

**INSPECTION REPORT OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NATIONAL GREEN TRIBUNAL (SOUTHERN ZONE) IN RESPECT OF O.A NO. 56 OF 2020 (SZ) SUO MOTU ON THE BASIS OF THE NEWS PAPER REPORT PUBLISHED IN DINAMALAR CHENNAI CITY SUPPLEMENT EDITION DATED, 04.03.2020 UNDER THE CAPTION "SITHALAPAKKAM LAKE IN NEED OF SUCCOUR"**

**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. 56 of 2020 inter alia stated that:

*"1. The above case has been suo motu registered by this Tribunal on the basis of the paper report published in 'the Hindu newspaper Chennai Supplementary, dated 04.03.2020 under the caption "Sithalapakkam Lake in need of succour".*

*2. It is alleged in the report that huge amount has been spent by the Government for rejuvenating the Putheri Lake in Pallavaram. However, due to the negligence and lapses on the part of the local bodies there is no maintenance for the lakes, whereby lot of water hyacinth have grown affecting the flow of the water and also reducing the oxygen level in the water.*

*3. Further, it is also alleged in the report that indiscriminate discharge of sewage is being done in that area and the municipal authorities are pumping sewage water into the lake thereby affecting the quality of the water causing pollution.*

*"6. Before proceeding further, we feel it appropriate to appoint a Joint Committee comprising of the*

- i. District Collector, Chengalpattu, District,*
- ii. Tamil Nadu Pollution Control Board,*
- iii. Chief Engineer Water Resources Organisation (WRO) Public Works Department (PWD) Chennai,*
- iv. Commissioner, Pallavaram Municipality,*
- v. Senior Officer from Chennai Metropolitan Water Supply & Sewerage Board*

*to go into the allegations made in the report and submit a factual and action taken report, if there is any discharge of untreated sewage then the committee is directed to identify the persons who are responsible for the same and initiate action against those persons in accordance with law. As discharging untreated sewage in to the water body is an offence under the Water (Prevention and Control of Pollution) Act, 1974. If there is any pollution caused and the water quality has been contaminated then they are also directed to submit an action plan for remediating the same with shorter and longer time lines. If they are able to trace out who is responsible for the contamination, then they are directed to take action against such person including launching of prosecution and imposing environmental compensation and take steps to recover the amount from such person.*

*7. Water Resources Organisation (WRO) and Public Works Department will act as nodal agency for co-ordination and for providing all necessary logistics for this purpose."*

## 2. COMPLIANCE OF THE DIRECTION

It is respectfully submitted that 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 RDO, Tambaram and officials from Pallavapuram Municipality from the Putheri Lake in Pallavaram on 20/08/2020.

**Collection of water sample to ascertain the quality of water in the Putheri Lake in Pallavaram**



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

Sl. No	Parameters	Units	Point of Collection		TNPCB Standards (Inland Water)	Standards Surface
			Putheri Lake in Pallavaram	in		
1	pH @ 25°C	No.	7.84		5.5-9	
2	Total Suspended Solids @ 105°C	mg/L	56		100	
3	Total Dissolved Solids @ 180°C	mg/L	1006		2100	
4	BOD @ 27°C	mg/L	40		30	
5	COD	mg/L	360		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 <sup>+6</sup>	mg/L	<0.01		0.1	
13	Iron as Fe	mg/L	<0.01		-	
14	D.O	mg/L	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
			Putheri Lake in Pallavaram	
1	Total Coliform	MPN /100 ml	1700	500 or less.
2	Faecal Coliform	MPN /100 ml	490	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 Putheri Lake in Pallavaram 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 Putheri tank is not maintained by the PWD and is under the maintenance control of Pallavapuram Municipality. The main allegation is that though huge amount has been spent by the Government for rejuvenating the Putheri Lake in Pallavaram but now due to the negligence and lapses on the part of the local bodies, there is no maintenance for the lakes, leading to large growth of hyacinth have been grown affecting the flow of the water and also reducing the oxygen level in the water, indiscriminate discharge of sewage is being done in that area and the municipal authorities are pumping sewage water into the lake thereby affecting the quality of the water causing pollution. Hence PWD has no specific remarks to offer in respect of the Putheri tank.

**4. REPORT FROM COMMISSIONER, PALLAVAPURAM MUNICIPALITY**

- 1. Pallavapuram is a Special Grade Municipality**
- 2. Location of the said Putheri lake: Survey No.273 of Zamin Pallavaram Village**
- 3. Extent of Putheri lake: 4.23 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**

It is respectfully submitted that the said complaints regarding the Sewage reaching the Putheri Lake had arisen due to the fact that during the Monsoon of 2019, there was huge inflow of

rain water along with sewage into Underground Sewage system (UGSS) of the Pallavapuram Municipality and the same was a cause for the overflow of the sewage mixed with Rain water from the pumping lines, lifting stations and the pumping stations in a few places.

Particularly in the Lifting station in Aishwarya Nagar there was overflow of the water that accumulated in the collection well. As there was a power failure at the time of the excessive rain the overflow of the sewage and flood waters had occurred. Due to this the water mixed with sewage had drained into the Putheri Lake through the natural channels in the area.

The said overflow was the reason for the sewage mixed with rain water to reach the Putheri Lake. The defect in the capacity of the lifting station was identified. In order to rectify the same, the capacity of the said Lifting station was improved by increasing the power of the Pumps installed in the Lifting station. In addition, a new Power Generator has been placed in the Lifting station at times of power failure.

In this regard the two 5HP motors were replaced with two 10 HP motors and the allied pumps. This essentially increases the capacity of the Lifting station to more than double its capacity and the said overflow has been now completely addressed. Moreover, the provision of Generator will ensure that the Lifting station will function even during the times off power failure and during the Stormy weather

Even during the monsoon season from October 2020 till date, the overflow of the same lifting station has not happened and the UGSS is now functioning without any overflow or leakages. It is submitted that the overflow that happened in the Monsoon of 2019 was also due to the fact that the UGSS was completed in 2017-18 in the left out area and the same was first heavy monsoon after the completion of the UGSS in the said area.

With regard to the maintenance of the Putheri Lake it is submitted that the Lake is in two parts namely South and North and it is separated by the Radial Road. The Lifting station is on the Southern part of the lake. The work of deepening the lake in order to restore its capacity was carried out by Pallavapuram Municipality and completed in the Month of June 2020, utilizing the CSR Funds through the District Collector, Kancheepuram. The work involved is desilting, deepening, formation of Bund, footpath around its periphery at an estimate cost of Rs.30 Lakhs. With regard to the Northern part the same is deepened with the assistance of an NGO by name Pasumai Sei and the lake has been restored to its full capacity.

Further on 30-12-2020 it as noticed that few loads of solid waste had been dumped on the northern part of the Putheri Lake on the night of 29-12-2020. Immediate action was taken and the same was also removed using the machinery.

Action will be taken by the Pallavapuram Municipality for removal of hyacinth in the Putheri Lake.

#### **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 :**

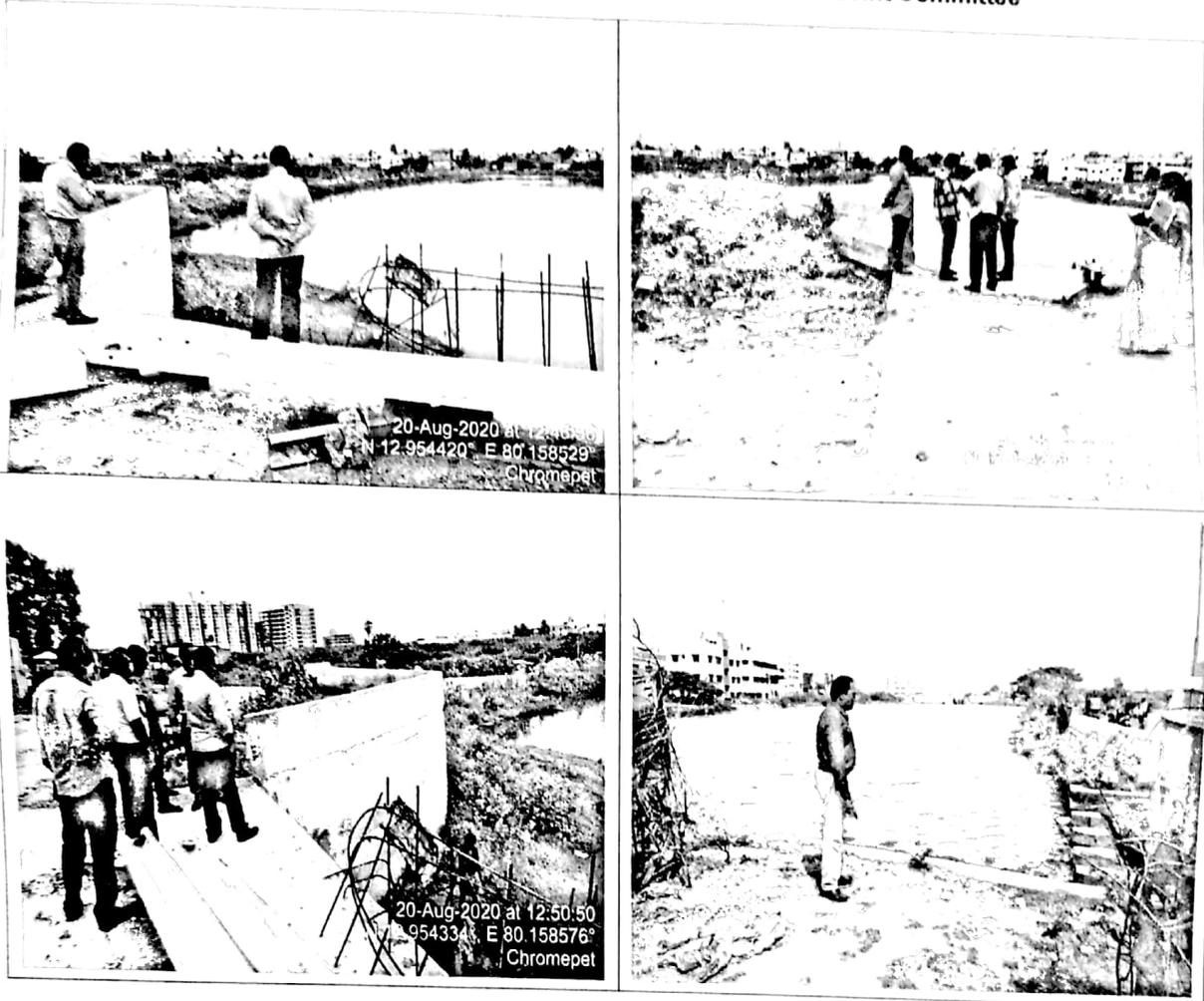
- 1 Door to Door Collection of segregated solid waste from the households of the Pallavapuram municipality will be made 100% within a months time.
- 2 Pallavapuram municipality has proposed to dispose the entire Non biodegradable incinerable waste to the proposed incineration facility (2X50MT capacity) 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 20/08/2020 & 01/02/2021.

**Photographs taken during the time of inspection of the Joint Committee**



## **6. OBSERVATIONS BY THE COMMITTEE**

During the time of inspection, the committee observed the following

1. Putheri Eri is located at survey no.273 of Zamin Pallavaram Village, Pallavaram Taluk, Chengalpattu District
2. It is bounded by vacant land and M/s Vels University in the Northern side, lifting station and Kurinji nagar in the Southern side, road and vacant land in the Eastern side and Aishwarya Nagar and Surya Avenue in the Western side.
3. Putheri Eri spreads over in an extent of 4.23 hectares and it is divided by the Radial Road into two parts namely Southern and Northern part.
4. Hyacinth was found in the southern part of Putheri Eri.
5. The overflow of the Pallavaram Periya Eri and the storm water from the Malliga Nagar and Velmurugan colony area near the Vels University reaches this Eri.

6. The overflow of this Eri leads to Pallikaranai Marsh land through Keelkattalai Surplus course.
7. 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.
8. 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.
9. Sewage is pumped into Putheri Lake in Pallavaram for which a suo moto case O A No.55 of 2020 under the caption " Sewage is pumped into Putheri Lake in Pallavaram/ Back to the Brink" is pending before the Hon'ble National Green Tribunal.
10. Accumulation of non biodegradable waste was noticed in the Ganapathipuram transfer station for which a suo moto case O A No.191 of 2020 under the caption "In Pallavaram, the road is dump yard" is pending before the Hon'ble National Green Tribunal.
11. Pallavapuram municipality is carrying out the biomining of the legacy waste in the Pallavaram Periya Eri for which O A No.37 of 2012 filed by S.P Surendranath Karthik, Madipakkam, Chennai is pending before the Hon'ble National Green Tribunal.
12. It is ascertained from the Pallavapuram municipality that during Monsoon 2019 there was a overflow from the sewage pumping station located in the southern end of the Putheri Eri and same was rectified by providing pumps with increased horse power along with standby DG set of capacity 25 KVA.
13. Further on 30/12/2020 it was noticed that few loads of solid waste had been dumped in the northern part of the Putheri Eri, Pallavapuram municipality has taken action and removed the dumped solid waste and the same was taken to the Ganapathipuram transfer station.
14. Pallavapuram municipality has identified the person who has dumped the solid waste in the said northern part of the Putheri Eri and levied a fine of Rs.25000 and the same was collected.

## **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 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 Putheri Eri at any circumstances by deploying security guards.
02. 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.

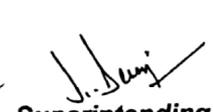
03. Pallavapuram municipality shall levy fine on the violators dumping solid waste and disposing sewage into the Putheri Eri and other water bodies in their jurisdiction under Local body Acts.
04. Pallavapuram municipality shall create awareness among the public with the help of associations in the local body area for proper segregation of solid waste.
05. Pallavapuram municipality with the help of Revenue Authorities shall make survey to identify any encroachment in the Putheri Eri and to evict them within six months.
06. Pallavapuram municipality shall remove the hyacinth in the Putheri Lake within a month's time.
07. Pallavapuram municipality shall deploy skilled persons to maintain the sewage pumping station located in the southern side of the Putheri Eri for periodical pumping of the sewage and shall maintain the energy meter in the pumping station, to record the hours of pumping.
08. 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.
09. Pallavapuram municipality shall maintain the sewer line laid along the radial road and ensure that there is no leakage/breakage at any point of time avoiding the flow of sewage into the Putheri Eri.

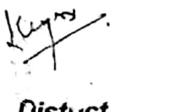
  
**Chennai  
 Metropolitan  
 Water  
 Supply &  
 Sewerage  
 Board**

  
**Commissioner  
 Pallavaram  
 Municipality**

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

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

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

  
**District  
 Collector,  
 Chengalpattu  
 District**