

INSPECTION REPORT OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NATIONAL GREEN TRIBUNAL (SOUTHERN ZONE) IN RESPECT OF O.A NO. 17 OF 2017 (SZ) FILED BY M/S. K. SHANMUGA KANI, DHENUPURI HOUSING COLONY, MADAMBKKAM, CHENNAI

1. ORDERS OF THE HON'BLE TRIBUNAL

It is respectfully submitted that the Hon'ble National Green Tribunal (SZ), Chennai in its order dated 06.03.2020 in the matter of O.A.No.17 of 2017 inter alia stated that:

"The grievance in this application is regarding pollution caused to Thangal Eri (Lake) situated in Madambakkam. According to the applicant, it is the drinking water source to the residents of Madambakkam. It was originally measuring a larger extent and due to indiscriminate encroachment, the said lake was reduced to a pond. The Madambakkam Town Panchayat has put up a large public lavatory with ten doors at the brink of the said Madambakkam Thangal Eri with a septic tank on the floors of the said lake. During rainy season the water level of the lake rises and the septic tank of the said public lavatory submerges in the water allowing all the storage of septic tank to be released into the Thangal Eri. The waste water in that area is also discharged in this water body without proper treatment. Large scale dumping of waste is also done in the nearby burial ground. There are a lot of encroachments in the burial ground and a construction has been made by the Tamil Nadu Electricity Board as well. A 20 feet wide road is running between the said burial ground and water body. The burial ground is being used as an illegal dumping ground for disposal of the solid waste generated in that area. On account of these illegal activities large scale pollution has been caused. The Madambakkam Town Panchayat is not taking steps to dispose of the waste generated in the Panchayat as required under the Solid Waste Management Rules, 2016. So, the applicant filed this application seeking the following reliefs:

- (i) To direct the respondents to stop discharging the drainage water of the Madambakkam Town Panchayat into the Madambakkam Thangal Eri, the drinking water source.*
- (ii) To remove the public toilet and the septic tank situated at the Madambakkam Thangal Eri.*
- (iii) To stop dumping of garbage and waste at the burial ground of the Madambakkam Town Panchayat.*
- (iv) To provide pollution free water to the residents of Madambakkam Town Panchayat.*

12) Some of the replies filed as statements are relating to the status of the year 2017. We are not aware of the present status. So, in order to ascertain the real state of affairs and regarding the genuineness of the allegations made, we feel it appropriate to appoint a joint committee comprising of

- a) District Collector, Chengalpattu District (as after bifurcation of Kancheepuram District, this disputed area now falls within the jurisdiction of District Collector, Chengalpattu),
- b) Tamil Nadu Pollution Control Board,
- c) Director of Town Panchayat,
- d) Superintending Engineer, Tamil Nadu Water and Drainage Board (TWAD Board),

e) Executive Engineer or Chief Engineer in charge of Public Works Department (PWD) and Water Resource Organization (WRO) of the respective area

to inspect the area in question and submit a detailed status report regarding the allegations made in the application and possible pollution that is being caused to the said water body mentioned in the application on account of the existence of the public toilet and discharge of any untreated water and dumping of garbage in the burial ground and also in the water body and whether ninth respondent is strictly complying with the procedure for collection, segregation and disposal of waste generated in their Panchayat as required under the Solid Waste Management Rules, 2016 and if there is any violation, what is the action taken, if there is any pollution caused to the quality of water in the water body then what is the remedial action to be taken to restore the same and submit a factual and actual action taken report to this Tribunal within a period of two months. The water quality should contain not only the parameter of BOD (Bio-logical Oxygen Demand), COD (Chemical Oxygen Demand) and PH (Potential of Hydrogen value) but also the Faecal Coliforms (FC), Suspended Solids (SS) and Total Coliforms (TC) and also the presence of heavy metals and TDS level. If any violation is found, the Committee can suggest the nature of action to be taken including the recovery of environmental compensation. The Committee is also to ascertain the source of pollution of the water body if any and submit the present status as well as action taken report within a period of two months to this Tribunal through e-mail @ngtszfling@gmail.com. Superintending Engineer, Public Works Department and Water Resources Organisation shall act as nodal agency for co-ordination and providing necessary logistics for this purpose."

Subsequently the Hon'ble National Green Tribunal (SZ), Chennai in its order dated. 21/12/2020 further directed the following

"1. As per order dated 06.03.2020, this Tribunal had considered the pleadings and appointed a Joint Committee to go into the issue and directed them to submit a status as well as action taken report and the case was being adjourned from time to time for that purpose. Lastly, it was taken up on 15.12.2020 and posted the case to today for filing the report.

3. The Tamil Nadu Pollution Control Board (TNPCB) has filed the report

4. They have not mentioned anything about the other aspects which this Tribunal has directed to submit. They have only reiterated the water analysis report regarding the quality of the water in Thangal Eri at Madambakkam and nothing more. They have not mentioned anything about the reason for the existence of high Faecal Coliform and Total Coliform in the water and whether there is any discharge of any sewage into the water body or not.

7. The Public Works Department (PWD) and Water Resources Organization (WRD) is maintaining the lake and it is for them to come with the report as to what is the present status and what are all the steps taken by them to protect the water bodies against the encroachment and also pollution being caused and what are all the necessary steps taken by them to see that the water quality in the water body is maintained to the extent of making it a potable one as originally the intention of establishing water bodies was to meet the needs of the people for drinking and irrigation purpose."

2. COMPLIANCE OF THE DIRECTION

In due compliance of the orders of the Hon'ble National Green Tribunal, water samples were collected by the officials of Tamil Nadu Pollution Control Board along with Executive Officer, Madambakkam Town Panchayat from the Thangal Eri (Lake) situated in Madambakkam on 07/09/2020.

Collection of water sample to ascertain the quality of water in the Thangal Eri (Lake), Madambakkam



Statement showing the value of the Physico chemical parameters analysed

Sl. No	Parameters	Units	Point of Collection	TNPCB Standards
			Thangal Eri (Lake Water) at Madambakkam	(Inland Surface Water)
1	pH @ 25°C	No.	7.55	5.5-9
2	Total Suspended Solids @ 105°C	mg/L	33	100
3	Total Dissolved Solids @ 180°C	mg/L	807	2100
4	BOD @ 27°C	mg/L	23	30
5	COD	mg/L	240	250
6	Copper as Cu	mg/L	<0.033	3
7	Zinc as Zn	mg/L	<0.01	1
8	Cadmium as Cd	mg/L	<0.013	2
9	Lead as Pb	mg/L	<0.07	0.1
10	Nickel as Ni	mg/L	<0.05	3
11	Total Chromium Cr	mg/L	<0.01	2
12	Hexavalent Chromium Cr ⁺⁶	mg/L	<0.01	0.1
13	D.O	mg/L	5.5	5mg/l and above

Statement showing the value of the Bacteriological parameters analysed

Sl. No	Parameters	Units	Point of Collection	Primary Water Quality Criteria for Bathing Waters prescribed by Central Pollution Control Board
			Thangal Eri (Lake Water) at Madambakkam	
1	Total Coliform	MPN /100 ml	1700	500 or less.
2	Faecal Coliform	MPN /100 ml	460	500 (desirable) 2500 (Maximum Permissible)

The Report of analysis of the water samples collected from the said water body reveals that the Physico chemical parameters analysed satisfy the Inland surface water standards prescribed by the Board. Furthermore the water sample collected from the Thangal Eri Lake analysed for Bacteriological parameter **Total Coliform exceeds the standards** and the (Faecal Coliform) meets the Primary Water Quality Criteria for Bathing Waters prescribed by Central Pollution Control Board.

3. REPORT OF THE PUBLIC WORKS DEPARTMENT:

It is respectfully submitted that the Public Works Department/ Water Resources Department, who is one of the member of the Joint Committee and also nodal agency, has submitted that the said Thangal Eri Lake in Madambakkam Town Panchayat is being controlled and monitored by the Executive Officer, Madambakkam Town Panchayat

4. REPORT FROM EXECUTIVE OFFICER, MADAMPAKKAM TOWN PANCHAYAT

In due compliance of the said Hon'ble National Green Tribunal direction, the Executive Officer, Madampakkam Town Panchayat furnishing the following detailed report:

1. **Location of the said Thangal Eri (Lake): Survey No.643 of Madambakkam Village**
2. **Extent of Thangal Eri (Lake): 2.96.5 hectares**
3. **Total Area of the Madampakkam Town Panchayat : 8.02 Sq.Km**
4. **Total Population of the Town Panchayat : 31681**
5. **Total Household of the Town Panchayat : 15684**
6. **No of Wards: 15**
7. **Total Solid waste generation: 8.4 T/day (Biodegradable waste - 3.2T/day & Non Biodegradable Waste - 5.2 T/day)**
8. **Total solid waste in the dump site: 150T**
9. **Total Sewage generation: 2.52 MLD**

SEWAGE GENERATION AND DISPOSAL ARRANGEMENTS:

Sewage generation from the Village Panchayat area: 2.52 MLD

The households and commercial establishments in the Town Panchayat area have their own individual septic tank and soak pit arrangements for the treatment and disposal of the sewage. However certain households/ commercial establishments dispose the sewage/sullage through storm a water drain which reaches the said Thangal Eri (Lake).

Action plan to prevent the disposal of sewage/sullage through storm water drain

1. The Town panchayat has proposed to identify the households/commercial establishment letting out sullage/sewage into the storm water drain and action will be taken to plug the same, and fine will be imposed under the provisions of the Local Body Act within a month time.
2. The Town panchayat has proposed to identify vulnerable locations and proposed to provide decentralized community soak pit arrangements within a month time.

SOLID WASTE MANAGEMENT

Solid waste generation from the Town Panchayat area: 8.4 T/ day (Biodegradable waste – 3.2 MT/day and Non Biodegradable waste – 5.2 MT/day)

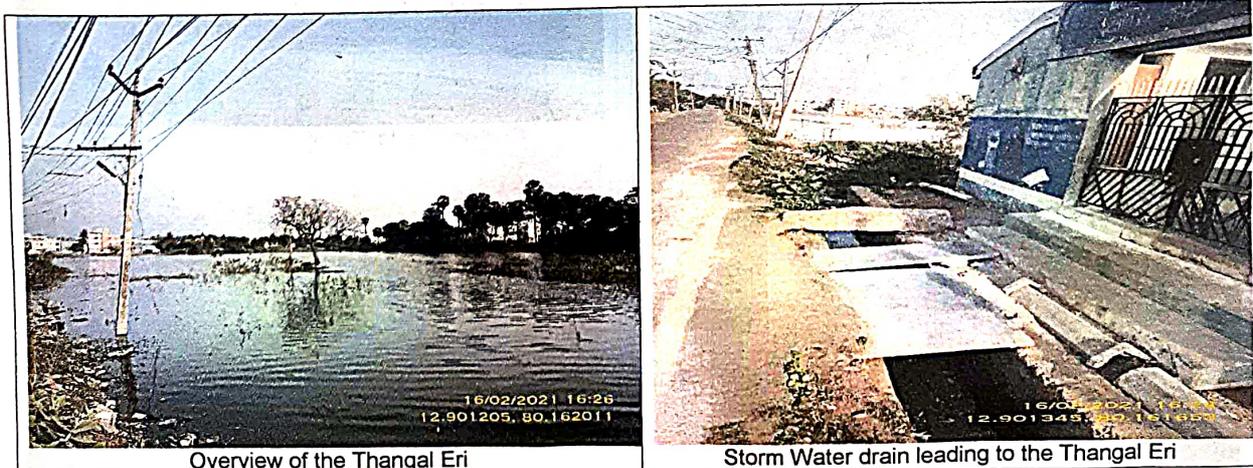
Present status of collection and disposal of solid waste:

Under the existing Solid Waste Management Scheme the Town Panchayat is having own Secondary Collection Vehicle 1 No. of Compactor Lorry, 2 Nos. of Tata Ace and 3 Nos. of Lorry. Also the Town Panchayat is having Primary Collection Vehicle - 14 Nos. of Tri Cycles, 15 Nos. of Push Carts and 15 Nos. of Battery Vehicles to clean the streets in 15 Wards located in the Madambakkam Town Panchayat limit.

The Town Panchayat carries out door-to-door collection of municipal solid waste of 8.4 T/day. The Town Panchayat has obtained authorization to operate the solid waste processing facility located at S.F.No.653, Ambika Nagar, Madambakkam Village, Tambaram Taluk, Chengalpet District for micro composting of 3.2 T/day from TNPCB vide proceedings No.JCEE(M)/TNPCB/CHN.ZONE/SWM/F.6847/MMN/2019, Dated 08.04.2019 valid upto 31.03.2020 under the provisions of Solid Waste Management Rules, 2016. The same is further extended up to 30.09.2020 vide the Chairman office order dated.01.07.2020. The balance, 5.2 MT/day of non biodegradable wastes are disposed through recycling facilities.

5. JOINT INSPECTION OF THE COMMITTEE

The members of the joint committee have carried out the inspection in the area in question on 07/09/2020 & 16/02/2021.

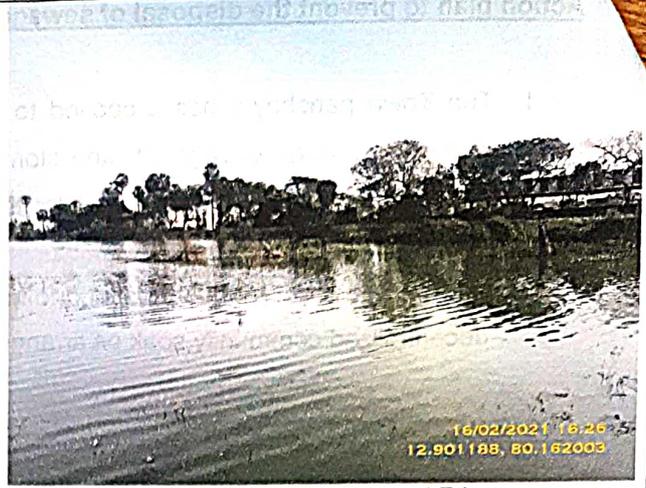


Overview of the Thangal Eri

Storm Water drain leading to the Thangal Eri



Drain carrying sewage/sullage into Thangal Eri



Overview of the Thangal Eri



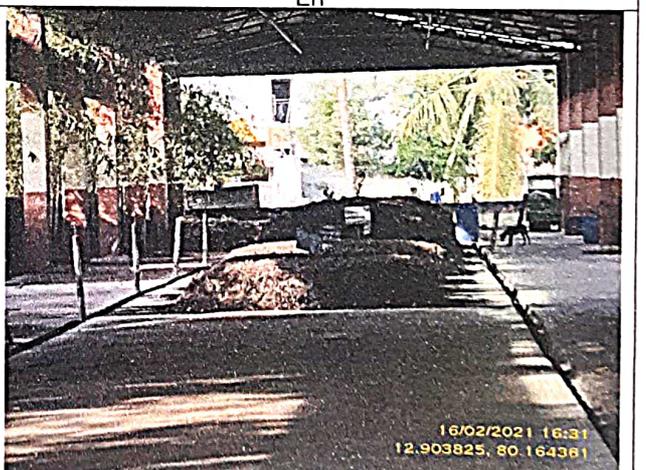
Overview of the Thangal Eri



Location of public toilet in the western end of the Thangal Eri



Composting facility of the Town Panchayat



Composting facility of the Town Panchayat



Composting facility of the Town Panchayat



Composting facility of the Town Panchayat

6. OBSERVATIONS BY THE COMMITTEE

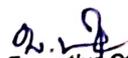
During the time of inspection, the committee observed the following

1. Thangal Eri Lake is bounded by road and residences on Northern side, residences in the Southern side, vacant land in Eastern side and Public toilet and residences on Western side area.
2. A public lavatory was found in Western end of the lake and septic tank's top surface level is above the surface water level of the Thangal Eri.
3. Electricity Board substation is located on Northern side, next to that the Solid waste Dumping yard, Solid waste segregation and processing facility is located nearby the burial ground. There is no dumping of solid waste noticed in the said burial ground.
4. Sewage from the fringes of the lake i.e Gandhi Street & Bharathiyar Street of Madambakkam area enters into the Thangal Eri Lake through storm water drain.
5. The Madambakkam Town panchayat is carrying out the processing of the solid waste collected from the Town Panchayat area as per Solid Waste Management Rules, 2016.
6. The segregated non biodegradable and unsegregated solid waste deposited by the public of about 150 Tonnes was found dumped in the said dump yard.
7. Encroachments in the form of residences were noticed along the northern bund of the Thangal Eri and in a portion of the bund in the Western end of the water spread area of the lake in the form of public toilet and overhead tank.

7. RECOMMENDATIONS:

Based on the above observation, the joint committee submits the following recommendation before the Hon'ble National Green Tribunal (Southern Zone)

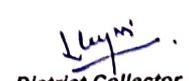
01. The Executive Officer of Madambakkam Town Panchayat shall identify the households/commercial establishments in their local body area letting out sullage/sewage into the storm water drain reaching the Thangal Eri and shall take action to plug the same and shall levy fine on the violators under the provisions of the Local Body Act within a months time
02. The said local body shall identify and provide decentralized community soak pit arrangement at vulnerable locations within three months time to prevent the entry of sewage/sullage to the Thangal Eri through storm water drain.
03. The said local body shall ensure 100% collection of solid waste being generated within its jurisdiction with proper segregation, door to door collection, processing and disposal of the same by complying with the provisions of the Solid Waste Management Rules 2016 within three months and shall ensure that no dumping of solid waste happens in the Thangal Eri by deploying security guards.
04. The said local body shall levy fine on the violators found dumping solid waste and disposing sewage into the water body under Local body Acts.
05. The said local body shall create awareness among the public with the help of associations in the local body area for proper segregation of solid waste.
06. The said local body with the help of Revenue Authorities shall make fresh survey to identify the exact details of encroachment and to evict them within six months.


Executive Officer,
Madambakkam
Town Panchayat


District Environmental
Engineer, Tamil Nadu
Pollution Control Board,
Maraimalai Nagar


Executive
Engineer of
Public Works
Department
and Water
Resources
Organization


Revenue Divisional
Officer, Tambaram,
Chengalpatt District.


District Collector,
Chengalpattu
District