

BEFORE THE NATIONAL GREEN TRIBUNAL (SZ) AT CHENNAI

APPLICATION No. 164 of 2017

M. Dhamodharan,

S/o Marappan

3/38, Gate Thottam, Mannarai,

Tiruppur - 641 607.

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Applicant.

AND

1. The Secretary to Government
Environment & Forests Department,
Government of Tamil Nadu
Secretariat, Fort St George,
Chennai-9.
2. The Executive/ Assistant Engineer
Public Works Department,
(Water Resources)
Government of Tamil Nadu,
Tiruppur District.
3. The Tamil Nadu Pollution Control Board
Rep by its Member Secretary
No. 76, Anna Salai, Guindy,
Chennai- 600 032.
4. The District Collector
Tiruppur District,
Tiruppur.
5. The Principal Secretary to Government of Tamil Nadu,
Municipal Administration & Water Supply Department,
TWAD Board,
Chennnai- 600 005.
6. The Commissioner
Tiruppur Municipal Corporation
Tiruppur.

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Respondents.

REPORT FILED BY RESPONDENT No. 6

I, Kranthi Kumar Pati son of Surender Pati, Hindu aged about 32 years working as Commissioner, Tiruppur Municipal Corporation, Tiruppur, do hereby solemnly affirm and sincerely state as follows:-

1. I am the 6th respondent herein and well conversant with the facts of the case from the connected files.

2. I submit that I have read and understood the contents of the Application filed in support of the above Application No 164 of 2017 and I deny each and every one of the averments set out except those that are specifically admitted herein. I submit that the Applicant is not entitled to any remedy as prayed for and the entire application is liable to be rejected as being misconceived.

3. The respondent herein submits the following report for the kind appreciation of the Honourable Tribunal.

PROPOSAL TO STOP FLOW OF SEWAGE INTO NANJARAYAN LAKE AT SARKARPERIYAPALAYAM

1. Tiruppur (also spelled as Tiruppur) was recognized as a Grade III Municipality by the Government of TamilNadu in the year 1917. The Municipality was subsequently classified as a Selection Grade Municipality in 1972 and subsequently was constituted as a Special Grade Municipality in 1983. Tiruppur Municipality has been upgraded into Tiruppur City Municipal Corporation with effect from 01.01.2008. Tiruppur City Municipal Corporation was formed by annexing adjoining other local bodies such as Nallur and Velampalayam (Municipalities), Andipalayam, Chettipalayam, Mannarai, Murugampalayam, Muthanampalayam, Nerupherichal, Thottipalayam, Veerapandi, (Village Panchayats). The total area of the

Corporation is 159.35 Sq.km. The extended Corporation area is effective from October 2011, after the local body elections. The population as per 2011 census is 877778 and is divided into 60 administrative wards.

2. The whole Municipal Corporation has been divided into 17 sewerage zones for providing under ground sewerage system. Of which zone 1 to 4 was already covered under the sewage project executed by New Tirupur Area Development Corporation Limited (NTADCL) during the year 2005. These zones covers about 60% of the erstwhile municipal area. The collected sewage is being treated in a 15 MLD STP, expandable to 30 MLD established at Sarkarperiyapalayam.
3. Govt of TamilNadu has approved to implement an underground sewerage scheme to added areas of Tirupur Corporation vide G.O MS.No. 50 MA&WS (MA2) Dept dated 21.05.2018 at a cost of Rs. 636.40 Cr. Currently sewage from part of the wards 4,5,6,19,20,29 and 30 which comes under sewerage zone 5,6 and 7 discharges into Nallar river at 5 locations. These zones are covered under the scope of the package 1 of the ongoing project for which work order has been issued on 10.07.2020. These are the added areas of Tirupur City Municipal Corporation, i.e. part of Velampalayam Municipality, Chettipalayam, Thottipalayam, Nerupperichal and Mannarai Village panchayats.
4. The population which contributes sewage through the above said 5 locations is about 1.50 Lakhs. The identified locations are Poomparai, PN road, J V Tapes, Kanjampalayam, and Nallathupalayam. Out of this the habitations are located on both the sides of the river course. Adopting a per-capita water supply of 118 LPD the expected sewage through these 5 locations is about 14.16 mld. Considering the



present duration of supply ie once in 5 days the expected sewage discharge works out to 2.92 mld say 3.0 mld.

5. Currently under ground sewerage system covering the above said areas are under progress. The expected time for completion of the project is year 2023. Meantime as per the directions of the NGT the possible options available to stop the discharge of sewage into Nallar river and to treat the sewage before letting into the Nallar river are as follows: The following options are proposed subject to the condition that there should not be any mixing of industrial effluent with the domestic sewage.

Option 1:

The length of the river stretch over which the zone 5,6 and part of 7 are covered is about 9 km. It is proposed to collect the sewage in a ground level sump of capacity 25000 lit and then pumped to the existing STP at Sarkarperiyapalayam located at about 10 km through 200 mm dia GRP pumping main.

The cost of the proposal works out as follows:

1. Cost of collection system :	
200 mm dia CI pipe – 4000 m	: 3.07 Cr.
400 mm dia CI pipe – 5000 m	: 11.88 Cr.
2. Cost of manholes 200 Nos.	: 2.0 cr.
3. Cost of sump cum pump house	: 1.50 Cr.
4. Cost of Electro mechanical items	: 1.0 Cr.
5. Cost of Pumping main 200 dia -10 Km	: 7.69 cr
6. Restoration charges for 6 km	: 3.0 Cr.
7. Strengthening the channels	: 1.0 cr
8. Misc items& Screens	: 2.86 cr
Total	: 34 .0 cr.

The time required to complete the project is not less than 2 years.

Monthly treatment charges @ Rs. 21.68 per KL would be Rs. 19.51 lakhs per month apart from the EB charges + salary of O&M staff.

Option 2 :

The discharge from the 5 locations can be made to pass through a slow sand filter before discharge into the Nallar river since most of the flow is sullage water and most of the houses are provided with septic tanks. Hence the sullage water can be treated in a filter media. This arrangement is suitable only if the discharge contains only domestic sullage water. We have to ensure that no dyeing or industrial effluents are discharged through these channels. This has to be ensured by TNPCB. The size of the Chamber required to house the filter media is 3 m x 6 m with baffle wall arrangement. Depth of chamber varies according to the location. Screens to be installed at the intercepting point.

1. Cost of construction of chamber	:	5 x 2 x 0.15 = 1.5 Cr.
2. Cost of media	:	= 0.60 Cr.
3. Cost of screens	:	= 0.2 cr.
4. Rejuvenation of collection points	:	= 0.1 Cr.
5. Outlet arrangements to the river	:	= 0.2 Cr
6. Misc items	:	= 0.40 Cr
Total	:	= 2.6 Cr.

Daily maintenance has to be done to keep the system functional. The average monthly maintenance cost would be Rs.10 Lakhs. It will require minimum one year time to complete the works as detailed below.

Sl.No.	Description	Time required
1	Preparation and approval of estimates	1 month
2	Floating of Tender,getting environmental clearances	1 month
3	Finalisation of Tender and issue of work order	1 month
4	Construction of Filter Chamber	3 months
5	Procurement and laying of slow sand filter media	3 months
6	Procurement and Fixing of filter nozzles	2 months
7	Commissioning	1 month

Option 3:

Under this option the sewage is allowed to flow in the river upto the entry point to the Nanjarayan Lake and then diverted to existing 1.5 mld STP constructed and maintained by PWD which is currently non-functional. The system is a conventional system with special blocks and power for performing aeration. Ozone is used as disinfectant. About 8 nos. of 1.5 HP aerators are used in the system.

The civil structures of the STP are in good condition. But all the electro mechanical items need to be replaced with a new one. The approximate cost that would be required to replace the electro mechanical items are about 2.0 Cr. These items are custom made and requires time to procure the same. The original manufacturers need to be identified through PWD. There will be a

recurring cost for the O&M of the plant. The approximate cost would be about Rs. 50 lakhs per annum.

In order to bring the system into operable condition it may require a year time.

The infrastructures proposed under Option 1 and 2 would become Redundant after completion of the ongoing UGSS works.

CONCLUSION:

The STP site and the connected canal alignment has been visited on 02.08.2021. The velocity of flow in the canal leading to the STP has been verified and found to be 0.45 m/sec at a place where the actual depth of flow is 0.61m and the canal width is 0.52m. The estimated flow in the canal is found to be 12.33 mld. The flow is found to be uniform throughout the day. Again the depth of flow in a 800 mm dia existing RCC culvert in the alignment of the canal has been measured and found to be 0.35 m. The flow works out to 8.54 mld. This flow is not matching with the estimated domestic sewage discharge (3 mld) and also not matching with the capacity of the existing STP (1.5 mld). Hence it is evident that the major contributor for the flow in the river is industrial effluent.

Samples of sewage has been collected on 02.08.2021 at various locations such as Nallathupalayam Bridge, Vengamedu Bridge westside, Kanjampalayam west side, Pichampalayam burial ground (Bridge eastside), J V Tapes (Bridge East & West side), Athupalayam bridge (East and West Side) and Kanjampalayam bridge (East side), PN Road Bridge (East & West Side), along the Nallaru river and tested in the lab AWE CARE Private Limited, Erode. The tested results indicates that the BOD in the sewage sample ranges from 36 to 98 mg/lit.

NTADCL is collecting the domestic sewage samples and testing the samples regularly and maintaining a record. The range of values is 180 to 200 mg/lit. Hence the parameters reported by the lab is not matching with the actual sewage parameters met with in the field. Hence it goes without saying that the flow in the Nallaru river is predominantly other than domestic sewage.

The existing plant is not suitable to treat flow containing sewage and industrial effluent. The technology adopted for the existing plant is not suitable to treat this mixed flow. A CETP is required to treat this mixed flow.

Summary of Options discussed above: Est Date of completion

Sl.No.	Options	Construction cost (Rs. In Cr)	Annual O&M cost (Rs. In Cr)	Limitations	Expected period of completion
1	Collecting the sewage and conveying to existing STP at Sarkarperiyapalayam	34.00	2.34	Only domestic sewage can be treated. TNPCB has to ensure that industrial effluent is not discharged at the collection point.	August 2023
2	Trap the sewage and treat it at the point of discharge into river through filter beds	2.60	1.20	Only domestic sewage can be treated. TNPCB has to	August 2022

				ensure that no industrial effluent is discharged at the collection point.	
3	Revamping of existing 1.5 MLD STP constructed by PWD	2.00	0.50	The capacity of existing STP (1.5 mld) is insufficient since the inflow is more than 10 mld. There should not be any mixing of industrial effluent.	August 2022

1). All the above options require at least 1 Year to Complete and start operations. i.e. treatment can begin only after August 2022.

2). UGSS Scheme currently under implementation by Tiruppur City Municipal Corporation. Which was earlier scheduled for completion in June 2023 is now being implemented in mission mode. Tiruppur City Municipal Corporation is expecting his to be functional by December 2022.

3). Once UGSS project is completed the above discussed options for treatment of sewage will be redundant as the project covers in totality the area from where sewage is being discharged into Nallaru / Nanjarayan Lake.

4). Tiruppur City Municipal Corporation is in dire financial stress owing to poor tax collection and additional expenditure resulting from Covid 19 pandemic. It is currently not feasible to undertake any of the proposed works from its general

funds. It will require special grant from government to undertake any project proposed in short term solutions.

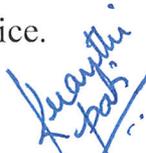
5).As per our calculation only 3 MLD out of 12.33 MLD inflows into the lake is domestic sewage. Rest is expected to be mixed waste including industrial discharge. Options proposed by Tiruppur City Municipal Corporation will not be suitable unless this discharge is treated through CETP beforehand.

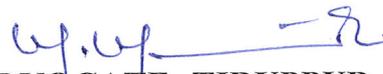
6) Necessary works by the TNPCB to intervene in the discharge of industrial effluents have to be taken up by the TNPCB with the participation from the concerned industries so as to ensure that the same does not reach the environment.

Hence I therefore prayed that this Hon'ble Tribunal may be pleased to dismiss the Application No 164 of 2017 and thus render justice.

Solemnly affirmed at Chennai
on this 19TH day of November 2021
and signed his name in my
presence

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BEFORE ME,
COMMISSIONER
Tiruppur City Municipal Corporation


ADVOCATE: TIRUPPUR

M. MANIKANDAN B.Com., B.L..
ADVOCATE MS. 2436/07
No:22/34 (1), Police Line 1st Street,
Tiruppur - 1.
Mobile : 99949 32389