, M/s Sri Bommu Industries, Coimbatore) periodically. From 05.08.2021 onwards, Municipality has disposed about 252 MT of wastes to the Cement Kilns.

Dharmapuri Municipality has its legacy waste at Thadangam area. Legacy wastes of 56000 Cum were removed through bio mining in first phase and in Second phase remaining 10000 Cum of legacy waste is under bio mining.

#### **7.0 Facts & Conclusions based on the field observations and analysis of samples taken by the Committee:**

- (i) The surplus of sogathur lake through feeder channel reach the Ramakkal lake during rainy seasons only.
- (ii) All the drains joining the Ramakkal lake predominantly carries the sewage from the nearby habitations.
- (iii) Presence of Eutrophication and heavy Algae growth noticed in the entire lake water.
- (iv) Fencing provided only to the part of Ramakkal Lake boundary and the same was found to be in damaged condition.

- (v) The solid wastes are disposed in the banks of the Ramakkal Lake at Tirupathur road junction and Harichandran Burial Ground.
- (vi) MCC is located in the bed of Ramakkal lake and solid wastes are disposed in haphazard manner outside the MCC.
- (vii) As per the analysis reports of samples taken inside the lake, the presence of Total Coliform and Fecal Coliform confirms the discharge of Domestic sewage into Ramakkal Lake. However, the concentration of Boron (<0.002mg/L), Sodium Absorption Ratio (SAR) (4.02-4.39) are found well within the limit of irrigation water quality.
- (viii) BOD of the sewage flowing through drain ranges between 120 - 280 mg/L. Due to natural oxidation, the average BOD of concentration 76.4 mg/l and 46.5 mg/L were observed after confluence and inside the Lake respectively.
- (ix) However, the average BOD (46.5 mg/l) inside the Lake water indicates that the quality of lake water is not meeting any class of designated best use Water quality criteria of CPCB classification and confirms the accumulation of domestic sewage in the lake.

**Based on the above facts, it is concluded that**

- (i) The domestic sewage from the nearby habitation is predominantly flows into the drains which joins the Ramakkal Lake.
- (ii) As per the analysis report, presence of total coliform, fecal coliform and BOD confirms the drain carrying untreated sewage inflow into the Ramakkal Lake.
- (iii) The accumulation of solid waste in the bank of the Ramakkal lake & the draining channels and water weeds in the Ramakkal Lake confirms the poor maintenance and least importance given to water body.
- (iv) The disposal of sewage and solid waste in the bank of Ramakkal lake leads to odour nuisance.

- (v) The average BOD concentration (46.5 mg/l) in the Lake water indicates that the quality of lake water is not meeting any class of designated best use Water quality criteria of CPCB classification and confirms the accumulation of domestic sewage in the lake.

#### **8.0 Suggestion of Committee to protect the water quality of Ramakkal Lake:**

To protect water quality of Ramakkal Lake, it is suggested to take following measures.

- Required to delineate the water tank area and steps to be taken to construct proper bund with fence wherever necessary, to protect the water body from human intervention to serve the purpose of improving ground water in the surrounding area as well as to meet the irrigation water demand of the nearby villages.
- Municipal authority may be directed to provide Under Ground Drainage system to collect all domestic sewage/sullage of Dharmapuri Municipality and to install Sewage Treatment Plant to treat the same and not to allow any discharge of domestic sewage/sullage into Ramakkal Lake.
- Panchayat Union authority may be directed to collect all domestic sewage/sullage generated from the habitation located near Ramakkal Lake and to treat the same and shall not allow any discharge of domestic sewage/sullage into Ramakkal Lake.
- The concerned local body shall ensure proper collection of solid waste from residential and commercial areas in their jurisdiction and process it as per the Solid Waste Management Rules,2016 and not to let any public or local body to throw any solid wastes / garbage into Ramakkal lake or any nearby water bodies.
- Municipality Authority may be directed to process the Municipal Solid Waste inside the shed of MCC at Harichandran burial ground and shall not

segregate, store and dispose the same outside the MCC i.e Bed of Ramakkal Lake

- Municipality Authority may be directed to explore the possibility of relocation of MCC constructed at the lake bed at Harichandran burial ground with proper storage facility to collect, segregate, store and dispose the Municipal Solid Waste inside the MCC.
- Municipality Authority may be directed to revamp the existing filter bed and to provide new filter bed in all drains joining the Ramakkal Lake to filter/screen the rainwater/surface water runoff.
- Periodical maintenance of water tank and channels shall be carried out by removing silt and water weeds from the lake so as to increase water storage capacity of Lake.

**Signature of Committee Members**



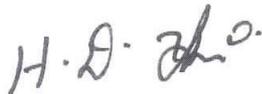
**(Thiru.S.Bhuvaneshwaran)**  
Commissioner, Dharmapuri  
Municipality, Dharmapuri.



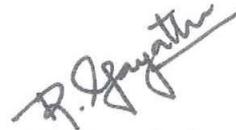
**(Er.S.Senthil Kumar)**  
EE, WRD, Upper Pennaiyar  
Basin Division,  
Dharmapuri.



**(Er.A.Nithyakshmi)**  
District Environmental  
Engineer, TNPCB,  
Dharmapuri



**(Tmt H.D.Varalaxmi)**  
Sc.E/RD, CPCB,  
Regional Director,  
Chennai.

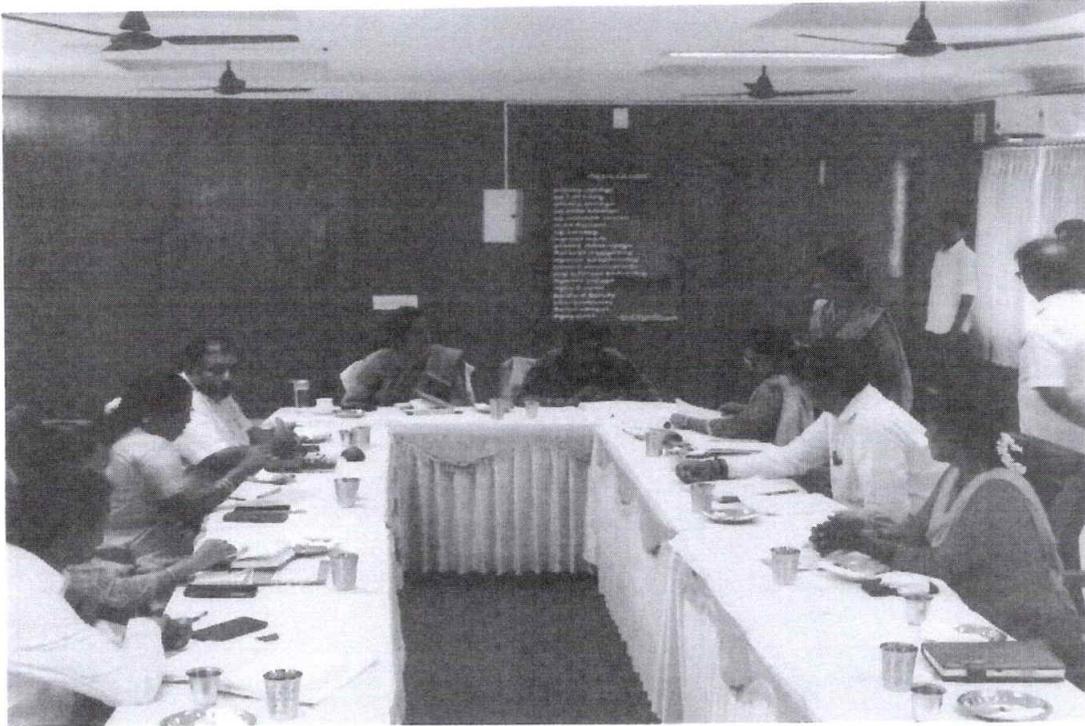


**(Tmt.R.Gayathri)**  
Revenue Divisional  
Officer, Dharmapuri.

**ANNEXURE-A**

**Photographs taken during Committee visit to Ramakkal Lake**

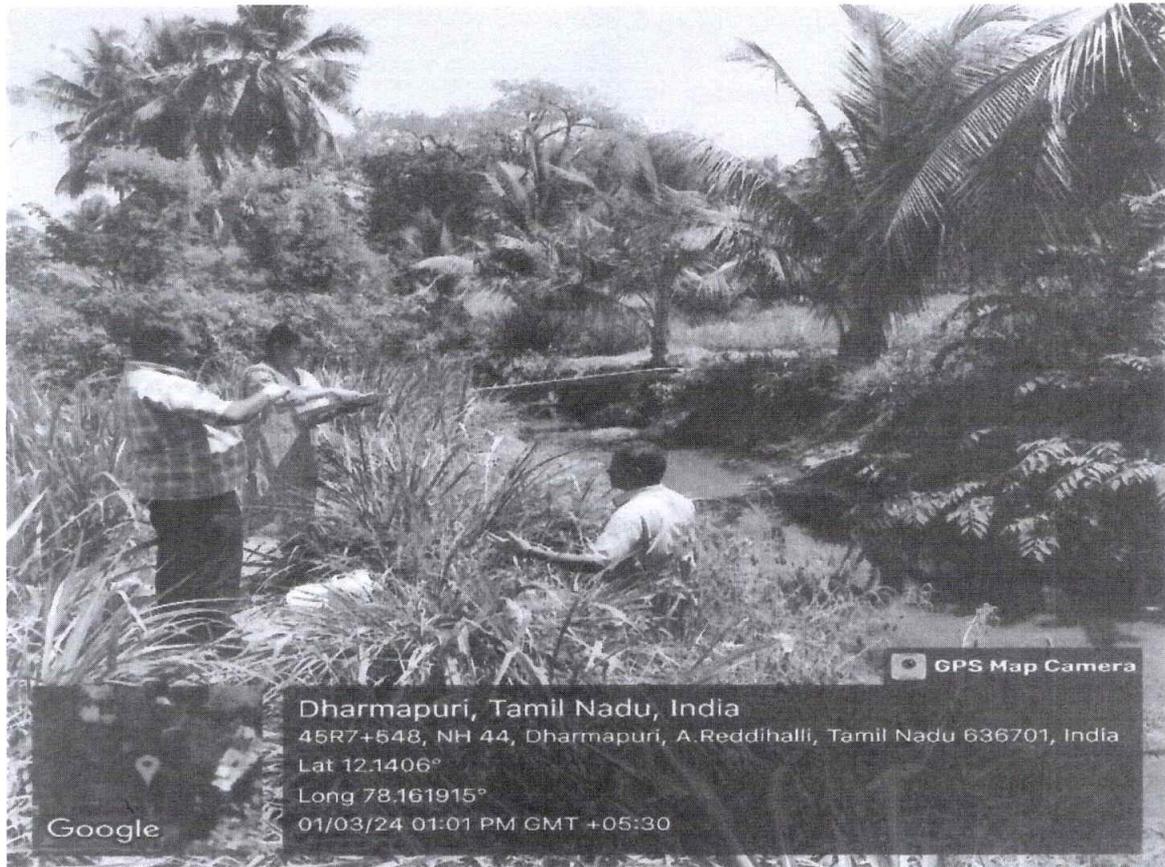
**Committee meeting at office of TNPCB, Dharmapuri**



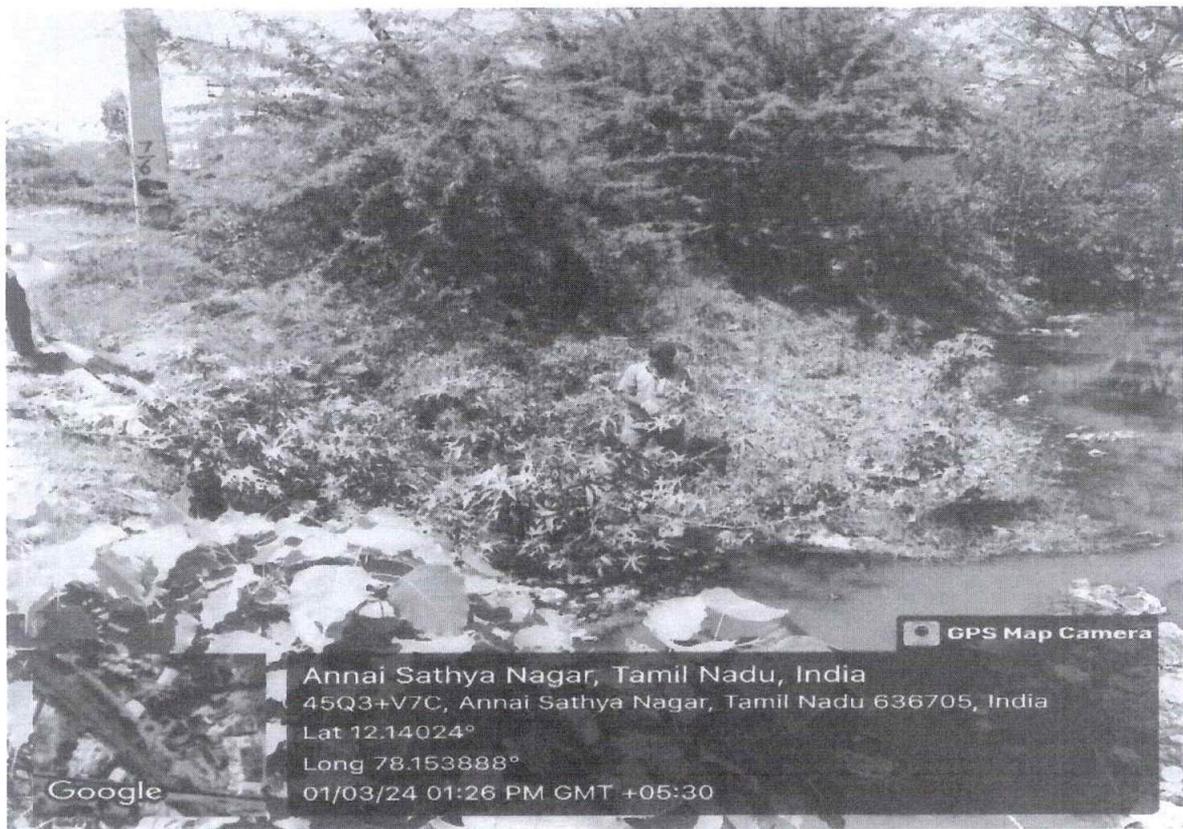
**Committee members field visit at Ramakkal Lake**



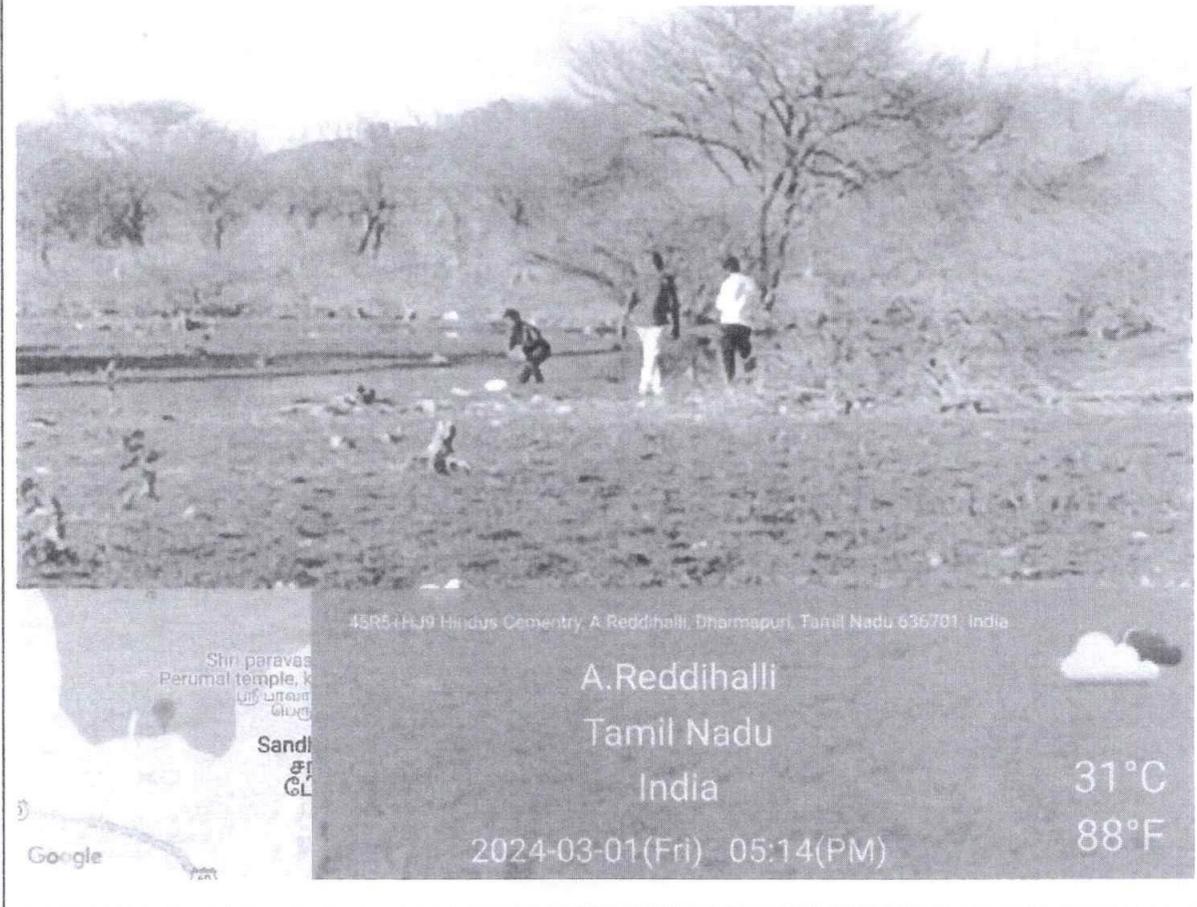
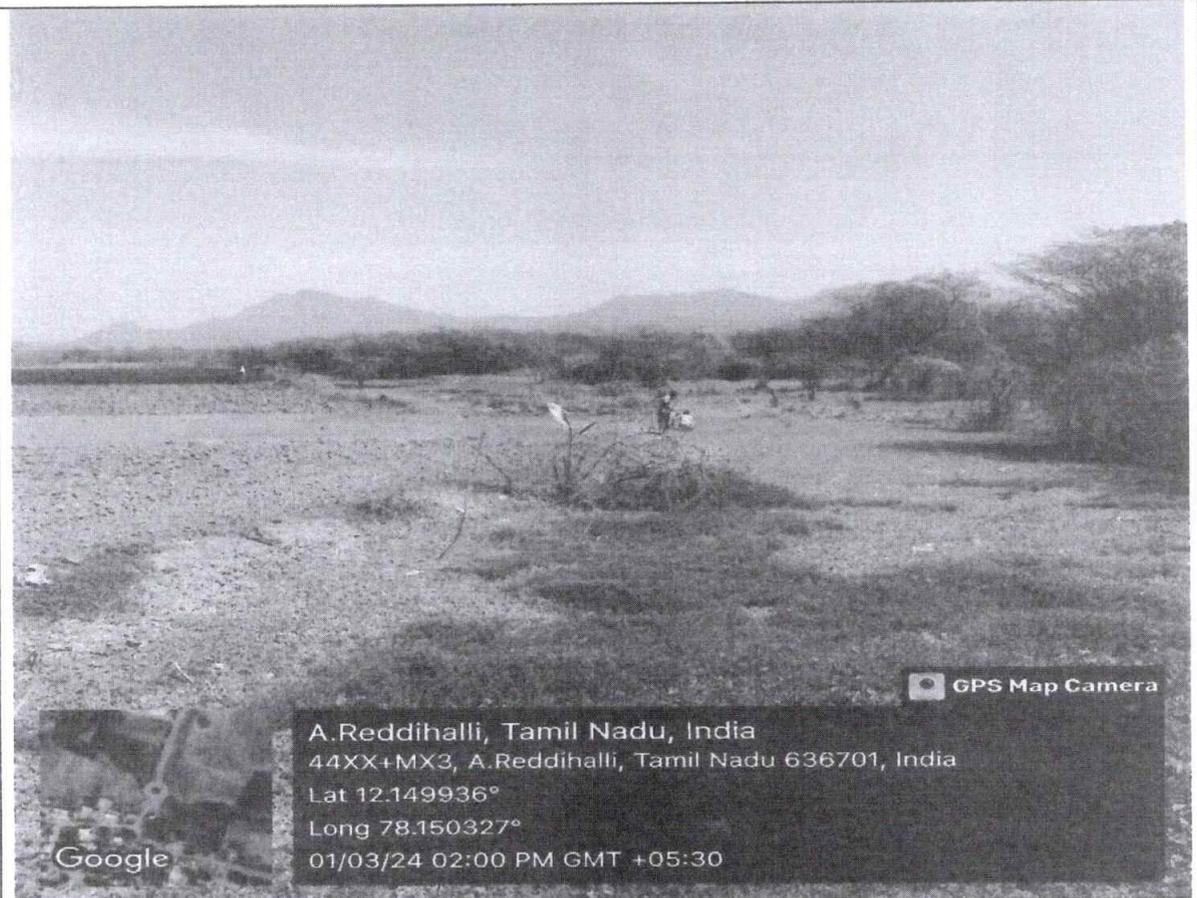
### Drains Joining Ramakkal Lake- Sample Collection



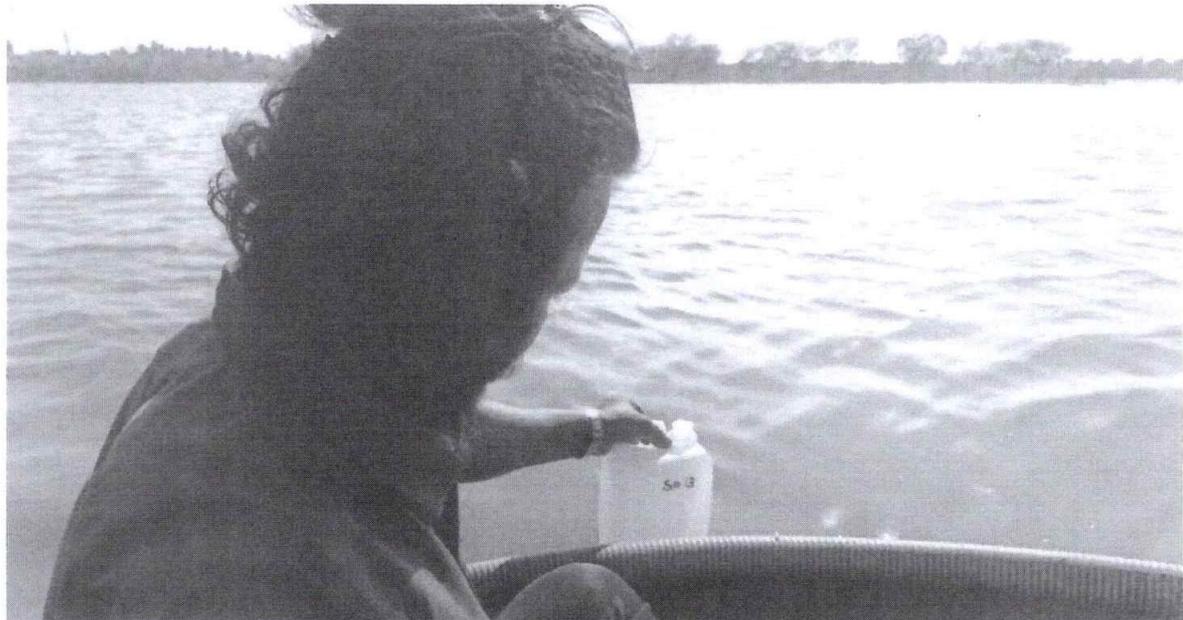
GPS Map Camera  
Dharmapuri, Tamil Nadu, India  
45R7+548, NH 44, Dharmapuri, A.Reddihalli, Tamil Nadu 636701, India  
Lat 12.1406°  
Long 78.161915°  
01/03/24 01:01 PM GMT +05:30  
Google



GPS Map Camera  
Annai Sathya Nagar, Tamil Nadu, India  
45Q3+V7C, Annai Sathya Nagar, Tamil Nadu 636705, India  
Lat 12.14024°  
Long 78.153888°  
01/03/24 01:26 PM GMT +05:30  
Google



**Sample collection inside the Ramakkal Lake**



45W6+M66 Ramakka yer, A.Reddihalli, Tamil Nadu 636701, India

A.Reddihalli  
Tamil Nadu  
India

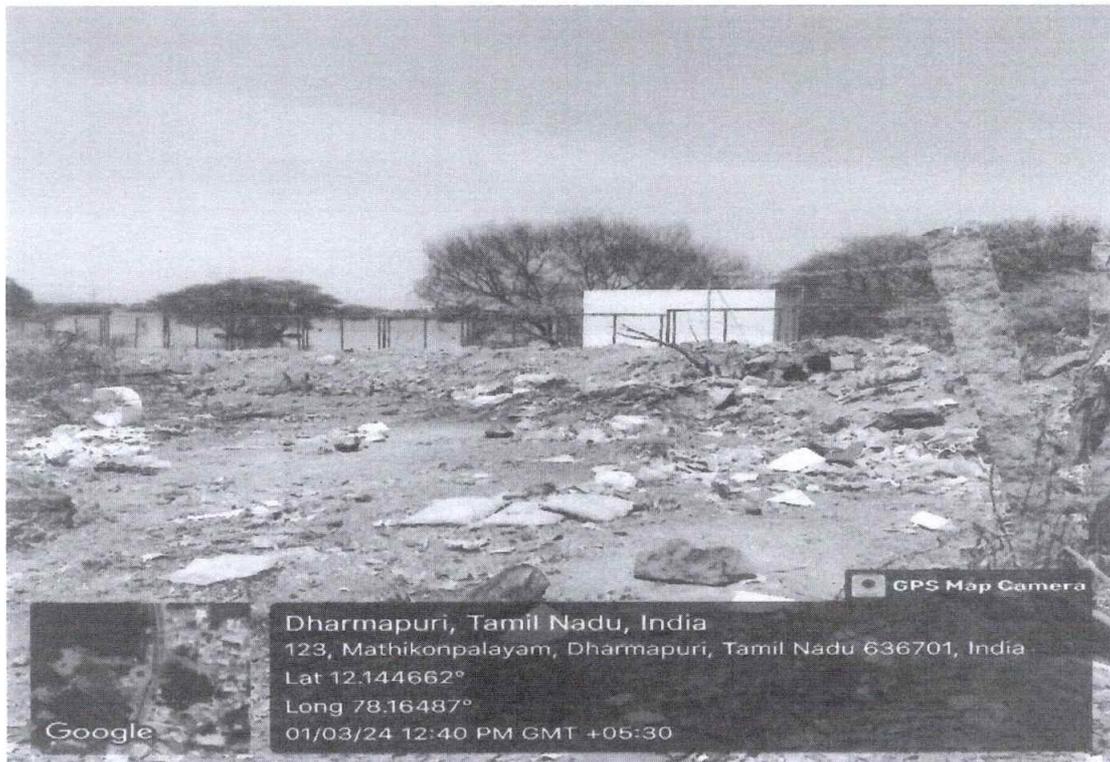
33°C  
91°F

2024-03-01(Fri) 04:08(PM)

Shri paravasudeva Perumal temple, kottai...  
Sandhai Pettai

Google

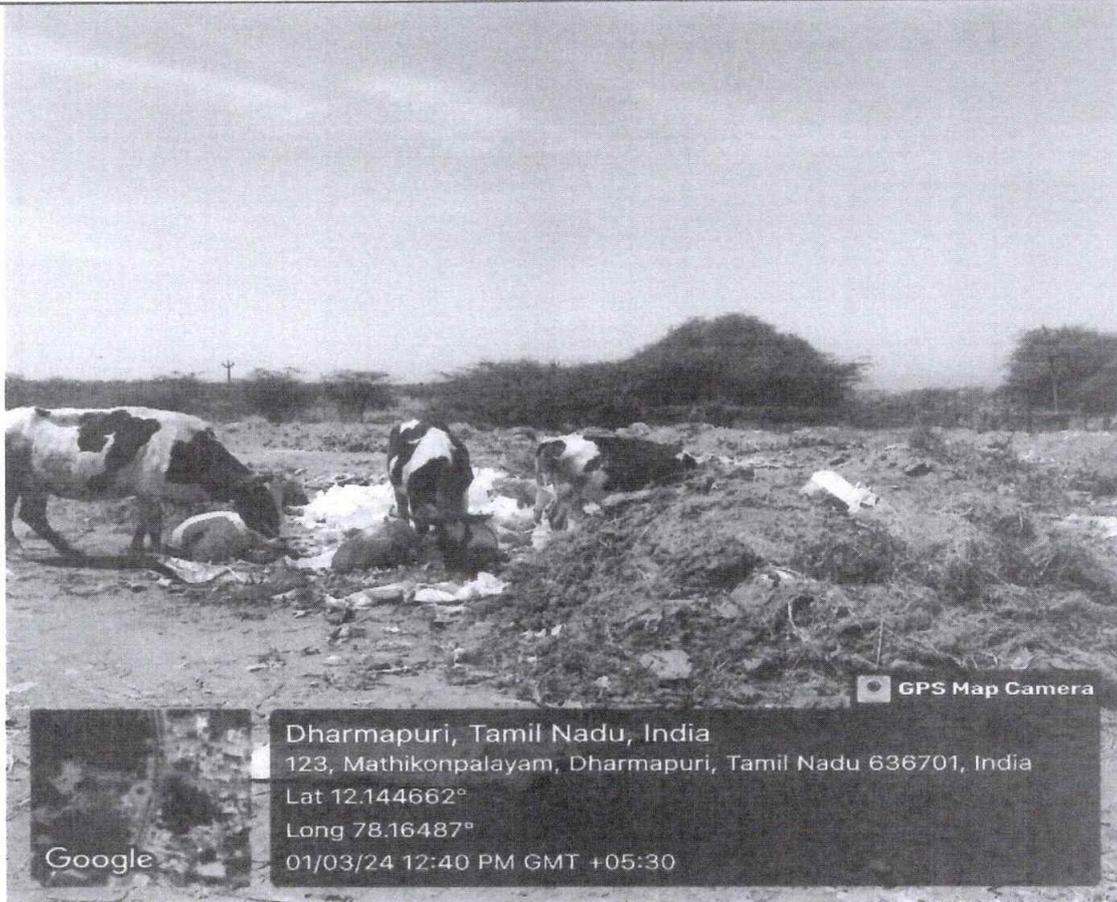
**Improper Disposal of Municipal Solid Waste near Ramakkal Lake**

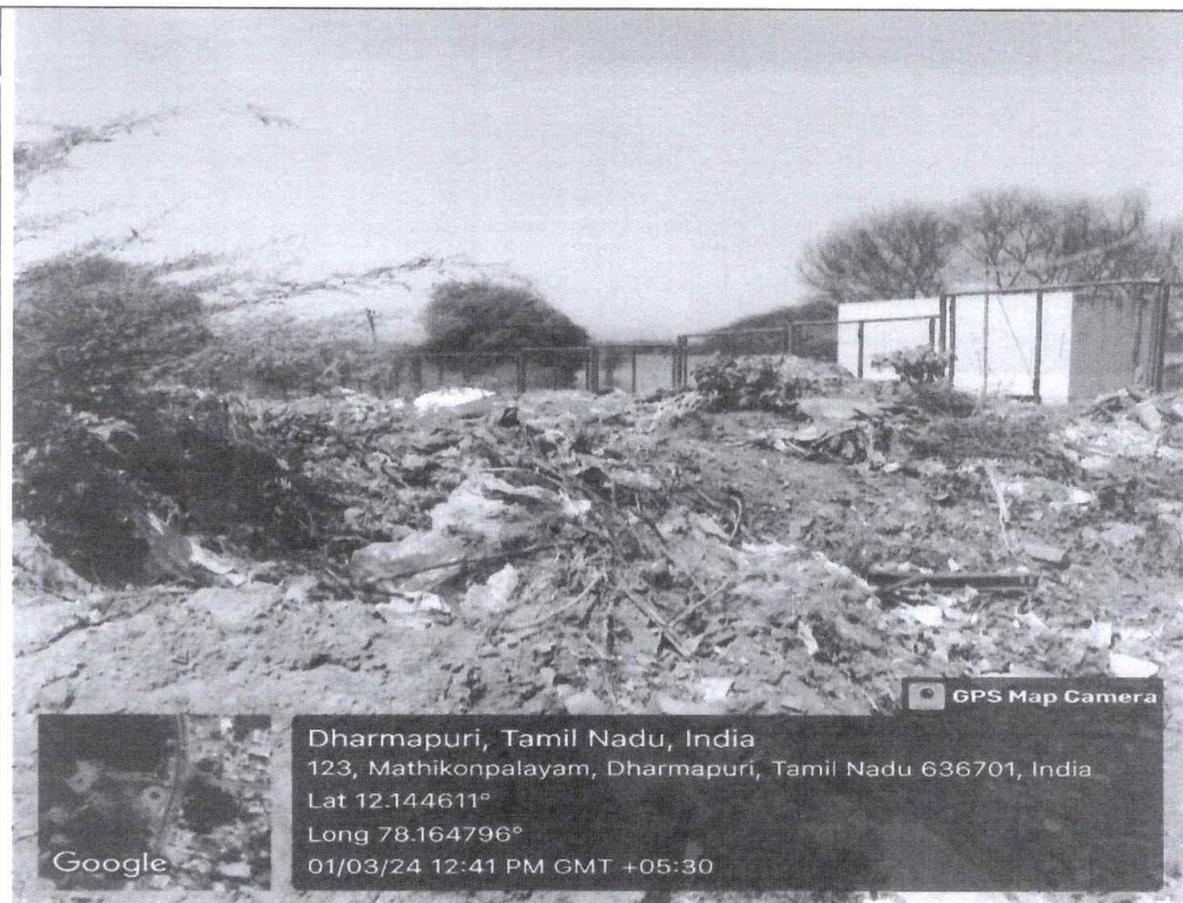


Dharmapuri, Tamil Nadu, India  
123, Mathikonpalayam, Dharmapuri, Tamil Nadu 636701, India  
Lat 12.144662°  
Long 78.16487°  
01/03/24 12:40 PM GMT +05:30

GPS Map Camera

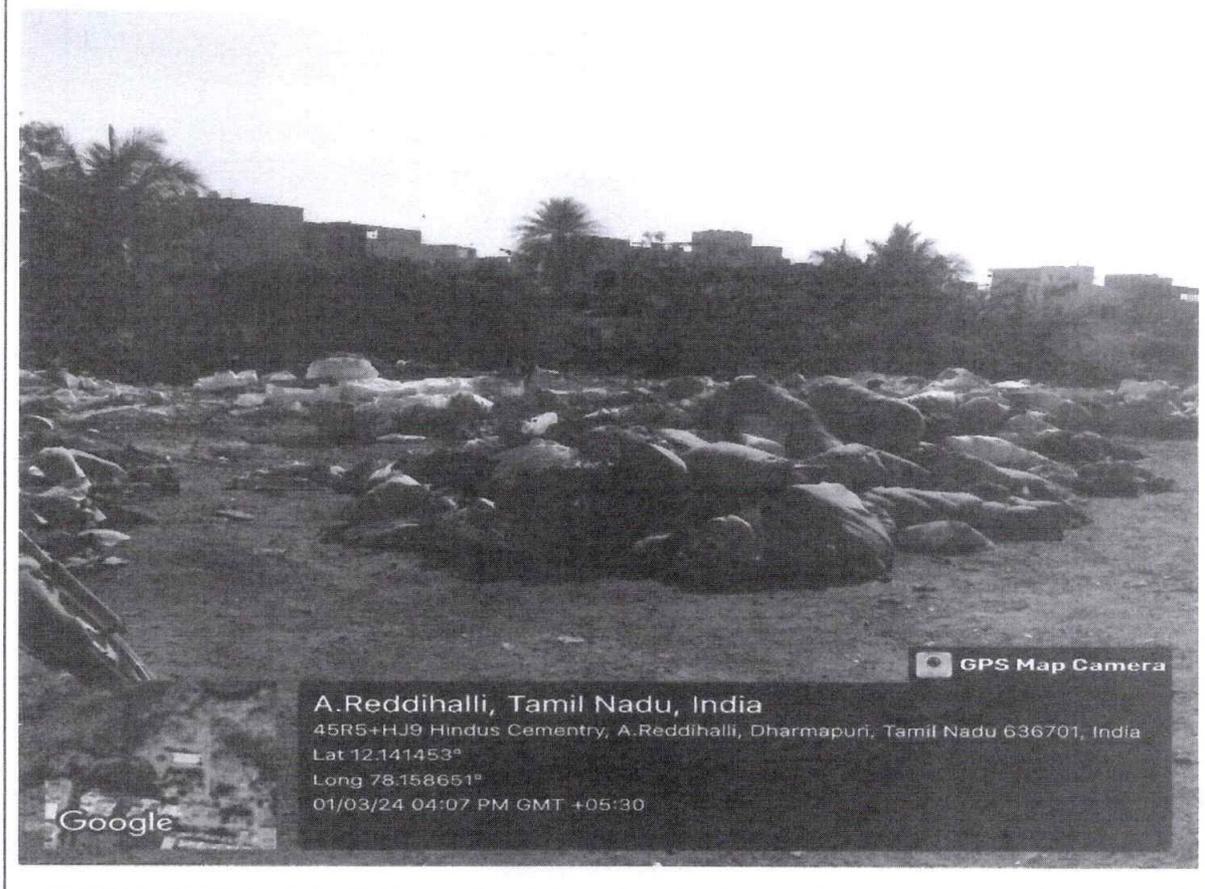
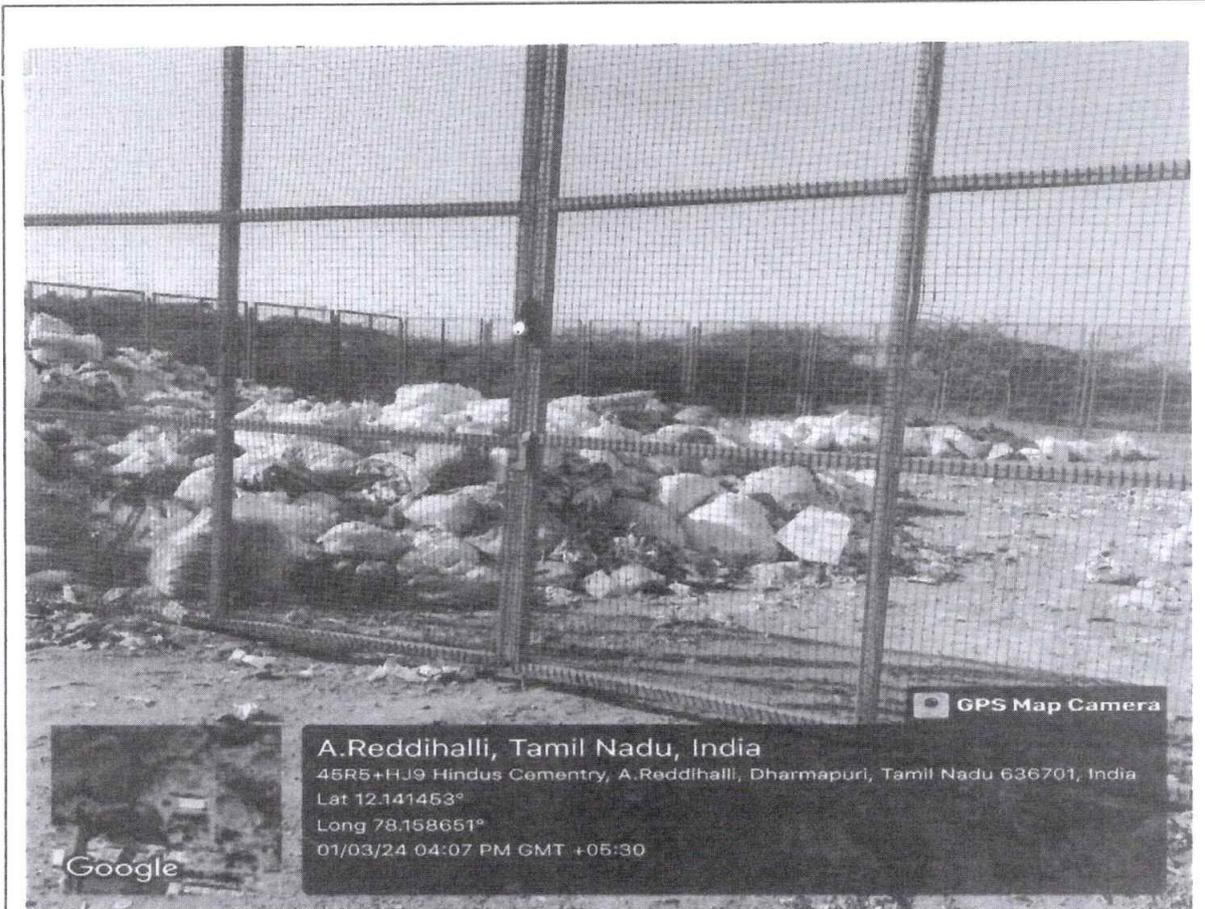
Google





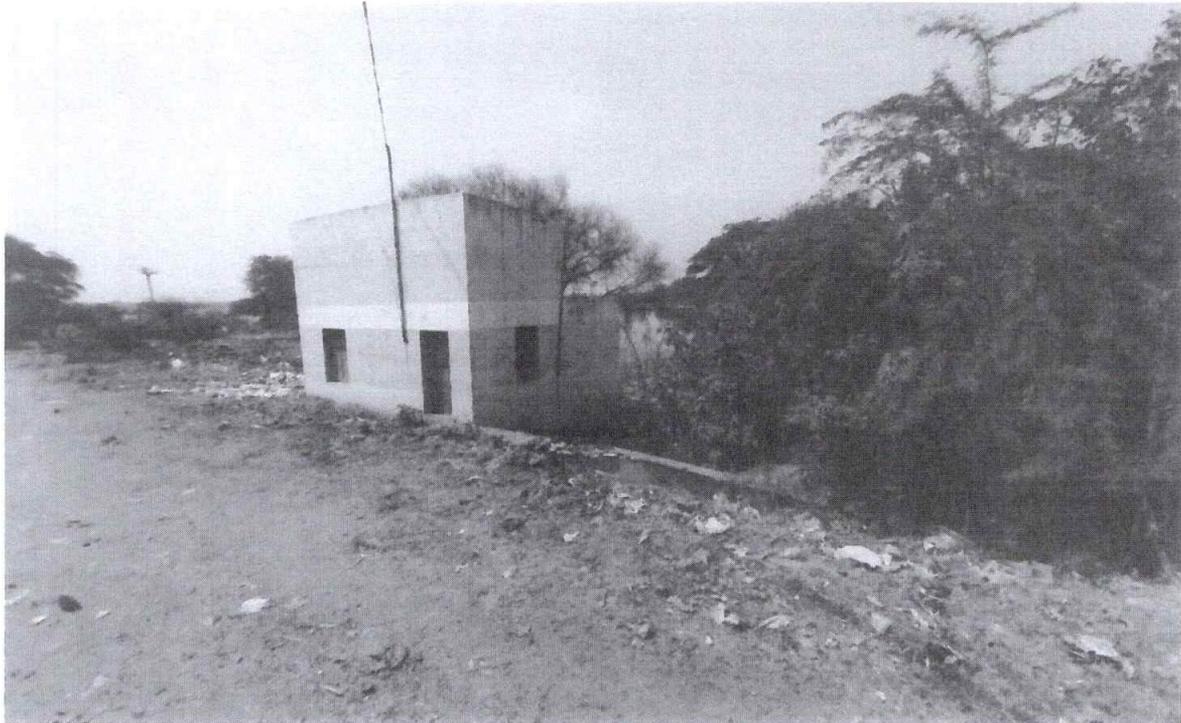
**Improper Disposal of Solid Waste near Harichandran MCC in the lake bed**





**Filter Beds constructed across the channel (not in operable condition)**

**At Tirupathur Road Junction**



**At Harichandran Burial Ground**



## ANNEXURE-I

NGT Order dated 09.10.2023

Item No. 06

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No.607/2023

In re: news report appearing in Express News Service dated 14.09.2023 titled "**Ramakkallake in TN polluted & emits foul smell, residents demand rejuvenation**"

Date of hearing: 09.10.2023

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON  
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER  
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Respondent(s): Mr. Karanveer Singh Yadav Advocate for Tamil Nadu PCB  
Mr. Raj Kumar, Advocate for CPCB (through VC)

**ORDER**

1. This original application is registered on the basis of a news item published in the New Indian Express dated 14.09.2023 titled "Ramakkallake in TN polluted & emits foul smell, residents demand rejuvenation". The news item discloses that the pollution level has arisen in the Ramakkal Lake with a foul smell causing distress to the nearby residents. The view expressed in the news item is that Ramakkal Lake is the most prosperous lake in the district but the water is extremely polluted with sewage water draining into the lake. The news item also discloses that a filtration unit has been set up but filter beds have not been functioning for the last eight months resulting in increased pollution level.

2. The Learned Counsel for CPCB has also informed that the filtration unit is not working as a result of which the pollution in the lake has increased.

1

3. Considering the grievance raised in the news item, we are of the view that substantial issue relating to the environment is involved, hence, at this stage, we deem it proper to constitute a joint committee comprising of the nominee of the Regional Director, CPCB; Member Secretary, State PCB; Director, State Development Authority and the concerned District Magistrate. The District Magistrate will act as a coordinating officer.

4. The joint committee will visit the site and ascertain the status of pollution in the Ramakkal Lake and will submit the action taken report before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.

5. Let the action taken report be submitted before the concerned Bench of the Tribunal. Since, the matter relates to the Southern zone Bench of the Tribunal, therefore, it is transferred to the said Bench.

6. The original application is accordingly disposed of with a direction of re-registration at the Southern Zone Bench, Chennai.

Prakash Shrivastava, CP

Sudhir Agarwal, JM

Dr. A. SenthilVel, EM

October 09, 2023  
Original Application No.607/2023  
SN

## ANNEXURE-II

## Copy of Joint Committee formation by the RDO, Dharmapuri

## From

Tmt.R.Gayathri,  
Revenue Divisional Officer,  
Dharmapuri.

## To

1. The Regional Director, Central Pollution Control Board, Chennai.
2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, Dharmapuri.
3. The Executive Engineer, WRD, Upper Pennaiyar Basin Division, Dharmapuri.
4. The Commissioner, Dharmapuri Municipality.

**Roc No.932/ 2024/A5 Dated:19.02.2024**

<b>Sub:</b>	Dharmapuri – Hon'ble National Green Tribunal (Principal Bench), Suo Motu Vide OA.No.607 of 2023-Joint Committee constituted-Joint Inspection-Reg.
<b>Ref :</b>	<ol style="list-style-type: none"> <li>1. The Hon'ble National Green Tribunal (Principal Bench), New Delhi-Suo Motu Vide OA.No.607 of 2023 in its order dated 09.10.2023.</li> <li>2. SPCB member Nomination letter dated 08.11.2023.</li> <li>3. CPCB member Nomination letter dated 09.11.2023.</li> <li>4. The District Collector's Proc.No.F.NGT/DEE/TNPCB/DMP/2023 dt 14.11.2023.</li> </ol>

\*\*\*\*\*

With reference to the above, the Hon'ble National Green Tribunal (Principal Bench), New Delhi has taken up Suo Motu vide O.A.No.607/2023 based on the news appeared in Express News Series dated 14.09.2023 titled "Ramakkal Lake in TamilNadu polluted & emits foul smell residents demand rejuvenation".

The Hon'ble NGT (PB), New Delhi in its order dated 09.10.2023 has disposed the case with a direction of re-registration at the Hon'ble National Green Tribunal (Southern Zone), Chennai and directed as below

*"Para 3. Considering the grievance raised in the news item, we are of the view that substantial issue relating to the environment is involved, hence, at this stage, we deem it proper to constitute a joint committee comprising of the nominee of the Regional Director, CPCB; Member Secretary, State PCB; Director, State Development Authority and the*

*concerned District Magistrate. The district magistrate will act as a coordinating officer.*

*Para 4. The joint committee will visit the site and ascertain the status of pollution in the Ramakkal Lake and will submit the action taken report before the next date"*

In this regard, the Revenue Divisional Officer, Dharmapuri was nominated to carry out the joint inspection of the Ramakkal Lake and also to act as coordinating officer on behalf of the District Collector, Dharmapuri vide reference 4<sup>th</sup> cited.

Based on the reference 2 to 4 cited, the following members were nominated by their respective authorities

1. Revenue Divisional Officer, Dharmapuri
2. Regional Director, CPCB, Chennai.
3. District Environmental Engineer, TNPCB, Dharmapuri.

Also, the following members are also included in the joint committee to carry out the joint inspection of Ramakkal Lake, Dharmapuri

1. Executive Engineer, WRD, Upper Pennaiyar Basin Division, Dharmapuri.
2. Commissioner, Dharmapuri Municipality.

Therefore, in order to comply with the said Hon'ble NGT (PB) orders, the Ramakkal Lake, Dharmapuri shall be jointly inspected on 01.03.2024 at 10 AM by the above nominated members of the Joint committee so as to submit the report of the joint committee before the Hon'ble NGT.

*R. Jayath*  
19/02/24  
Revenue Divisional Officer,  
Dharmapuri.

*ds*  
19/02/2024

Copy submitted to the District Collector, Dharmapuri for kind information please

**IN THE NATIONAL GREEN TRIBUNAL  
(SOUTHERN ZONE) CHENNAI**

**O.A 34 OF 2024**

Tribunal on its own  
motion SUO MOTU  
based on the News  
Item in The New  
Indian Express dt.  
14.09.2023 titled  
*“Ramakkal lake in TN  
polluted & emits foul  
smell residents demand  
rejuvenation”*

Applicant ...

Versus

Central Pollution Control Board  
Rep. by its Regional  
Director,  
Chennai and Ors.

... Respondents

**VAKALAT**

**DS Ekambaram  
COUNSEL FOR 1<sup>st</sup> RESPONDENT**

Plot No. 10,  
Rajalakshmi Nagar Extension  
Madipakkam, Chennai – 600091.  
Mobile: 9444247274  
Email: dsekambaram@gmail.com