

INSPECTION REPORT OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NATIONAL GREEN TRIBUNAL (SOUTHERN ZONE) IN RESPECT OF O.A NO. 55 OF 2020 (SZ) TAKEN UP SUO MOTU BASED ON THE NEWS ITEM IN CHENNAI EXPRESS NEWSPAPER DATED 03.03.2020, CHENNAI SUPPLEMENTARY UNDER THE CAPTION "SEWAGE IS PUMPED INTO PUTHERI LAKE IN PALLAVARAM/ BACK TO THE BRINK"

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.55 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 Chennai Express News paper Chennai Supplementary, dated 03.03.2020 under the caption "Back to the Brink".*
- 2. It is alleged in the report 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 water of hyacinth have been 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.*
- 7. Before proceeding further, we feel it appropriate to appoint a Joint Committee comprising of the District Collector, Chengalpattu, District, The Tamil Nadu Pollution Control Board, Engineer-in Chief, Water Resources Organisation (WRO) and Public Works Department (PWD), the Commissioner, Pallavaram Municipality, Senior Officer from Chennai Metropolitan Water Supply & Sewerage Board to go in to the allegations in the report and submit a factual and action taken report to this Tribunal. If there is any discharge of untreated sewage, then the committee is directed to identify the persons responsible for the same and initiate action against the people in accordance with law, as discharging untreated sewage into the water body is an offence under the Water Prevention (control of Pollution) Act, 1974. If there is any pollution caused and the water quality has deteriorated then they are also directed to submit the action plan for remediating the same with shorter and longer time lines. If they are able to trace out persons 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(s).*
- 8. 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.*
- 9. The Chief Engineer, Public Works Department (PWD) and Water Resources Organisation (WRO), Chennai is Suo Motu impleaded as additional 9th respondent."*

Subsequently the Hon'ble National Green Tribunal (SZ), Chennai in its order dated. 29/01/2021 further directed the following

- "3. We have received the report submitted by the Executive Engineer, Public Works Department, Lower Palar Basin received on 29.01.2021*

4. It is mentioned in the report that the Putheri tank in question is not maintained by the Public Works Department and it is under the maintenance and control of Pallavaram Municipality. Joint inspection was conducted on 20.08.2020 by the members of the committee and they would be filing their report immediately before this Tribunal.

5. It is also mentioned in the report that there are plans for rehabilitation and restoration of all tanks including Putheri tank in the overall Kovalam Basin (comes under Chengalpattu and Chennai District) under Comprehensive Flood Mitigation Project with an amount of Rs.2,000/- Crore which also involves creating biodiversity parks/ tree planting around the banks of the water body protecting the lake against future encroachment and Detailed Project Report (DPR) has been sent to the Government and after getting approval from the World Bank, the said project will be launched.

6. The 8th respondent/Pallavaram Municipality filed report dated 06.01.2021

7. It is seen from the report that certain steps have been taken to mitigate the issue and the entire solid waste dumped in that area has been removed.

8. So considering the circumstances, the Joint Committee is directed to submit the report to this Tribunal on or before 18.02.2021 by e-filing in the form of Searchable PDF/OCR Supportable PDF and not in the form of Image PDF along with necessary hardcopies to be produced as per Rules, failing which, action will be taken against the members of the committee for non-compliance of the direction as contemplated under Section 25 & 26 of the National Green Tribunal Act, 2010 as more than 10 (Ten) months have lapsed, after passing the order and constituting the committee."

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 RDO, Tambaram and officials from Pallavaram 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 Surface Water)
			Putheri Lake in Pallavaram	
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 ⁺⁶	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 Pallavaram 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

4. REPORT FROM COMMISSIONER, PALLAVARAM 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 Pallavaram Municipality : 18.01 Sq.Km***
- 5. Total Population of the Pallavaram Municipality: 2,15,452***
- 6. Total Household of the Pallavaram Municipality: 75,000***
- 7. No of Wards: 42***
- 8. Total Solid waste generation: 104 T/day (Biodegradable waste – 52T/day & Non Biodegradable Waste – 52 T/day)***
- 9. Total Sewage generation: 9 MLD***

It is 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 Pallavaram 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 is 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 Pallavaram Municipality for removal of hyacinth in the Putheri Lake.

SEWAGE GENERATION AND DISPOSAL ARRANGEMENTS:

Sewage generation from the Pallavaram Municipality area: 9 MLD

Sewerage system is functioning in all areas since 2018 with the installation of sewer line, pumping line, lifting and pumping stations at 18 locations.

SOLID WASTE MANAGEMENT

Solid waste generation from the Pallavaram Municipality area: 104 T/ day (Biodegradable waste – 52 MT/day and Non Biodegradable waste – 52 MT/day)

Present status of collection and disposal of solid waste:

Under the existing Solid Waste Management Scheme the Pallavaram Municipality is having own Secondary Collection Vehicle - 7 Nos. of Compactor Lorry and 7 Nos. of Tipper Lorry. Also the Municipality is having Primary Collection Vehicle - 39 Nos. of Light Commercial Vehicle (Tata Ace) and 96 Nos. of Battery operated vehicles to clean the streets in 42 Wards in Pallavaram Municipality limit.

The Municipality carries out door-to-door collection of municipal solid waste of 104 T/day. The Municipality has obtained authorization from TNPCB to operate the solid waste processing facility to operate waste processing/recycling/treatment/disposal facility in the micro composting centre for 26.7MT/day of compostable waste at Thiruvika Nagar phase 1 (S.F.No.51/2,4 Hasthinapuram Village) for 4.9TPD, Ganga garden Keelkattalai (S.F.No.258/1C1 (P) Keelkattalai Village) for 3.5TPD, Keelkattalai pumping station (S.F.No.304 Keelkattalai Village) for 3TPD, Manikandan Nagar (S.F.No.51/5A1 Hasthinapuram Village) for 4.9TPD, Kacheri Malal 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 under the provisions of Solid Waste Management Rules, 2016. The same is further extended up to 30.09.2020 vide the TNPCB Chairman office order dated.01.07.2020. Remaining biodegradable waste quantity handled in onsite compost centres (OCC) which is functioning in various 22 locations. The balance, 52 MT/day of non biodegradable wastes along with garden waste is being disposed to Perungudi Dump yard and remaining waste is being disposed in Kodungaiyur dump yard belongs to Greater Chennai Corporation with proper permission from Superintending Engineer vide Letter No. SWM/A8/0233/2020 dated 06/02/2021.

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 were 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. Pallavaram 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.
8. Accumulation of non biodegradable waste was noticed in the Ganapathipuram transfer station to the tune of 150 tonnes 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.
9. It was reported by the Pallavaram 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.
10. Pallavaram 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.
11. It is ascertained from the Pallavaram 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.
12. 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, Pallavaram Municipality has taken action and removed the dumped solid waste and the same was taken to the Ganapathipuram transfer station.
13. Pallavaram 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. Pallavaram 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. Pallavaram 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. Pallavaram 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. Pallavaram Municipality shall create awareness among the public with the help of associations in the local body area for proper segregation of solid waste.
05. Pallavaram 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. Pallavaram Municipality shall remove the hyacinth in the Putheri Lake within a month's time.

07. Pallavaram 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. Pallavaram 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. Pallavaram 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.

R. Beteguanabala

**Commissioner,
Pallavaram
Municipality**

D. Vairam

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

[Signature]

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

[Signature]

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

[Signature]

**District
Collector,
Chengalpattu
District**

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