

INSPECTION REPORT OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NATIONAL GREEN TRIBUNAL (SOUTHERN ZONE) IN RESPECT OF O.A NO. 149 OF 2020 (SZ) SUOMOTU ON THE BASIS OF THE NEWS PAPER REPORT PUBLISHED IN DINAMALAR CHENNAI CITY SUPPLEMENT EDITION DATED, 06.08.2020 UNDER THE CAPTION "WILL PERUMBAKKAM LAKE BECOME TOURIST SPOT?"

1. ORDERS OF THE HON'BLE TRIBUNAL

It is respectfully submitted that the Hon'ble National Green Tribunal (SZ), Chennai in its order dated 17.08.2020 in the matter of O.A.No.149 of 2020 inter alia stated that:

"2. It is alleged in the paper report that Perumbakkam Lake which has been engulfed by the encroachers has now become polluted by garbage and sewage. It was originally having an extent of 400 acres in the middle of borders of Vengai Vaasal, Chithalapakkam and Perumbakkam and it was covering a large area of cultivable lands for providing water for irrigation. Large scale encroachment has been made due to urbanisation and now as per the survey of 2015, the size of the Perumbakkam Lake has been reduced to 258 acres.

3. The facilities of electricity connection, Road, Drinking water and other facilities have been given by the authorities to the encroachers instead of taking steps to remove the encroachment.

4. The garbage is being dumped by Lorries and they are also using the same for discharging untreated sewage water. Few years back, the water was tested by the authorities and it was found to be contaminated. Some steps have been taken to rejuvenate certain water bodies, and some cleaning work was done at the instance of the Welfare Associations and social activists.

5. The Public works Department has planned to reform this lake at a cost of Rs. 3 crores by desilting the lake, strengthening bunds, setting up a bio diversity park on bunds of Perumbakkam Lake. But the work was not carried out completely. Lot of work will have to be done for bringing the dream of the people by making Perumbakkam Lake a tourism spot with eco-park facility a reality.

9. It is also seen from the report that this lake is affected by large scale encroachment and also it has become a dumping ground for garbage and discharging untreated sewage water

10. So, under such circumstances, in order to ascertain the present state of affairs and action to be taken by the authorities to protect the water bodies, we feel it appropriate to appoint a joint committee comprising of

(i) the District Collector, Chengalpet District, or a Senior Officer not below the rank of Assistant Collector or Sub Divisional Magistrate deputed by the District Collector,

(ii) The Superintending Engineer, Lower Palar circle, Chepauk

(iii) Senior Officer deputed by the Chairman, Tamil Nadu State Pollution Control Board and

(iv) The Secretary, Perumbakkam Village Panchayat

to inspect the area in question and submit a factual as well as action taken report, if there is any violation found.

11. The committee is directed to ascertain the original extent covered by the lake as per revenue records and the extent of encroachment, action taken to remove the same and restore it and the action taken to protect the same from future encroachment.

12. The committee is directed to consider the question as to whether there is any scheme launched by the State Government or by the District administration for the purpose of rejuvenation and protection of this water body and if so, what is the stage of its implementation and whether there is any unauthorised dumping of garbage and discharge of untreated sewage into the lake and if so, trace out the persons who are responsible for the same and take appropriate action including imposition of environmental compensation against such persons.

13. The committee is also directed to take the water samples from the lake for analysis to ascertain as to whether it confirms to the standard for drinking purpose including Bio Chemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD), Total Coli Form and Fecal Coli Form and other prohibited metals. If there is any contamination, they are also directed to suggest the ways and means to rectify the same.

14. The Tamil Nadu State Pollution Control Board is at liberty to conduct independent inspection as provided Under the Water (Prevention and Control of Pollution) Act, 1974 and also Under the Solid Waste Management Rules, 2016 to ascertain the water quality and implementation of Solid Waste Management Rules, 2016 in that area and if there is any violation and non-compliance of the directions given by the Principal Bench of National Green Tribunal, New Delhi in Original Application No 606 of 2018 in respect of Solid Waste Management Rules, 2016 in Perumbakkam Panchayat and if there is any gap, then what are the steps taken by them, on the basis of the directions given by the Principal Bench against the erring local bodies apart from assisting the committee to incorporate those things in the report.

15. The Public Works Department will be the nodal agency for co-ordination and for providing all necessary logistics for this purpose,.

16. The Tamil Nadu Pollution Control Board as well as the committee are directed to submit the report to this Tribunal within a period of two months i.e., on or before 20.10.2020 by e-filing."

## **2. COMPLIANCE OF THE DIRECTION**

In due compliance of the said Hon'ble National Green Tribunal direction, surface water sample from the Perumbakkam Lake was collected on 01/02/2021 so as to ascertain the present water quality in the said water body

### **Statement showing the value of the Physico chemical parameters analysed**

Sl.No	Parameters	Units	Point of Collection	TNPCB Standards (Inland Surface Water)
			Perumbakkam Lake	
1	pH @ 25°C	No.	7.59	5.5-9
2	Total Suspended Solids @ 105°C	mg/L	22	100
3	Total Dissolved Solids @ 180°C	mg/L	1612	2100
4	BOD @ 27°C	mg/L	11	30
5	COD	mg/L	128	250
6	Copper as Cu	mg/L	< 0.033	3

7	Zinc as Zn	mg/L	< 0.05	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 <sup>+6</sup>	mg/L	< 0.01	0.1
13	D.O	mg/L	6.2	5 mg/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
			Perumbakkam Lake	
1	Total Coliform	MPN/100 ml	45	500 or less.
2	Faecal Coliform	MPN/100 ml	<1.8	500 (desirable) 2500 (Maximum Permissible)



The Report of analysis of the water sample 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 Perumbakkam Lake analysed for Bacteriological parameter Total Coliform and Faecal Coliform meets the Primary Water Quality Criteria for Bathing Waters prescribed by Central Pollution Control Board.

**3. REPORT OF THE PUBLIC WORKS DEPARTMENT:**

1.	Original extent covered by the lake as per revenue records	The Perumbakkam tank in Perumbakkam Village of Tambaram Taluk in S.F.No. 428 has the capacity to store 0.74 million cubic metre
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		(Mcm) of water to feed an extent of 229.15 Ha which was originally intended to be fed by the tank for irrigation. It has a water spread area of 2.27sq.miles and its own catchment is 9.25 sq.miles. As such, the Perumbakkam tank is a PWD tank. It has lost its irrigation potential long back due to agglomeration of Chennai City and its suburb over the period of time. Now, the tank serves mostly as a natural aquifer.
2.	The extent of encroachment	As per the estimation of PWD in the year 2009, there are about 358 encroachments in the water spread area and the bund of the tank extending in 0.07.16 ha and hence actual survey has to be made to indentify the exact number of encroachments.
3.	Whether there is any scheme launched by the State Government or by the District administration for the purpose of rejuvenation and protection of this water body	The rehabilitation of the Perumbakkam eri has been taken up by the PWD under Environment Protection and Renewable Energy Development (EPRED) scheme at an estimated cost of Rs. 4.5 crore. The works of construction of walkway, compound wall to prevent encroachment and pollution, strengthening of the tank bund, nesting island and reconstruction of sluice are in progress and will be completed soon.

**4. REPORT FROM BLOCK DEVELOPMENT OFFICER, ST. THOMAS MOUNT (PERUMBAKKAM VILLAGE PANCHAYAT)**

In due compliance of the said Hon'ble National Green Tribunal direction, the Block Development Officer, St. Thomas Mount (Perumbakkam Village Panchayat) furnishes the following detailed report:

1.	Total Area of the Perumbakkam Village Panchayat :	831.96.5 hectares
2.	Total Population of the Village Panchayat :	78000
3.	Household in the above said Village Panchayat area :	28500
4.	No of Wards:	12
5.	Total Generation of sewage:	10 MLD
6.	Total Generation of Solid Waste generation: a) Bio – Degradable Waste – b) Non Bio degradable waste -	10 T/day 3 T/day 7 T/day
7.	Legacy Waste	150 T

## SEWAGE GENERATION AND DISPOSAL ARRANGEMENTS:

**Sewage generation from the Village Panchayat area: 10 MLD**

The households and commercial establishments in the village 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 water drains.

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

1. The Village 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 three months time.
2. The Village panchayat has proposed to identify vulnerable locations and community soak pit arrangements will be provided within three months time.

## SOLID WASTE MANAGEMENT

**Solid waste generation from the Village Panchayat area: 10 T/ day (Biodegradable waste - 3 MT/day and Non Biodegradable waste - 7 MT/day)**

### **Present status of collection and disposal of solid waste:**

Presently the Village Panchayat carries out door-to-door collection of solid waste of 10T/day deploying 8nos. of E-Cart Tricycles, 23 nos. of push carts, 6nos. of Tractors and with 36 sanitary Workers. The village panchayat is not having solid waste processing facility and now they are in the process of construction of Micro Composting Centre (MCC) within the premises of the village panchayat area office.

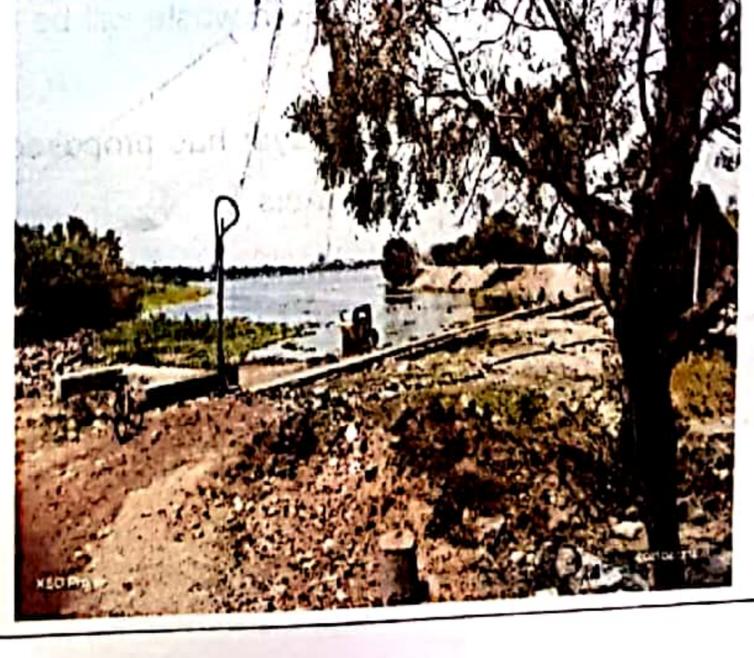
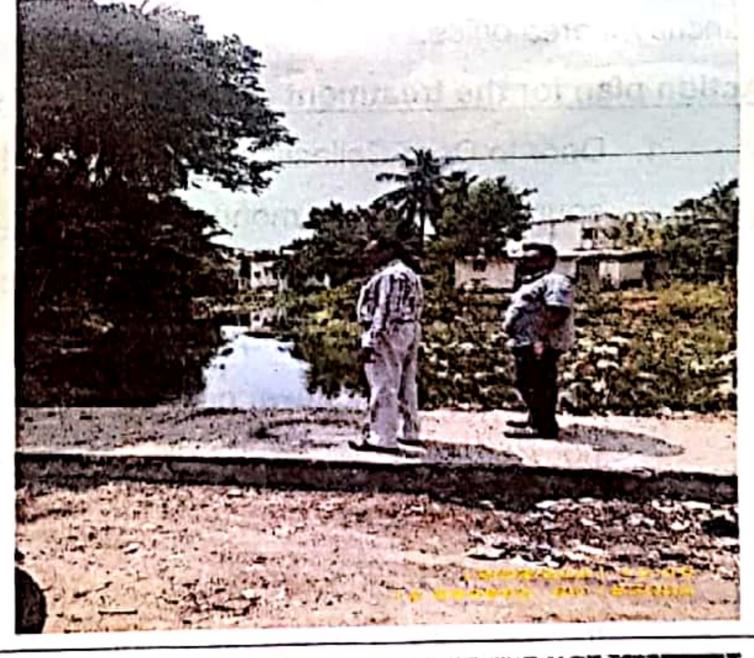
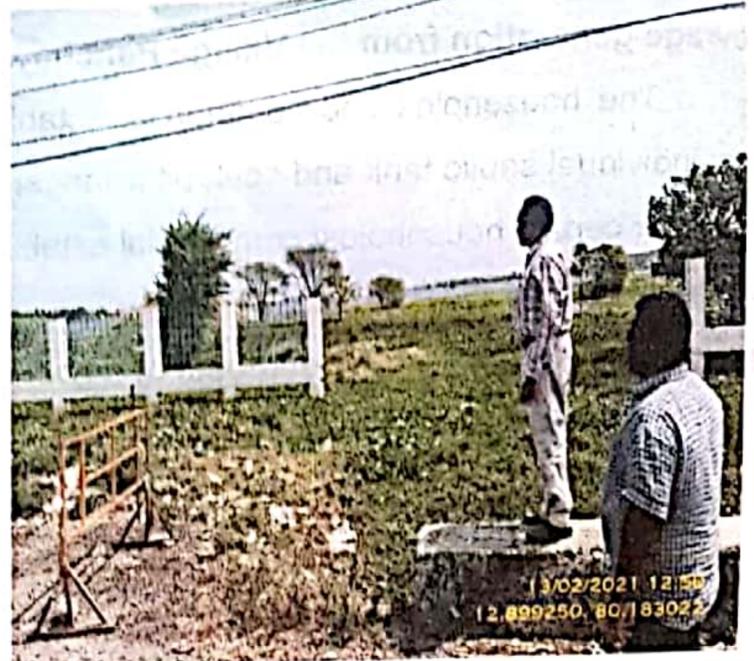
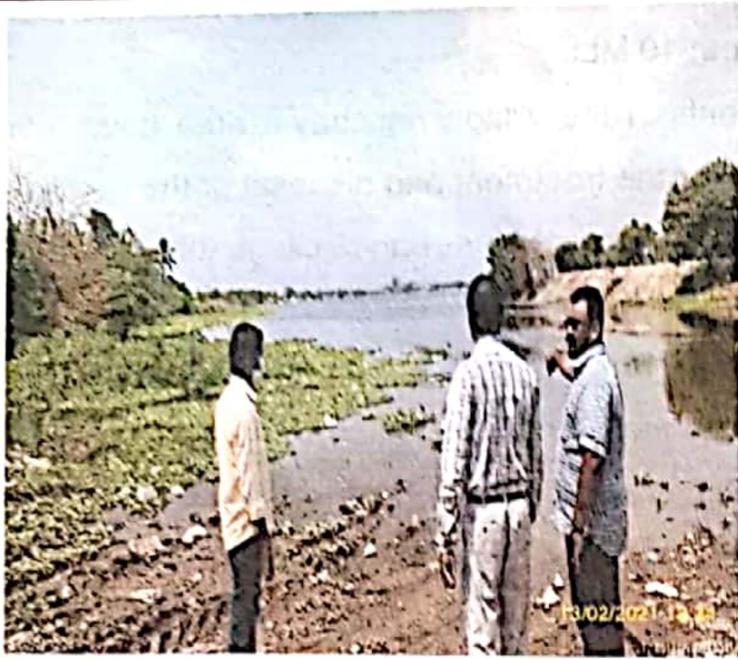
### Action plan for the treatment and disposal of solid waste:

1. Door to Door Collection will be made 100% for the collection of segregated solid waste at source within three months.
2. Awareness will be created among the public with the help of associations in the village panchayat area for proper segregation of solid waste within three months.
3. The Village panchayat has proposed to issue notice to the public and to the households not to dump the waste on the road sides and to issue pamphlets regarding the source segregation of the solid waste within a month time.
4. Micro composting centre will be created in the village panchayat area within three months to compost the segregated Biodegradable wastes of 3 T/day. Non degradable waste of 7 T/day including plastic waste will be collected and will be sent to recycling facility within three months.
5. The Village Panchayat has proposed to levy fine on the violators dumping solid waste under Local body Acts

## 5. JOINT INSPECTION OF THE COMMITTEE

The members of the joint committee have carried out the inspection in the area in question on 13.02.2021.

Photographs taken during the inspection



## 6. OBSERVATIONS BY THE COMMITTEE

During the time of inspection, the committee observed the following

1. The Perumbakkam Lake is located at Perumbakkam Village of Tambaram Taluk in S.F.No. 428 and it is bounded by Mambakkam – Medavakkam Main Road on western side, Residential Apartments on Eastern Side, Residences on Northern side and Residences followed by hillock on Southern side.
2. The Perumbakkam lake has the capacity to store 0.74 million cubic metre (Mcm) of water to feed an extent of 229.15 Ha. It has a water spread area of 2.27sq.miles and its own catchment is 9.25 sq.miles.
3. The Perumbakkam lake is a PWD tank. It has lost its irrigation potential long back due to agglomeration of Chennai City and its suburb over the period of time. Now, the tank serves mostly as a natural aquifer.
4. Surplus overflow from Sithalapakkam Lake and Vengaivasal Lake flows into the Perumbakkam Lake and Surplus overflow from the Perumbakkam Lake leads to Pallikaranai Marshal land.
5. Encroachments were noticed all along the bund in the Western side of the lake.
6. Sullage/Sewage generated from the houses located in the encroached area disposes the same into the lake.
7. The lake is bounded by Perumbakkam Village Panchayat area in the Eastern and Southern side, Sithalapakkam Village panchayat area in the Western side, Vengaivasal Village Panchayat area in the Northern Side.
8. Individual houses/ commercial establishments in the above Perumbakkam, Sithalapakkam and Vengaivasal Village panchayat area have their individual septic tank, soak pit arrangements. However, However certain households/ commercial establishments from the Vengaivasal and Sithalapakkam Village Panchayat area dispose the sewage/sullage through storm water drains which reaches Perumbakkam Lake in the Northern side.
9. There is no dumping of solid waste in the lake <sup>except</sup> ~~except~~ in the Southern corner of the lake which is observed dumped by the residents in the encroached area.
10. PWD has provided Grill compound wall Works in the western and northern side of the lake i.e abutting the Mambakkam to Medavakkam Road to prevent the encroachment. Furthermore the PWD was carrying out the works for strengthening of the tank bund, creation of nesting island and reconstruction of sluice were in progress.
11. Perumbakkam Village panchayat was establishing Micro composting centre at survey no. 429/7 part within its office premises to compost the segregated Biodegradable wastes of 3 MT/day
12. Legacy wastes were found dumped in the dumping yard located in the Perumbakkam panchayat office premises.

## 7. RECOMMENDATIONS:

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

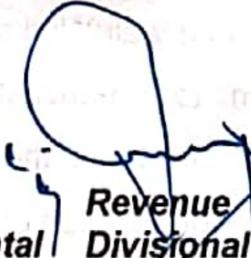
01. The Block Development Officer shall identify the households/commercial establishment in the Perumbakkam, Vengaivasal, Sithalapakkam Village Panchayat area letting out

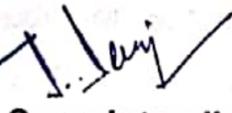
- sullage/sewage into the storm water drain and shall take action to plug the same and shall levy fine under the provisions of the Local Body Act within three months time
02. The Village panchayat shall identify and provide community soak pit arrangements at Vulnerable locations within three months time
  03. The Village Panchayat shall ensure 100% collection of solid waste being generated within its jurisdiction with proper segregation, door to door collection, processing and disposal by complying with the provisions of the Solid Waste Management Rules 2016 within three months time.
  04. The Village Panchayat shall establish Micro composting centre within three months at survey no. 429/7 part of Perumbakkam panchayat office to compost the segregated Biodegradable wastes of 3 MT/day and non degradable waste of 7 MT/day including plastic waste shall be sent to cement factories for co processing or to the recycling facility complying with the provisions of the Solid Waste Management Rules, 2016.
  05. The Village Panchayat shall immediately remove the solid wastes dumped in the southern corner of the lake and shall not dump solid waste under any circumstances.
  06. The Village Panchayat shall create awareness among the public with the help of associations in the village panchayat area for proper segregation of solid waste within three months
  07. The Village Panchayat shall levy fine on the violators dumping solid waste and disposing sewage into the water body under Local body Acts.
  08. The PWD with the help of Revenue Authorities shall make fresh survey to identify the exact number of encroachment and to evict them within six months.
  09. PWD shall expedite the construction of walkway, compound wall to prevent encroachment and pollution, strengthening of the tank bund, nesting island and reconstruction of sluice within six months under Environment Protection and Renewable Energy Development (EPRED) scheme.
  10. PWD along with TamilNadu Tourism department shall explore the possibility of creating the Perumbakkam Lake as a Tourist Spot.

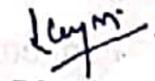
  
**Secretary,  
 Perumbakk  
 am Village  
 Panchayat**

  
**Block  
 Development  
 Officer, St.  
 Thomas  
 Mount  
 Panchayat  
 Union**

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

  
**Revenue  
 Divisional  
 Officer,  
 Tambaram  
 Chengalpet  
 District.**

  
**Superintending  
 Engineer of  
 Public Works  
 Department  
 and Water  
 Resources  
 Organisation**

  
**District  
 Collector,  
 Chengalpattu  
 District**