

**INSPECTION REPORT OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NATIONAL GREEN TRIBUNAL (SOUTHERN ZONE) IN RESPECT OF O.A. NO. 69 OF 2020 (SZ) SUO MOTU ON THE BASIS OF THE PAPER REPORT PUBLISHED IN DINAMALAR – NEWSPAPER CHENNAI EDITION DATED 14.05.2020 UNDER THE CAPTION "ENCROACHMENT OF NEMILICHERRY LAKE"**

**1. ORDERS OF THE HON'BLE TRIBUNAL**

It is respectfully submitted that the Hon'ble National Green Tribunal (SZ), Chennai in its order dated 15/05/2020 in the matter of O.A.No. 69 of 2020 inter alia stated that:

*"2. It is seen from the report, that Nemilicherry Lake was having a total extent of 37 acres earlier of which major portion has been encroached by the residential buildings constructed and it has been reduced to 10 acres now.*

*3. This was filled up with plastic waste earlier. On the basis of the newspaper report published in the paper, certain NGO's and Government departments formed committees in order to restore the water bodies to its original position under the name and style "Kalamiranguvomnamakkunaamey".*

*4. Accordingly, that organization has removed the plastic waste and along with the Public Works Department (PWD) and this lake has been restored to its original position to some extent. Now, considering the lock down situation, some miscreants have dumped the construction and demolition waste by trespassing into this lake and trying to encroach into the lake. Nearby fish market is also trying to fill up this area for the purpose of converting into their parking area.*

*9. Before proceedings further, we feel it appropriate to appoint a Joint Committee comprising of the District Collector, Chengalpattu, Executive Engineer, Public Works Department (PWD), Chengalpattu Division, within whose jurisdiction the area is falling, and a Senior Officer of the Tamil Nadu Pollution Control Board, to inspect the area in question and submit a status as well as action taken report, if there is any violation or encroachment found including the removal of the encroachment and imposing environmental compensation against the violators and submit the report to this Tribunal within a period of two months.*

*10. Public Works Department (PWD) is designated as nodal agency for co-ordination and for providing all necessary logistics for this purpose."*

In the order dated 17/07/2020 inter alia stated that,

*"3. We have received an interim report filed by the Executive Engineer, Public Works Department, Thiruvallur District*

*4. It is seen from the report that they have taken some steps to improve the condition of Nemillicheri Tank and they wanted some more time for filing a detailed report in this regard, showing the steps taken for evicting the encroachments and also regarding the rejuvenation activities taken by them to restore the Nemillicherry Tank.*

*6. Considering the circumstances, we feel it appropriate to grant two months time to the committee to submit the report to this Tribunal.*

*7. The committee is directed to submit the report to this Tribunal on or before 28.09.2020 through e-mail or by e-filing at [ngtszfilling@gmail.com](mailto:ngtszfilling@gmail.com)"*

In the order dated 03/11/2020 inter alia stated that,

*"1. As per order dated 17.07.2020, this Tribunal had considered the interim report submitted by the Executive Engineer, Public Works Department, Thiruvallur District and posted the case to 28.09.2020 for filing final report and on 28.09.2020, the matter was adjourned to today by notification.*

*4. Considering the circumstances, we feel that one more opportunity can be given to the committee to submit the report. The committee is directed to submit the report to this Tribunal on or before 01.12.2020 by e-filing along with necessary hardcopies to be produced as per Rules"*

In the order dated 01/12/2020 inter alia stated that,

*"2. on 17.07.2020, the Public Works Department (PWD) filed a report but the committee did not file the report. So, we directed the committee to submit the report regarding the action taken for the removal of encroachment and rejuvenation activities taken by them to restore the Nemilicherry Lake. The learned counsel appearing for the Pollution Control Board had submitted that the Board has also independently conducted the inspection on 11.07.2020 and water samples had been collected from the lake and they were awaiting the report of the analysis and they also wanted some more time to file the report to be incorporated in the joint committee's report. So, the matter was adjourned to 28.09.2020 for that purpose. On 28.09.2020, it was adjourned to 03.11.2020 by notification and on 03.11.2020, the matter was taken up and at the request of the committee, the same was adjourned to today.*

*5. The 6th respondent is directed to submit an independent report regarding the compliance of the Solid Waste Management Rules, 2016 in their area including collection, segregation and disposal of the waste generated in their area and the management of the sewage generated therein and if there is any possibility of discharge or dumping of garbage in any portion of the lake, then they are also directed to submit a detailed report as to what are all the remedial measures taken by them to overcome that issue.*

*7. So considering the circumstances, we feel that some more time can be granted to them to submit a report. The committee is directed to submit the report on or before 06.01.2021 to this Tribunal by e-filing along with necessary hardcopies to be produced as per Rules."*

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

It is respectfully submitted that in due compliance of the said Hon'ble National Green Tribunal direction, surface water samples from the Nemilicherry Lake was collected on 11/07/2020 so as to ascertain the present water quality in the said water body

**Statement showing the value of the Physico chemical parameters analyzed**

Sl. No	Parameters	Units	Point of Collection	TNPCB Standards (Inland Surface Water)
			Nemilicherry Lake	
1	pH @ 25°C	No.	7.18	5.5-9
2	Total Suspended Solids @ 105°C	mg/L	22	100
3	Total Dissolved Solids @ 180°C	mg/L	642	2100
4	BOD @ 27°C	mg/L	28	30
5	COD	mg/L	208	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	<0.05	2
12	Hexavalent Chromium Cr <sup>+6</sup>	mg/L	<0.05	0.1
13	D.O	mg/L	6.6	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
			Nemilicherry Lake in Pallavaram	
1	Total Coliform	MPN /100 ml	16000	500 or less.
2	Faecal Coliform	MPN /100 ml	3500	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 Nemilicherry Lake analysed for Bacteriological parameter. Total Coliform and Faecal Coliform exceeds the Primary Water Quality Criteria for Bathing Waters prescribed by Central Pollution Control Board.

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

- (i) It is respectfully submitted that the Nemilicherry Tank in Pallavaram Taluk in Chengalpattu District is a tank maintained by the Public Works Department. Nemilicherry Tank is located at Survey No.164/3 in Nemilicherry Village, Pallavaram Taluk in Chengalpattu District. It has water spread area in an extent of 13.96 Ha with an own catchment of 0.31 sq.km and with the storage capacity of 6.31 Mcft. The tank was once irrigating an extent of 95.54 Ha and there are 655 encroachments as identified by the survey department officials in the year of

2017. The tank has lost its irrigation potential long back due to the expansion of the city in course of time and now it is only a natural aquifer.

- (ii) During an inspection made, it is observed that the Pallavapuram Municipality area is letting sewage water into the lake and dumping of solid wastes on the bed of the tank which has to be addressed by the Commissioner, Pallavapuram Municipality.
- (iii) The NGO's and Welfare Association have collected the debris, garbages spread on the surface of the tank bed and at foreshore during June' 2018. In continuation to their voluntary clearing activity this Department has taken massive garbages and debris clearing activity subsequently after clearing the garbages in the tank bed the Department has obtained the District collector order vide processing No. 352 / Q – 3 – 2018 / Dated: 13.07.2018 for desilting and deepening of the Nemilichery Tank and the tank was deepened to conserve more flood water and to mitigate the flooding of the foreshore.

As regards to the rehabilitation of the tank a comprehensive plan for rehabilitation and restoration of all tanks in overall Kovalam basin (comes under Chengalpatu and Chennai District) under Comprehensive Flood Mitigation Project with an amount of Rs.2000 crore which also involves creating biodiversity parks/ tree-planting around the banks of the water body protecting the lake against the future encroachment. Detailed Project Report has been sent to Government and the Nemilicherry Tank in Chengalpattu District is one of the tanks included in the proposals and when the financial sanction is accorded for the proposal, the encroachments will be removed and further guarded against new encroachments besides all other component works included in the proposals under the plan.

#### **4. REPORT FROM COMMISSIONER, PALLAVARAM MUNICIPALITY**

- 1. Pallavapuram is a Special Grade Municipality**
- 2. Location of the said Nemilicherry Lake: Survey No.164/3 of Nemilicherry Village**
- 3. Extent of Nemilicherry Lake: 13.96 hectares**
- 4. Total Area of the Pallavapuram Municipality : 18.01 Sq.Km**
- 5. Total Population of the Pallavapuram Municipality: 2,15,452**
- 6. Total Household of the Pallavapuram Municipality: 75,000**
- 7. No of Wards: 42**
- 8. Total Solid waste generation: 104 T/day (Biodegradable waste – 44T/day & Non Biodegradable Waste – 60 T/day)**
- 9. Total Sewage generation: 9 MLD**

#### **SEWAGE GENERATION AND DISPOSAL ARRANGEMENTS:**

**Sewage generation from the Pallavapuram Municipality area: 9 MLD**

Underground Sewerage system is functioning in all areas of the Municipalities since 2018 with the installation of sewer line, pumping line, lifting and pumping stations at 18 locations and the sewage is transported to CMWSSB premises at Perungudi, treated in the STP operated and maintained by the CMWSSB.

## **SOLID WASTE MANAGEMENT**

**Generation of total Solid Waste in the Pallavapuram Municipal area: 104 MT/day**  
(Biodegradable waste - 44 MT and Non Biodegradable waste – 60 MT)

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

Presently the Pallavapuram Municipality carries out door-to-door collection of solid waste using 32 tricycle, 96 Battery Operated vehicle(BOV), 39 Light Commercial Vehicle (LCV) and with 589 sanitary Workers. Out of 104 MT/day solid waste, biodegradable solid waste is 44 MT/day and the non biodegradable wastes is 60 MT/day. Pallavapuram Municipality is having Solid waste processing facility to process the biodegradable waste generated in the Pallavapuram municipal area to the tune of 44 MT/day for which the local body has obtained Authorization from the TNPCB vide Procs. No. JCEE(M)/ TNPCB/ CHN./ SWM/ F.6840/ MMN/2019, Dated 08.04.2019 valid upto 31/03/2020 and subsequently extended up to 30/09/2020. The local body is having Micro Composting Centers viz at Thiruvika Nagar phase 1 (S.F.No.51/2,4 Hasthinapuram Village) for 4.9TPD, Ganga garden Keelkatalai (S.F.No.258/1C1 (P) Keelkattalai Village) for 3.5TPD, Keelkatalai pumping station (S.F.No.304 Keelkattalai Village) for 3TPD, Manikandan Nagar (S.F.No.51/5A1 Hasthinapuram Village) for 4.9TPD, Kacheri Malai Road, Zamin Pallavapuram (S.F.No.49/4(P) Zamin Pallavaram Village) for 3.5TPD, Highways Nagar, Zamin Pallavapuram (S.F.No.167/145/146/157/180 Zamin Pallavaram Village) for 4.9TPD and Thiruvika Nagar phase 2 (S.F.No.51/2,4 Zamin Pallavaram Village) for 2TPD to process 26.7MT/day of compostable waste and the local body is having 22 nos. of Onsite Compostable Centre to handle biodegradable waste to the tune of 17.3 MT/day.

Of the 60 MT/day of Non biodegradable waste, saleable waste such as plastics, glass bottles and metals to the tune 10MT/day are sold to the recycling facility. Garden waste and Coconut shell to the tune of 10MT/day are being sent to garden waste processing facility at Perungudi operated and maintained by Greater Chennai Corporation and the remaining 40MT/day of Non biodegradable waste is taken to the Ganapathipuram Transfer Station, from where the same is transported to Kodungaiyur dump site of Greater Chennai Corporation.

Pallavapuram Municipality earlier transported the Non biodegradable solid waste to the Integrated Municipal Solid Waste processing facility at Vangadamangalam Village, Vandalur Taluk, Chengalpattu District and dumped in the premises of the said facility. The Hon'ble National Green Tribunal in Original Application 208 of 2017 dated: 16.12.2019 directed the local bodies Tambaram, Pallavapuram, Sembakkam Municipalities not to use the said area for further dumping. Thereafter the local body is disposing the same through Chennai Corporation dumping yard.

### **Action Plan for Solid Waste Management**

#### **Short Term**

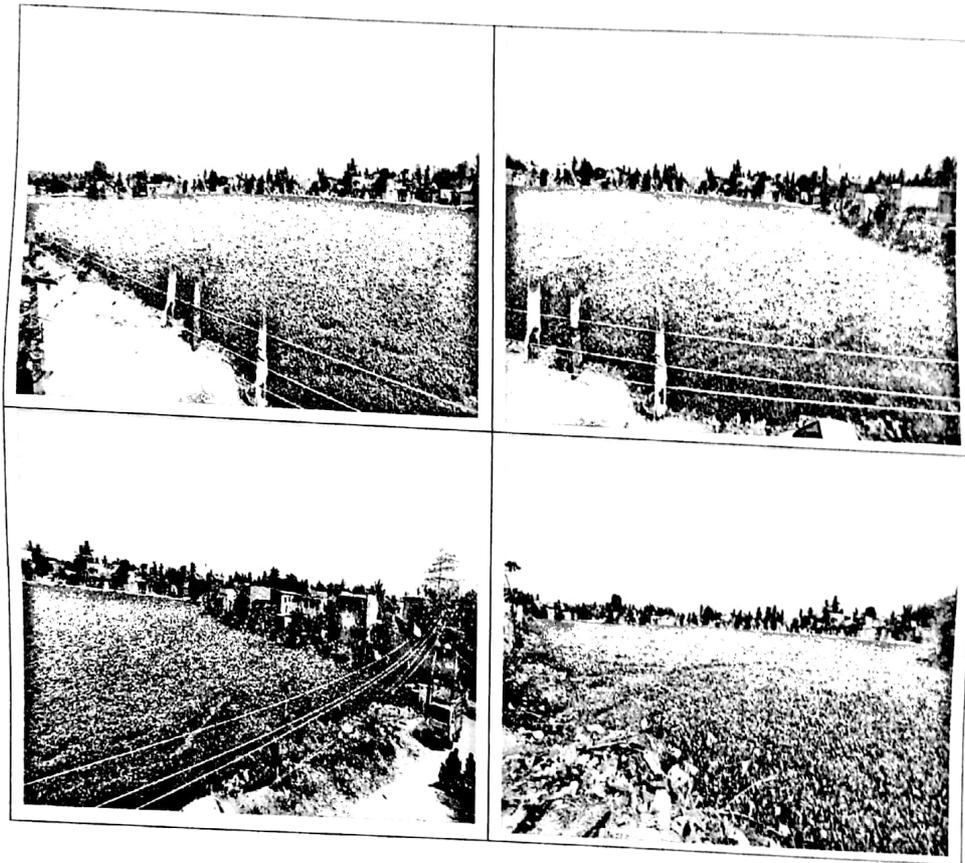
1. Pallavapuram Municipality is carrying out composting of the biodegradable waste at its Micro Compost centres(MCC) and Onsite Composting Centers(OCC)
2. Pallavapuram Municipality is carrying out the disposal of recyclable and saleable waste through recycling facilities.
3. Pallavapuram Municipality disposing the Non biodegradable waste through Greater Chennai Corporation using its Kodungaiyur dumping facility.

### Long Term :

- 1 Door to Door Collection of segregated solid waste from the households of the Pallavapuram municipality will be made 100% within a months time.
- 2 Pallavapuram municipality has proposed to dispose the entire Non biodegradable incinerable waste to the proposed incineration facility (2X50MT capacity) proposed at Vengadamangalam, Vandalur Taluk, Chengalpattu District within six months, after obtaining necessary permission from the competent authority for the said facility.

### 5. JOINT INSPECTION OF THE COMMITTEE

The members of the joint committee have carried out the inspection in the area in question on 11/07/2020.



### 6. OBSERVATIONS BY THE COMMITTEE

1. Nemilicherry 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.
2. Nemilicherry Lake is located at survey no.164/3 of Nemilicherry Village, Pallavaram Taluk, Chengalpattu District which has water spread area in an extent of 13.96 hectares.
3. It is bounded by Residences of Pallavapuram Municipality in the Northern side, Southern side and in the western side and tank bund in the Eastern side.
4. Hyacinth was found fully occupying the entire area of Nemilicherry tank.
5. The surplus water of the Nemilicherry tank is feeding the storm water channel and finally confluence to Nanmangalam Surplus course.

6. Due to the absence of the surplus course, every year the downstream side of this tank area was inundated by the surplus water of this tank.
7. Encroachments were noticed on the entire length of the tank bund and in the east, west and northern side of the water spread area of the Nemilicherry tank.
8. There are major storm water drain outlets and street drains, draining into this Nemilicherry tank bringing Sullage / Sewage to the tank. The tank water is being polluted due to this inflow of sewage mixed storm water from Pallavapuram Municipal area.
9. The residents in the fringe of the water body were found dumping the solid waste.
10. Pallavapuram Municipality is carrying out the processing of the biodegradable waste collected from the Municipality area and handling the same as per Solid Waste Management Rules, 2016. The local body is having Solid waste processing facility to process the biodegradable waste generated in the Pallavapuram municipal area for which the local body has obtained Authorization from the TNPCB vide Procs. No. JCEE(M)/ TNPCB/ CHN./ SWM/ F.6840/ MMN/2019, Dated 08.04.2019 valid upto 31/03/2020 and subsequently extended up to 30/09/2020.
11. It was reported by the Pallavapuram Municipality that the entire non biodegradable waste will be taken to the Vengadamangalam solid waste processing facility after the installation of the 2 x 50 tonne capacity incinerator with necessary control measures.

## **7. RECOMMENDATIONS:**

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

01. Pallavapuram Municipality shall plug the unauthorized sewage/sullage discharge into the Nemilicherry tank and provide community soak pits at vulnerable points to prevent the flow of sewage/sullage into the tank within six months.
02. Pallavapuram Municipality 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 six months and shall ensure that no dumping of solid waste happens in the Nemilicherry Lake at any circumstances by deploying security guards.
03. Pallavapuram Municipality shall take steps for the complete disposal of the non biodegradable waste generated to the Vengadamangalam incinerator facility after getting necessary permission from the competent authority within six months.
04. Pallavapuram Municipality shall levy fine on the violators dumping solid waste and disposing sewage into the Nemilicherry Lake and other water bodies in their jurisdiction under Local body Acts.
05. Pallavapuram Municipality shall create awareness among the public with the help of associations in the local body area for proper segregation of solid waste.
06. Pallavapuram Municipality / PWD shall remove the hyacinth in the Nemilicherry Lake within a month's time.
07. Pallavapuram Municipality shall provide dedicated CCTV camera within a month at the vulnerable points to prevent the dumping of solid waste and disposal of sewage by the public.

08. PWD with the help of Revenue Authorities shall make survey to identify any encroachment in the Nemilicherry Lake within six months and to take necessary steps to evict them.

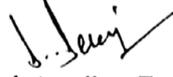
09. PWD shall revamp the weir and strengthening of the bunds in the said water body for smooth flow of surplus water and create biodiversity parks/ tree-planting around the banks of the water body, so as to protect the lake against the future encroachment within six months by obtaining necessary funds from the Government



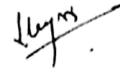
**District  
Environmental  
Engineer,  
Tamil Nadu Pollution  
Control Board,  
Maraimalai Nagar**



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



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



**District  
Collector,  
Chengalpattu  
District**