

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 268 of 2016 (SZ)

Korattur People's Welfare & Awareness
Trust Represented by Mr. S. Sekaran Founder
and Managing Trustee
Registered Office at: Door No.04, 5th Main Road,
Ellai Amman Nagar,
Korattur, Chennai – 600 076.

...Applicant(s)

Vs

Government of India,
Rep. by its Secretary, Ministry of Environment,
Forests & Climate Change, Central Secretariat,
Indira Paryawaran Bhavan, Jorbagh Road,
New Delhi and Ors.

...Respondents

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REPORT OF JOINT COMMITTEE IN COMPLIANCE TO THE
HON'BLE NATIONAL GREEN TRIBUNAL(SZ),CHENNAI
ORDER DATED 24/06/2021 IN O.A.NO.268 OF 2016.

Submitted to
Hon'ble National Green Tribunal (SZ)
Chennai

September 2021

REPORT BY JOINT JOINT COMMITTEE IN CONJUNCTION WITH THE
NATIONAL WATERWAY GREEN THROUGH THE
CALIFORNIA WATERWAY IN O.A.M. 1957

Submitted to
the National Green River
Channel
September 1957

1. Preamble

Ambattur is an industrial town located at the north-west of the Chennai city which comes under the administrative jurisdiction of Chennai District. SIDCO industrial estate, Ambattur is located in Zone – 7 (Ambattur) of Greater Chennai Corporation. Ambattur Lake and Korattur Lake are the two major lakes located within the jurisdiction of Zone – 7 (Ambattur) of Greater Chennai Corporation. Ambattur Lake is located at south west corner of the Ambattur (Corporation of Chennai) area and Korattur Lake is located at northern side of Ambattur (Corporation of Chennai) area. A canal called Ambattur lake surplus canal which flows through SIDCO Industrial Estate is used to discharge the surplus water from the Ambattur Lake to Korattur Lake during monsoon season through two culverts, one near DTP colony in the western end of the lake and another at Eastern end of the lake.

The untreated and partially treated domestic sewage generated from Thirumullaivoyal, Annanur and Ayapakkam areas of Thiruvallur District finds way to Ambattur Lake through various storm water drains. This sewage along with the domestic sewage generated from the Ambattur (Corporation of Chennai) areas such as MKB Nagar, Teachers Colony, Dobhi Colony, Ramapuram, Alagesan Nagar, Gnanamoorthy Nagar, Pattaravakkam, Meenambedu, Karukku, Mannurpet, and Mangalapuram flows through Ambattur lake surplus canal which traverse through Ambattur Industrial Estate (North Phase).

The total extent of the SIDCO Industrial Estate, Ambattur is 1430 acres. On the Northern side, the industrial estate is bounded by the Chennai–Arakkonam railway line followed by Korattur Lake and the other three sides are surrounded by residential and commercial areas of Zone 7 (Ambattur) of Greater Chennai Corporation. The north phase of the estate is sloping towards northeast (i.e. towards Korattur area), and the southern phase of the industrial estate is sloping towards south.

Totally 2976 industrial sheds/plots are located in Ambattur Industrial Estate. Most of these industries are small scale light engineering units and are carrying out dry operations like fabrication/machining of auto & Industrial equipments. Some of the engineering units also carry out surface treatment activities like electroplating, phosphating and powder coating and these activities generate trade effluent. Other types of industries located in the estate are castings, heat treatment, forging, garments, and electrical equipment manufacturing etc. The trade effluent generated from the

industries located in this estate is typically acidic in nature and may contain heavy metals like zinc, copper, chromium, nickel, etc. Out of the total industries located in Ambattur Industrial Estate, only 61 industries in south phase and 125 industries in north phase are trade effluent generating units.

For the management of sewage generated from the industrial units in Ambattur Industrial Estate, SIDCO has installed two Common Sewage Treatment Plants (CSTP- 2 MLD capacity plant at North Phase and 3 MLD capacity plant at South Phase). The operation and maintenance of both CSTPs is being carried out by M/s. Chennai Auto Ancillary Industrial Infrastructure Upgradation Company (CAAIUC).

Other than SIDCO industrial estate, some small industrial estates such as TASS Industrial Estate, Patavatamman Estate & Tiny shed industrial units are located within & adjacent to SIDCO Industrial Estate, Ambattur which have no underground sewer system and the CMWSSB has furnished action plan to provide underground sewer system for that area. Further, CMWSSB has also furnished action plan to provide underground sewer for unsewered areas such as MKB Nagar, Teachers Colony, Dobhi Colony, Ramapuram, Alagesannagar, Gnanamoorthy Nagar, Pattaravakkam, Meenambedu, Karukku, Mannurpet and Mangalapuram.

Earlier, all the trade effluent generating units had provided Individual Effluent Treatment Plant (IETP's) followed by either facilities for reuse or Solar Evaporation Pans (SEPs). Many trade effluent generating units are small scale industries carrying out surface treatment. As the small scale individual units found difficult to operate the IETP's efficiently due to lack of skilled manpower and as the SEPs were found overflowing or seeping occasionally, it was proposed to have a full-fledged Common Effluent Treatment Plant (CETP) with modern facilities for treatment and reuse of trade effluent generated by these industries. In this regard, M/s. JBR Technologies Pvt. Ltd has entered with an tripartite agreement lease with M/s. Tamilnadu Small Industries Development Corporation Limited (TANSIDCO) and with M/s. Ambattur Industrial Estate Manufacturers Associations (AIEMA) and provided CETP with zero liquid discharge system for treatment of trade effluent from the surface treatment industrial units located in the Ambattur Industrial Estate (North Phase & South Phase) engaged in electroplating and allied activities which is functioning since July 2019.

All the small scale trade effluent generating surface treatment units made agreement with M/s. JBR Technologies Pvt. Ltd for the disposal of trade effluent

generated. Further, all these units dismantled the individual ETPs already provided within the premises and now provided only the collection tank with 3 days storage capacity. Presently the CETP is collecting the trade effluent from the member units located in the SIDCO Industrial Estate through dedicated tanker lorries operated with GPS tracking system for treatment. The RO permeate is reused in the member units and the final RO reject is evaporated through Multiple Effect Evaporators (MEEs). No trade effluent is discharged outside the premises and hence the CETP/member units are achieving Zero Liquid Discharge. Hence, there is no discharge of either treated / untreated trade effluent into storm water drain / Ambattur surplus canal.

CAAIUC has identified two locations in south phase and north phase of SIDCO, near 2MLD and 3MLD CSTP's plant with an area of 4500 sq.ft in each location for the storage of non hazardous solid wastes generated from the industrial estate. Collected non hazardous solid waste is being handed over to Greater Chennai Corporation for further processing at Athipattu Solid Waste processing facility.

Meanwhile, the Korattur People's Welfare & Awareness Trust had filed an application before the Hon'ble National Green Tribunal (SZ) in application no.268 of 2016 with a prayer to restrain untreated effluent from industries and sewage from household activities directly letting into the Korattur Lake through the canals or in any manner. Thereafter the case has been adjourned from time to time and subsequently as per order dated 12.12.2019, the Tribunal has constituted a joint committee and directed to prepare the short term & long term action plan and shall file the interim report regarding the progress of the action taken within the period of three months. Further, the Chief Secretary to Government, Government of Tamilnadu convened a meeting on 03.01.2020 with line departments to resolve the issue and restoration of Korattur Lake. Also, the Chief Secretary to Government, Government of Tamilnadu convened a follow up meeting on 08.09.2020, with line departments to review the action plan furnished by the stake holders and Joint Committee report for restoration of Korattur Lake. Finally, the Joint Committee has filed their final report to the Tribunal on 19.11.2020.

2. Order of the Hon'ble Tribunal

It is respectfully submitted that in the above matter, the Hon'ble NGT in its order dated 24.06.2021 has noted and directed inter alia that

Para 9 - However, considering the circumstances and also to ascertain the present status, we direct the Joint Committee to inspect the area in question again and submit the nature of progress of work that has been done in that area and whether the steps taken by the regulators are sufficient to avoid discharge of effluents/sewage into the Korattur Lake.

Para 10 - The committee is also directed to ascertain the water quality and also the sediments from the lake, so as to ascertain as to whether there any heavy metals or other industrial effluents are mixing with the water in the lake.

Para 11 - If on analysis of the sediments from the lake shows presence of any industrial effluents, then the committee is also directed to take steps against the concerned industries who are responsible for the same and they must suggest the remedial measures to remove the same and the expenses required for this purpose have to be realized from the responsible industries who have caused the mischief. The committee is also directed to take the sediment samples from the Ambattur Lake excess of water which is likely to reach the Korattur Lake as well.

Para 12 - The applicant as well as the 11th respondent are directed to submit their suggestions and objections, if any, regarding the work so far taken before the committee within a week, so that, the same may also be considered by the committee while submitting the report as directed by this Tribunal. The authorities must take into account the fact that the monsoon is approaching and all necessary steps to prevent mixing of sewage & other effluents into the lake have to be completed before the onset of monsoon.

Para 15 - The Committee as well as the Tamil Nadu Pollution Control Board, Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) and the Greater Chennai Corporation and the Public Works Department are directed submit their respective reports as directed on or before 12.08.2021 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.

The copy of the above order is enclosed as Annexure-I.

The hearing has been posted further on 30.09.2021.

3. Inspection by the Joint Committee

In order to comply with the orders of the Tribunal, the Joint Committee comprising of the following members reviewed the nature of progress of work that has been done by the stake holders to curtail the discharge of effluents / sewage into the Korattur Lake on 30.07.2021 at AIEMA, SIDCO Industrial Estate, Ambattur.

Sl. No	Name	Designation
1.	Thiru.T.Ravindra Babu	Special Secretary to Government, PWD, Secretariat.
2.	Thiru.M.Vadivel	Additional Secretary to Government, MA&WS Department, Secretariat.
3.	Thiru.R.Rajkumar	Scientist D, Central Pollution Control Board, Regional Directorate, Chennai.
4.	Thiru.V.G.Ramaswami	Superintending Engineer, CMWSSB
5.	Tmt.V.Vijayakumari	Zonal Officer (Zone-VII), Greater Chennai Corporation, Representative of the Commissioner, Greater Chennai Corporation.
6.	Thiru.N.Elangovan	RDO/Central, Chennai Division (Ambattur), Representative of the District Collector, Chennai.
7.	Thiru.M.Malaiyandi	Joint Chief Environmental Engineer(M), TNPC Board, Chennai Zone.



Joint Committee meeting on 30.07.2021



Joint Committee Inspection at Korattur Lake on 30.07.2021

The details of earlier action plan furnished by the stake holders, action taken by them so far and balance works to be done as received from individual stake holders are submitted below.

Status of action plan of the stake holders

1. Chennai Metropolitan Water Supply & Sewerage Board(CMWSSB)					
a. Short Term Action Plan					
Sl. No	Issues	Action Plan (Submitted as on 25/05/2021)	Work Progress from 25.05.2021-09.08.2021	Balance work to be completed	Target Date/ Remarks
1	2	3	4	5	6
1	Ramapuram/ Ward 85 : 25 Nos of streets Underground sewer system available but house sewer connections are not connected in the main sewer system. They are using septic tank for collection of domestic sewage and over flow from septic tank is being letout into the SWD.	<ul style="list-style-type: none"> Total no. of houses :700 Nos. House sewer connections effected :675 Nos. The balance 25 Nos of house sewer connections are to be effected under "illamthorumInnaip u "scheme Estimated Cost: Rs. 1.47 Cr Fund G.O(Ms) No.107, MA&WS(MW1) Dept, dated 20.08.2019 for 224 crores 	Balance 25 nos. has been completed.	NIL	Work completed.

2	Teachers Colony/ Ward 85 i) Underground sewer System available in 8 streets.	<ul style="list-style-type: none"> • Total no. of houses : 340 Nos. • House sewer connections effected: 335 Nos. • The balance 5 Nos of house sewer connections are to be effected under "illamthorumInnaipu "scheme • Estimated Cost: Rs. 0.71 Cr • Fund G.O(Ms) No.107, MA&WS(MW1) Dept, dated 20.08.2019 for 224 crores 	Balance 5 nos. has been completed	NIL	Work completed.
	ii) Underground sewer system not available in 6 streets, the residents are using septic tank for collection of domestic sewage and over flow from septic tank is being let out into the SWD.	<ul style="list-style-type: none"> • Total length of sewer main :1100m • Completed :1070 m Balance: 30 m (deep sewer main) awaiting permission from highways department • Entire 37 Numbers of Manholes constructed. • There are 190 houses are existing and all the house service connections are effected under illamthorumInnaipu "scheme • Estimated Cost: Rs. 8.39Cr • Fund : CMCDM 	Balance length of 30 m deep sewer main has been completed.	NIL	Work completed.

b. Long Term Action Plan

Sl. No	Issues	Action Plan (Submitted as on 25/05/2021)	Work Progress from 25.05.2021-09.08.2021	Balance work to be completed	Target Date/ Remarks
1	Ward 90 - Padikuppam, Golden gerorge Colony Ward 92 - Paarisalai, Mogappair East (10-12 Blocks). Ward 93 - Mogappair East (1-6 Blocks) • Underground Sewage System is	<ul style="list-style-type: none"> Entire 12789 m length of sewer main and 522 number of Manholes construction completed • Total 1314 Nos of House Sewer connections to be effected • Completed:230; Balance:1084 • Estimated Amount: 	135 Nos. of HSC were effected.	Net balance to be effected - 949 nos	Work under progress and will be completed by 31.12.2021

	completed recently.	7.24 Crores. • Fund : CMCDM • Sewer mains provided in 90 streets			
2	i) SIDCO Industrial Estate/Depot 84 /Ward 85 & Depot 86/Ward 86 (P) TINY SHED-70 Nos. Provision of Underground sewer system is under progress. (Industries located in station road, 5th street and 4th cross street are discharging sewage into the storm water drain).	• There are 683 Industries existing. • 70 House Sewer connections are to be effected under Illamthoruminnaipu • Entire 2700m length of sewer main and 92 Nos of manholes construction completed • Sewer mains provided in 9 streets	Testing and commissioning of sewer system has been completed on 06.09.2021 & during commissioning it is found that certain length of sewer line is left out and need to be carried out.	Net HSC to be effected – 70 nos	Work under progress and will be completed by 31.03.2022
	ii) Depot 84 & 86 Korattur & Mannurpettai Underground sewer system is under progress. The residents are using septic tank for collection of domestic sewage and over flow from septic tank is being letout into the SWD.	• 1300 Nos. of House Sewer connections are to be effected • Completed:149 • Balance:1151 • Entire Sewer of length 10380m and 524 number of Manholes construction completed • Estimated Amount: Rs. 6.08 Cr • Fund : CMCDM • Sewer mains provided in 157 streets	456 nos. of HSC were effected	Net balance to be effected - 695 nos.	Work under progress and will be completed by 31.12.2021
3	Pattravakkam (84), Mannurpettai(84) Kachanankuppam (84), Ambattur, SIDCO Estate : 65 streets • No Underground Sewerage System. • Work is under progress	• Entire Sewer main of length 10380 m and 524 Nos of manholes construction completed • 1301 Nos. of House Sewer connections are to be effected • Completed: 45 • Balance:1256 to be effected under illamthoruminnaipu scheme • Estimated Amount: 9.98 Crores. • Fund : CMCDM	Testing and commissioning of sewer system has been completed 45 nos. of HSC were effected.	Net balance to be effected - 1211 nos.	Work under progress and will be completed by 31.12.2021

4	<p>Ward 86 – Athipattu, Mannurpettai (P), Ambattur Estate (P), ICF Colony. -211 streets Underground Sewerage System.</p>	<ul style="list-style-type: none"> • Entire laying of 30823m length of sewer main work completed • Entire 1377 Nos of Manholes constructed. • 2690 Nos. of House Sewer connections are to be effected • Completed:182 • Balance:2508 to be effected under illamthoruminnaipu scheme • Estimated Amount: 14.96 Crores. • Fund : CMCDM 	<p>Trial commissioning work is in progress.</p>	<p>Balance 2508 nos. to be effected.</p>	<p>Work under progress and completed by 31.12.2021</p>
5	<p>Karukku(D/82-40 streets), Gnanamoorthy (D/82-25 streets), DTP Colony(D/82-5 streets), Poompohar Nagar(D/81-5 streets), Mangalapuram (D/85-8 streets) Underground sewer system available but not connected in the main sewer system. The residents are using septic tank for collection of domestic sewage and over flow from septic tank is being letout into the SWD</p>	<ul style="list-style-type: none"> • Entire 3950 Nos. Of House sewer connections effected • Estimated Cost: Rs.82.95 Cr • Fund: G.O (Ms) No.107, MA&WS (MW1) Dept, dated 20.08.2019 for Rs. 224 Cr 	<p>Completed as on 25.05.2021</p>	<p>-</p>	<p>-</p>
6	<p>TASS Industrial Estate/Depot 85 (Corporation) -26 streets No Underground Sewer system available. & 143 Industries are existing</p>	<ul style="list-style-type: none"> • Total length of sewer main: 2974 m • Balance to be completed:1450 m • Total Manholes:100 • Balance to be constructed:29 • Entire 143 Nos of House Sewer connections are to be effected under illamthoruminnaipu scheme • Estimated Amount: Rs. 8.39 Cr • Fund : CMCDM 	<p>Length of sewer main completed: 486 mtrs. Manholes: 8 nos. were completed.</p>	<p>Balance length of sewer main to be completed: 964 mtrs. Manholes to be constructed: 21 Total 143 nos. of HSC are to be effected only after completion of works.</p>	<p>Work under progress and will be completed on or before 31.12.2021</p>

7	<p>Depot 79 to 83,87to 88 /Ward79 to 83,87to 88 Ambattur(OT) -145 streets,Kallikuppam-90 streets</p> <p>Underground sewer system available but not connected in the main sewer system. The residents are using septic tank for collection of domestic sewage and over flow from septic tank is being letout into the SWD</p>	<ul style="list-style-type: none"> Total No. of houses : 29237 Nos. House sewer connections effected under illamthoruminnaipu scheme: 6778 Nos. The balance 22459 Nos of house sewer connections are being effected under illamthoruminnaipu scheme Estimated Amount: Rs. 61.39 Cr Fund: G.O (Ms) No.107, MA&WS (MW1) Dept, dated 20.08.2019 for Rs. 224 cr. 	<p>1807 nos. of HSC were effected.</p> <p>Total Nos effected as on date: 6778+1807= 8585 nos.</p>	<p>Net balance to be effected - 20652 nos.</p>	<p>Work under progress and will be completed before Dec' 2021.</p>
8	<p>Depot 81/ Ward 81 KK Road, Ambattur OT, Indira Nagar, Kalayanapuram, Thiruvallur Nagar Ward 82 Kallikuppam Menambedu, Karruku, DTP Colony, Gnanamoorthy Nagar, Madanamkuppam (Part) Ward : 91- Ebinezer avenue</p> <p>Sewer mains are to be provided in 64 streets.</p>	<ul style="list-style-type: none"> Entire Sewer main length :11110m Completed:6230 m; Balance:4880 m 250 manholes completed out of 356 and balance 106 manholes has to be constructed and work is under progress Estimate Amount : Rs. 7.45 Cr Fund :CMCDM 1115 House Sewer connections are to be given under illamthoruminnaipusc heme. Completed:395; balance:720 	<p>Length of sewer main completed: 1744 mtrs.</p> <p>Manholes: 56 nos. were completed.</p>	<p>Balance length of sewer main to be completed: 3136 mtrs</p> <p>Manholes to be constructed: 50</p> <p>Total 720 nos. of HSC are to be effected only after completion of works</p>	<p>Work to be completed on or before 31.12.2021</p>
9	<p>Depot 79 / Ward 79, Oragadam, Gandhi Nagar, Ram Nagar, Ezhil Nagar Depot 80 / Ward 80 Puthur, Vijayalakshmi Puram, Banu Nagar</p> <p>Sewer mains are to be provided in 100 streets.</p>	<ul style="list-style-type: none"> Entire Sewer main length : 10648m Completed:2820 m;Balance:7828m 131 manholes completed out of 348 and balance 217 manholes has to be constructed and work is under progress Estimate Amount : Rs. 8.05 Cr 	<p>Length of sewer main completed: 1279 mtrs.</p> <p>Manholes: 50 nos. were completed.</p>	<p>Balance length of sewer main to be completed: 6549 mtrs</p> <p>Manholes to be constructed: 167</p> <p>Total 655nos.</p>	<p>Work to be completed on or before 31.12.2021</p>

		<ul style="list-style-type: none"> Fund :CMCDM 1246 House Sewer connections to be given under illamthoruminnaipuscheme. Completed:591;balance:655 		of HSC are to be effected only after completion of works	
10	<p>Depot83 /Ward 83 Katchanankuppam, Korattur, TVS Nagar, Annai Nagar, Madanamkuppam (Part)</p> <p>Depot85 /Ward85 Kamaraja Puram, TASS Avenue, Vanchinagar</p> <p>Sewer mains are to be provided in 56 streets.</p>	<ul style="list-style-type: none"> Entire Sewer main length : 4205m Completed:1800m;Balance: 2405m 81manholes completed out of 147 and balance 66 manholes has to be constructed and work is under progress Estimate Amount : Rs. 8.39 Cr Fund :CMCDM 686 House Sewer connections to be given under illamthoruminnaipuscheme. Completed:0;balance: 686 	<p>Length of sewer main completed: 200 mtrs.</p> <p>Manholes: 16 nos. were completed.</p> <p>30% of construction of roadside pumping station is completed.</p>	<p>Balance length of sewer main to be completed: 2205 mtrs</p> <p>Manholes to be constructed: 50</p> <p>Total 686 nos. of HSC are to be effected only after completion of works</p>	<p>Work to be completed on or before 31.12.2021</p>
11	<p>AnnaiSathiya Nagar (D/86)</p> <ul style="list-style-type: none"> No Underground Sewer system available at present Sewer mains are to be provided in 12 streets. 	<ul style="list-style-type: none"> DPR is technically approved for 400 Nos of HSC to be given under Illamthoruminnaipu and Total Sewer main of length of 1725 m and 60 Nos of Manholes. Fund : G.O(Ms) No.107, MA&WS(MW1) Dept, dated 20.08.2019 for Rs. 2371 Cr. 	NIL	<p>length of sewer main to be completed: 1725mtrs</p> <p>Manholes to be constructed: 60</p> <p>Total 400 nos. of HSC are to be effected only after completion of works</p>	<p>Awaiting fund from CRRT. work will be completed on or before Dec'2022</p>
12	<p>Sivanandha Colony(D/85)</p> <ul style="list-style-type: none"> No Underground Sewer system available at present Sewer mains are to be provided in 12 streets. 	<ul style="list-style-type: none"> DPR is technically approved for 450 Nos. of HSC to be given under Illamthoruminnaipu and Total Sewer main of length 887 m and 37 No.s of Manholes Fund : G.O(Ms) No.107, 	NIL	<p>length of sewer main to be completed: 887 mtrs</p> <p>Manholes to be constructed: 37</p> <p>Total 450 nos. of HSC are to be</p>	<p>Awaiting fund from CRRT. work will be completed on or before Dec'2022</p>

		MA&WS(MW1) Dept, dated 20.08.2019 for Rs. 2371 Cr.		effected only after completion of works	
13	MKB Colony (Depot 85/Ward 85) <ul style="list-style-type: none"> No Underground Sewer system available at present. Sewer mains are to be provided in 21 streets. 	<ul style="list-style-type: none"> DPR is technically approved for 630 Nos of HSC to be given under Illamthoruminnaipu and Total Sewer main of length 2852m and 120 Nos. of Manholes Fund : G.O(Ms) No.107, MA&WS(MW1) Dept, dated 20.08.2019 for Rs. 2371 Cr 	NIL	length of sewer main to be completed: 2852 mtrs Manholes to be constructed: 120 Total 630 nos. of HSC are to be effected only after completion of works	Awaiting fund from CRRT. work will be completed on or before Dec'2022
14	Patavatamman Estate and Tiny shed / Depot 84/Ward 84 <ul style="list-style-type: none"> No Underground Sewer system available. Sewer mains are to be provided in 15 streets. 	<ul style="list-style-type: none"> DPR is technically approved for 237 Nos. of HSC to be given under Illamthoruminnaipu and Industries and Total Sewer main of length of 1238 m and 45 Nos of Manholes Fund: G.O (Ms) No.107, MA&WS (MW1) Dept, dated 20.08.2019 for Rs. 2371 Cr 	NIL	length of sewer main to be completed: 1238 mtrs Manholes to be constructed: 45 Total 237 nos. of HSC are to be effected only after completion of works	Awaiting fund from CRRT. work will be completed on or before Dec'2022

Remarks of the Joint Committee:

The CMWSSB has furnished the progress of short term & long term action plan that have been furnished earlier to plug the domestic sewage out falls into the Korattur Lake.

Based on the inspection & on reviewing the progress of works that have been completed by the CMWSSB, it is concluded that the provision of UGSS at ward no.85 and connection of houses to sewer line as furnished in short term action plan has been completed.

Provision of UGSS and connection of houses to completed sewer line at ward no.79 to 84, 85 Part, 86 to 88, 90, 92, 93 are in progress and it was reported that the entire works will be completed by **March 2022**.

The preparation of Detailed Project Report (DPR) is under progress for providing UGSS to the left out area such as Annai Sathya Nagar at ward no.86,

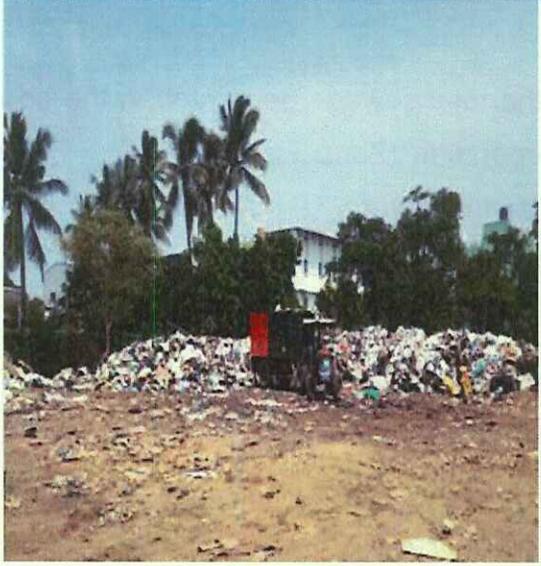
Sivanandha Colony & MKB Colony at ward no.85 & Padavattamman Estate and Tinny Shed at ward no.84 and it was reported that the entire works will be completed by **December 2022**.

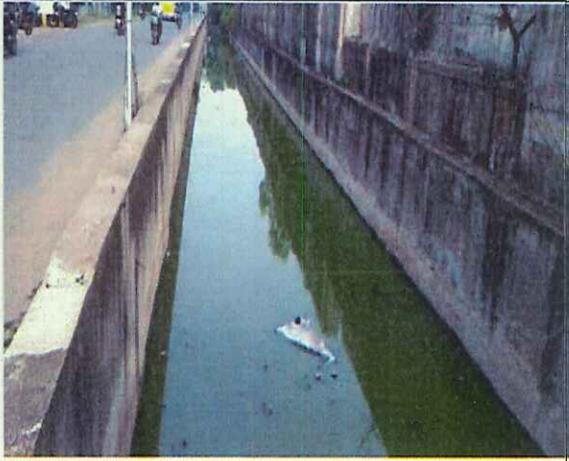
The CMWSSB has reported that the total sewage generated in the above said wards (79 to 93) of Greater Chennai Corporation (Zone 7) is 45 MLD. The sewage generated in these wards is connected to Kodungaiyur STP through 23 nos. of pumping stations. The capacity of these 23 pumping stations is 259.92 MLD and the capacity of Kodungaiyur STP is 270 MLD.

The CMWSSB has reported that the pending works of UGSS and house connection will be completed by **March 2022**. The remaining works of UGSS and house connection at the stage of DPR preparation will be completed by **December 2022**.

The joint committee opined that due to COVID pandemic, the CMWSSB was not able to complete the works as per the time schedule furnished in the earlier action plan, however the CMWSSB shall speed up the works & complete the entire works on or before **December 2022** as committed to completely curtail the discharge of untreated sewage in to Ambattur Lake surplus canal and Korattur Lake.

2. Greater Chennai Corporation (Zone-VII)			
Sl. No	Description of issues	Action Plan for the issues	Target date
1	Action Plan with time schedule to implement on municipal solid waste received from the Ambattur SIDCO industrial estate and collect the municipal solid waste in Ambattur industrial estate from where it is stored by CAIIUC and dispose the same in proper way	<ul style="list-style-type: none"> ➤ Now SIDCO Industrial estate has identified place for collection of garbage within their own jurisdiction. ➤ Now, The CAIIUC to dump the dry waste at the allotted site and dumping have been started at South phase Ambattur Industrial Estate near sewerage treatment plant since from 23.08.2021. 	Completed

			
	Temporary transit yard		
2	<p>Removal of municipal solid waste in residential areas located in and around Ambattur Lake surplus canal and to avoid dumping of municipal solid waste into the Ambattur Surplus Canal</p>	<ul style="list-style-type: none"> ➤ Greater Chennai Corporation has identified household in residential area in and around the Ambattur Surplus Canal. Details as follows : Annai Sathya Nagar – 362 Households Sivananda Nagar – 305 Households MKB Nagar – 320 Households ➤ Door to door Collection is being carried in these areas by deploying 3 tricycles at 3 trips per day. ➤ Door to Door Collection is intensified by giving awareness to the individual houses and being continuously monitored by maintaining registers. ➤ IEC activities were conducted by way of rallies and issuing pamphlets to all the houses. ➤ Removal of garbage in the surplus canal is under progress by deploying Robotic earth mover. ➤ As per Solid Waste Management By laws GCC has formulated penalty for throwing garbage in public 	Completed

		and private place/littering from vehicles, littering in water bodies etc. which will be implemented after the Gazette publications.	
			
	Before	After	
	Ambattur surplus canal		
3	Also ensure that the proper collection, segregation and disposal of municipal solid waste in the private industrial estates such as TASS industrial estate, Patavatamman estate and Tiny Shed.	<ul style="list-style-type: none"> ➤ TASS industrial Estate covers an area of around 20acre with 285 industries. ➤ Removal of Municipal Solid waste inside the TASS industrial is being carried out through TASS industrial Estate Welfare Association by engaging maintenance contractor. ➤ Garbage Generation in TASS Industrial Estate is around 4.5 MT per day and this is being dumped in Greater Chennai Corporation Transfer Station Athipet. ➤ Regarding removal of municipal solids waste from padavatamman Estate and at Tiny sheds, GCC has identified around 118 industries in this area. ➤ Door to door collection and disposal of garbage commenced in this area from 12.02.2020. 	Completed



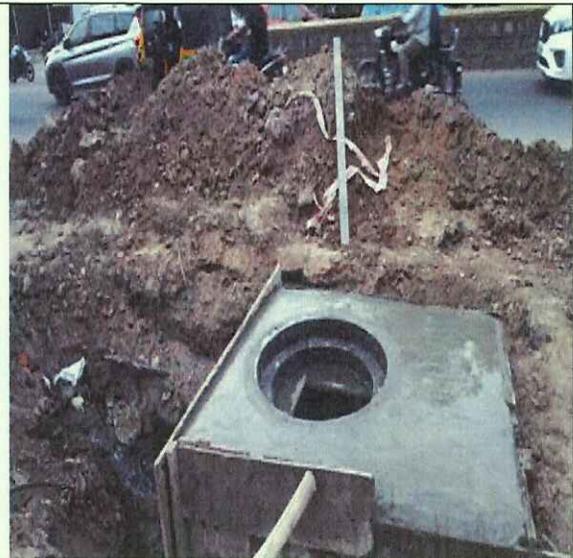
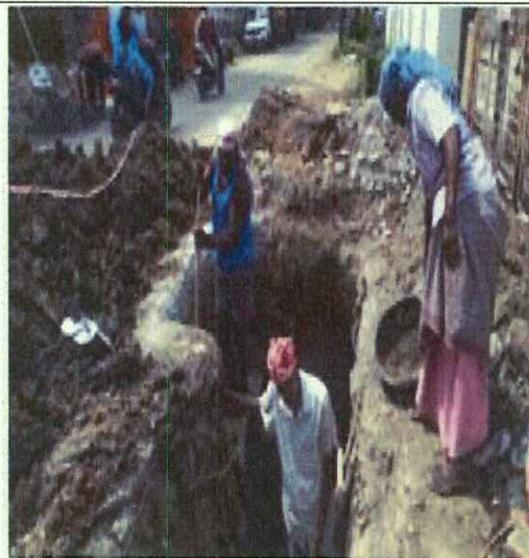
TASS Industrial Estate garbage collection

4

The Secretary, Micro Small & medium Enterprises Department expressed that damage has been caused to the sewerage pipeline while works carried out by the Chennai Corporation and lead that to sewerage discharge into Ambattur surplus canal. The Commissioner, Greater Chennai Corporation expressed that the rectification work will be undertaken and will be completed within 15 days in coordination with SIDCO.

- In North Phase all damage sewer line were rectified.
- In South Phase all damage sewer line were rectified.

Completed



Sewerage pipeline rectification works

Remarks of the Joint Committee:

The Greater Chennai Corporation (Zone-VII) has furnished the action taken report for collection and disposal of municipal solid waste generated from Zone-VII, which covers the solid waste generated from the residences and industries in and around Ambattur Lake, Ambattur Lake surplus canal, Korattur Lake, Ambattur Industrial Estate, TASS Industrial Estate, Padavattamman Industrial Estate & Tiny Sheds.

The GCC has rectified the damaged sewer line in North and South phase of SIDCO Industrial Estate so as to ensure the disposal of sewage into CSTP located in Ambattur Industrial Estate.

The GCC has started and continuing the door to door collection of municipal solid waste from households, Private Industrial Estate & Ambattur Industrial Estate. The waste collected are being disposed to Atthipattu MSW processing site owned by Greater Chennai Corporation for further processing as per the SWM Rules, 2016.

The Greater Chennai Corporation (Zone-VII) shall continue the door to door collection of municipal solid waste from the above said areas, store properly in intermediate stations and dispose the same to Atthipattu MSW site for further processing consistently.

3. <u>Avadi City Municipal Corporation</u>			
<u>ACTION PLAN FOR AMBATTUR LAKE</u>			
<u>Short Term Action Plan:</u>			
Sl. No	Description of issues	Action taken to mitigate the issue	Target date of completion
1.	Construction of sump in Moondru nagar and Ganapathy nagar area in Thirumullaivoyal Village and dispose of the sewage periodically.	For Moondru Nagar area to control the discharge of grey water from the above said area 972 households with 126 streets (0.20 MLD) grey water from the entire households and in Ganapathy Nagar total no of households 165 with 6 streets (0.03 MLD) grey water from the entire households and also detailed survey has been	The Corporation has planned to construct five number of collection tanks to collect the all grey water in that respective area and it will be removed through sullage water tanker vehicle and disposal will be in our UGSS Pumping station. More over we floated tender on 29.05.2020 for construction of five

		taken for preparation of Detailed Project Report by Tamilnadu Water Investment Company Ltd (TWICL) under progress for the above said left out area.	numbers of collection tanks and also work awarded on 01.07.2020 to the contractor M/s K.K.R. Builders. The work will be started this month and the same will be completed by December 2021.
2.	Providing drainage facilities for the residents of Moondru Nagar and Ganapathy Nagar area in Thirumullaivoyal Village.	For Moondru Nagar area to control the discharge of grey water from the above said area 972 households with 126 streets (0.20 MLD) grey water from the entire households and in Ganapathy nagar total no of house holds 165 with 6 streets (0.03 MLD) grey water from the entire households and also Detailed survey has been taken for preparation of Detailed Project Report by Tamilnadu Water Investment Company Ltd (TWIC) under progress for the above said left out area.	The Corporation has planned to construct five number of collection tanks to collect the all grey water in that respective area and it will be removed through sullage water tanker vehicle and disposal will be in our UGSS Pumping station. More over we floated tender on 29.05.2020 for construction of five numbers of collection tanks and also work awarded on 01.07.2020 to the contractor M/s K.K.R. Builders. The work will be started this month and the same will be completed by December 2021.
3.	Ward No. 15 Jothi Nagar residents drainage water and grey water discharging to Ambattur Lake.	In Jothi Nagar area underground drainage system has been implemented for 7 streets with 167 households (0.06 MLD) grey water generated per day out of 17 streets with 707 households (0.20 MLD) grey water generated per day and also Detailed survey has been taken	In order to stop the Drainage water entering in to Ambattur lake the UGSS connections has been started where ever UGSS line available, the same will be completed by December 2021.

		for preparation of Detailed Project Report by Tamilnadu water Investment Company Ltd (TWIC) under progress for the above said left out area.	
4.	Ward No. 10, 11, 12 Cholambedu Main road residents drainage water and grey water discharging to Ambattur lake.	In Cholambedu area underground drainage system has been implemented for 117 streets with 1834 households (0.50 MLD) grey water generated per day out of 221 streets with 3334 households (1.00 MLD) grey water generated per day and also Detailed survey has been taken for preparation of Detailed Project Report by Tamilnadu water Investment Company Ltd (TWIC) under progress for the above said left out area.	In order to stop the Drainage water entering in to Ambattur lake the UGSS connections has been started where ever UGSS line available, the same will be completed by December 2021.

Long Term Action Plan:

Sl. No	Description of issue	Action taken to mitigate the issue	Target date of completion
1.	Construction of sump in Moondru nagar and Ganapathy nagar area in Thirumullaivoyal Village and dispose of the sewage periodically.	For Moondru Nagar area to control the discharge of grey water from the above said area 972 households with 126 streets (0.20 MLD) grey water from the entire households and in Ganapathy Nagar total no of households 165 with 6 streets (0.03 MLD) grey water from the entire households and also Detailed survey has been taken for preparation of Detailed Project Report by Tamilnadu water Investment	In order to mitigate the 100% UGSS connections in Avadi City Municipal Corporation limit, Planned to prepare Detailed Project Report for the left out area for the same work order issued to TWIC. The scheme will be completed by 2025.

		Company Ltd (TWIC) under progress for the above said left out area.	
2.	Providing drainage facilities for the residents of Moondru Nagar and Ganapathy Nagar area in Thirumullaivoyal Village.	For Moondru Nagar area to control the discharge of grey water from the above said area 972 households with 126 streets (0.20 MLD) grey water from the entire households and in Ganapathy nagar total no of households 165 with 6 streets (0.03 MLD) grey water from the entire households and also Detailed survey has been taken for preparation of Detailed Project Report by Tamilnadu water Investment Company Ltd (TWIC) under progress for the above said left out area.	In order to mitigate the 100% UGSS connections in Avadi City Municipal Corporation limit, Planned to prepare Detailed Project Report for the left out area for the same work order issued to TWIC. The scheme will be completed by 2025.
3.	Ward No. 15 Jothi Nagar residents drainage water and grey water discharging to Ambattur Lake.	In Jothi nagar area underground drainage system has been implemented for 7 streets with 167 households (0.06 MLD) grey water generated per day out of 17 streets with 707 households (0.20 MLD) grey water generated per day and also Detailed survey has been taken for preparation of Detailed Project Report by Tamilnadu water Investment Company Ltd (TWIC) under progress for the above said left out area.	In order to mitigate the 100% UGSS connections in Avadi City Municipal Corporation limit, Planned to prepare Detailed Project Report for the left out area for the same work order issued to TWIC. The scheme will be completed by 2025.
4.	Ward No. 10, 11, 12 Cholambedu Main road residents drainage water and grey water discharging to Ambattur lake.	In Cholambedu area underground drainage system has been implemented for 117 streets with 1834 households (0.50 MLD) grey water generated per day out of 221 streets with 3334 households (1.00 MLD) grey water	In order to mitigate the 100% UGSS connections in Avadi City Municipal Corporation limit, Planned to prepare Detailed Project Report for the left out area for the same work order issued to TWIC. The

	generated per day and also Detailed survey has been taken for preparation of Detailed Project Report by Tamilnadu water Investment Company Ltd (TWIC) under progress for the above said left out area.	scheme will be completed by 2025..
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Remarks of the Joint Committee:

The Avadi City Municipal Corporation has furnished action taken report for the short term and long term action plan so as to curtail the discharge of sewage into Ambattur Lake.

On reviewing the progress made, the committee opined that the Avadi Corporation has not made any physical progress in the field so far to stop the discharge of untreated sewage into Ambattur Lake.

The Corporation has reported that the collection and disposal of sewage generated from the Moondru Nagar and Ganapathy Nagar area of Thirumullaivoyal Village through sullage water tanker vehicle into to UGSS pumping station as temporary measure, it has proposed to provide 5 nos. of collection tank for which work order has been awarded to the contractor M/s. KK builder and the works were stated in June 2021 after the COVID second wave. As the ground water table is high in the area, the contractor could not able to proceed the work and it was reported that the entire works will be completed by **December 2021**.

The Corporation has reported that the house connections at ward no.10, 11, 12 & 15 are in progress wherever provisions of UGSS available and the same will be completed by **December 2021**.

The Corporation has also reported that for the installation of UGSS and house connections for the remaining areas, Avadi City Municipal Corporation is planned to prepare DPR and the entire works will be completed by **December 2025**.

From the above, the committee opined that the Avadi City Municipal Corporation shall speed up the ongoing works & complete the same by **December 2021**.

The Corporation shall expedite the DPR preparation for the remaining works, get the administrative sanction from the Government of Tamil Nadu and to complete the same by **December 2025** as committed to stop the discharge of untreated sewage into Ambattur Lake.

4. Public Works Department (Water Resources Department)			
Short Term Action Plan			
Sl. No	Description of Issue	Action Plan for Issue	Target Date
1.	There are no regulator arrangements in both the inlets and the weir-2 near North Avenue of Korattur Lake. Inundation occurred in the nearby areas of inlet since, the inlet water cannot be regulated during the rainy season.	Construction of Regulator arrangements in DTP colony inlet, Ondi Veeran Koil inlet, Weir-2 near North Avenue of Korattur Lake.	Government has accorded the administrative sanction vide Public Works (R1) Department G.O. (Ms) No.290 Dated 23.11.2020. The tender has been called for on 14.07.2021 and the work will be commenced after the tender process is over and the work will be completed before the end of the year 2022.
2.	The Ambattur surplus channel runs through the highly urbanized areas of Ambattur and Ambattur Estate before reaching Korattur Lake. The nearby residents are used to through the solid wastes in the Surplus channel.	Providing Fencing arrangements for 2930 Meter length in the Existing RCC retaining walls in Ambattur Surplus channel to curtail the illegal dumping of solid waste.	
3.	The Ambattur surplus channel is an earth channel. Silt up takes place throughout the channel. Due to in fall of sewage/sullage water in the channel, hyacinths are fastly growing and obstruct the free flow of water.	De silting of Ambattur Surplus Channel from Ambattur lake to Korattur Lake every year.	The work is being carried out before the month of September every year. This year the Pre monsoon G.O. issued on 07.09.21. The work will be commenced before end of this September 2021.
4.	The Korattur Lake is having 8500 m peripheral length out of which 6800 m length is having bund. The remaining portion of 1700 m is foreshore area. In the foreshore area. In the foreshore area encroachments are found in some places and solid waste and sewage waters are directly let into the lake.	Demarcation of Korattur lake and Ambattur Surplus Channel with the help of Revenue Department and evict the encroachments after following the due legal procedures.	Demarcation of Boundary has been done by WRD with the co-ordination of Revenue Department. Form-I & II notice has to be issued by the Concerned Thasildar. After enumeration using Bio-Matric system is done, Form -III notice has to be issued to the encroachers by the Water Resources

			Department by giving 21 days time to the encroachers to vacate the land. The Alternate site for encroachers has to be allotted through slum clearance board by the District Collector. The Encroachment has to be evicted after abiding the above said procedures. The Form I and II notices are not yet received from the Revenue Department. Hence, the eviction work will be completed before the end of the year 2022
5.	The Korattur Lake is having the extent of nearly 590 Acres. The tank attains its full capacity once in 4 to 5 years. Nearly seventy five percent land area covered by Hyacinths, Prosopis, Juliflora, weeds and floating materials etc., Except the natural species the flora which are the threats to environment should be removed.	Removal of Hyacinths, weeds, floating materials and Prosopis Juliflora in the Korattur lake once in two years.	The work is being carried out before the month of September every year. This year the Pre monsoon G.O. issued on 07.09.21. The work will be commenced before end of this September 2021.

Long Term Action Plan

Sl. No	Description of Issue	Action Plan for Issue	Target Date
1.	The Korattur Lake is having 8500 m peripheral length out of which 6800 m length is having bund. The remaining portion of 1700 m is foreshore area. In the foreshore area encroachments are found in some places and solid waste and sewage waters are directly let into the lake.	Providing 6000m length of protection wall with fencing arrangements and foreshore bund to a length of 500m along the foreshore boundary of Korattur Lake to curtail the encroachments and illegal dumping of solid waste. Bund strengthening using revetments to a length of 500 m. Removal of top soils in the areas of sludge	Before 2023 April

	Heavy metals are found in the soil samples of Korattur lake due to in fall of unauthorized Industrial effluents in to the Ambvattur surplus channel.	formation, found in eastern side of Korattur tank and desilting the Korattur lake and forming 5 Nos. of inland island inside the lake with bottom dimension of 220x220 m and top dimension of 96x96 m by using the above desilted soils to a height of 10 m.	
2.	In the entire stretch of Ambattur surplus channel lot of unauthorized infall points of sewage/sullage water are found made by the local residents.	Plugging of unauthorized sullage water disposal inlets in to the Ambattur surplus channel.	Before 2023 April. After the completion of UGSS by CMWSSB.
3.	The Ambattur surplus channel water passes through the balance culverts provided by the Railway department and infalls in to the Korattur lake near DTP colony. This channel is an earthen channel. The nearby residents are used to through the solid wastes in the Surplus channel. Further in the full supply level of Ambattur surplus channel the area of DTP colony inundated every year.	Providing RCC wall with Fencing arrangements on both side of the DTP Colony Channel which leads to Korattur lake.	Before 2023 April.

Remarks of the Joint Committee:

The Public Works Department (Water Resources Department) has reported that the Government has accorded the administrative sanction vide Public Works (R1) Department G.O. (Ms) No.290 Dated 23.11.2020 for the construction of regulators arrangement in both the inlets (DTP colony inlet & Ondiveeran Koil inlet), Weir-2 near North Avenue of Korattur Lake and for providing of fencing arrangements for 2930 Meter length in the existing RCC retaining walls in Ambattur Surplus channel to curtail the illegal dumping of solid waste. The tender has been called for on 14.07.2021 and the work will be commenced after the tender process is over and the work will be completed before the end of the year 2022.

Providing RCC wall with fencing arrangements on both sides of the DTP Colony channel leads to Korattur Lake will be completed before April 2023.

De silting of Ambattur Surplus Channel from Ambattur lake to Korattur Lake is being done every year. The work is being carried out before the month of September every year. This year the Pre monsoon G.O. issued on 07.09.21. The work will be commenced before end of this September 2021.

Removal of hyacinths, weeds, floating materials and prosopis juliflora in the Korattur lake is being done once in two years. The work is being carried out before the month of September every year. This year, the Pre monsoon G.O. issued on 07.09.21. The work will be commenced before end of this September 2021.

Providing, 6000m length of protection wall with fencing arrangements and foreshore bund strengthening using revetments to a length of 500m along the foreshore boundary of Korattur Lake to curtail the encroachments and illegal dumping of solid waste. Removal of top soils in the areas of sludge formation found in eastern side of Korattur tank and desilting the Korattur lake & forming 5 Nos. of inland island inside the lake with bottom dimension of 220x220 m and top dimension of 96x96 m by using the above de silted soils to a height of 10 m. The above work will be completed by April 2023.

The Public Works Department (Water Resources Department) shall complete the above works within the time schedule as reported.

5. TNPCB Action Plan:		
Sl. No.	Description of each issues	Action taken for the issues
1.	TNPCB to inspect all the industries, to take appropriate action on violating units.	As per the NGT order dated 12.12.2019, <ul style="list-style-type: none"> • A special team was formed consisting of 10 Engineers to carry out inspection from 2.1.2020 and have completed inspecting all the industries. • 2976 units have been inspected totally. • Out of these 2976 industries, <ul style="list-style-type: none"> ○ 859 industries have applied and obtained consent, ○ 255 no of industries have closed and vacated their premises ○ 197 sheds are godowns ○ 1665 no of industries categorised under white

		<p>category as per BP.No.06 dated 02.08.2016 which are not required to obtain consent of the Board as per CPCB revised categorization.</p> <ul style="list-style-type: none"> • Out of 1665 units, 891 industries are involved in machining operations using CNC machines which use coolant diluted with water (95% water and 5% coolant) for the purpose of cooling during machining operation. These machining industries do not generate waste on a daily basis. Coolant water is being re-circulated and once it has become contaminated, the waste coolant is let out. The frequency of letting of coolant varies between once in 3 month /6 months/ one year/ 2 years and the quantity varies between 10 litres / annum to 1000 Lit/ annum. • CAIIUC has provided 2 Nos. of mobile treatment systems for reuse of coolant water. • The CAIIUC has to ensure that the coolant generated from these industries are not disposed outside the premises either in the sewer / storm water drain or on land under any circumstances.
2.	<p>The TNPCB was directed to consider the BOD, COD and faecal coliform present in the water in that area in order to ascertain the quality of the water and to comply with the norms and to check for adequacy of existing system . If not, alternate mechanism or standardisation of the STP to meet the situation</p>	<p>1.Ambattur surplus canal</p> <ul style="list-style-type: none"> • Samples have been collected in the Ambattur surplus canal and the ROA reveals that the value ranges of BOD, COD, Faecal Coliform indicates that the channel is contaminated with untreated sewage from the nearby unsewered areas. • CMWSSB has to take action to provide sewer system to unsewered areas and to take action to provide connection with the sewer system so as to treat the same in the existing STP provided at Kodungaiyur and Koyambedu for further treatment and disposal. CMWSSB has given action plan to provide sewer to the unsewered areas. <p>2. Common STP provided by CAIIUC</p> <ul style="list-style-type: none"> • Treated sewage samples collected at CSTP (3 MLD & 2 MLD) from January 2021 to June 2021 reveals that the parameters BOD, COD & Faecal Coliform are within the standards prescribed by the Board.

Remarks of the Joint Committee:

As per the Tribunal order dated 12.12.2019, a special team was formed consisting of 10 TNPCB Engineers to carry out inspection from 2.1.2020 and have inspected all the 2976 industries. Out of these 2976 industries, 859 industries have applied and obtained consent, 255 industries have closed and vacated their premises, 197 sheds are godowns and the remaining 1665 no of industries have been categorized under white category as per TNPCB BP.No.06 dated 02.08.2016 which are not required to obtain consent of the Board as per CPCB revised categorization.

Out of 1665 white category units, 891 industries are involved in machining operations using CNC machines which use coolant diluted with water (95% water and 5% coolant) for the purpose of cooling during machining operation. These machining industries do not generate waste on a daily basis. Coolant water is being re-circulated and once it has become contaminated, the waste coolant is let out. The frequency of letting of coolant varies between once in 3 month /6 months/one year/ 2 years and the quantity varies between 10 Litres / annum to 1000 Litres/annum.

The CAIIUC has provided 2 Nos. mobile treatment systems for reuse of coolant water. Based on the requirements, CAIIUC is planning to increase the mobile treatment systems. Industries have been instructed by the TNPCB to make use of mobile system to treat and reuse the coolant water.

Those units have been strictly instructed by the TNPCB not to dispose the coolant water either in the sewer or any other water source and to store the coolant in barrels as and when generated and recycle the same after treating in the mobile system provided by CAIIUC.

As CAIIUC has provided mobile filtration units for coolant water to the micro and small scale member units (891 Nos. of white category industries) in Ambattur Industrial Estate and as the CAIIUC takes the responsibility of treatment and reuse of coolant water from the member units, those units need not obtain consent of the Board, provided, the CAIIUC shall ensure that the coolant generated from these industries are not disposed outside the premises either in the sewer / storm water drain or on land under any circumstances.

Water samples are regularly collected in Ambattur surplus canal, Ambattur Lake, Korattur Lake and CSTPs to verify the value of BOD, COD and Faecal Coliform.

TNPCB shall closely monitor the industries in Ambattur Industrial Estate, ensure effective operation & maintenance of Common Sewage Treatment Plant (CSTPs) to achieve the treated sewage standards prescribed by the CPCB and Common Effluent Treatment Plant(CETP) to achieve zero liquid discharge consistently to curtail the untreated /partially treated/treated sewage/trade effluent in to Ambattur surplus canal & Korattur Lake.

6. CAIIUC				
Short Term Action Plan:				
Sl. No	Description of each issues	Action Plan	Action taken	TNPCB Remarks
1	Collection of Garbage in Industrial Estate	Two locations were identified by SIDCO in 2MLD plant and 3MLD plant with an area of 4500 sq.ft in each location	Corporation has temporarily suspended the transit yard in Ambattur Industrial Estate and the same is being taken to Athipet transit yard currently.	Garbage collected in the SIDCO industrial estate is being disposed to Athipet transit yard by CAIIUC.
2	Municipal Solid Waste Dumped in the Road			
i)	Dumping Domestic Solid waste in SP Sector-1 9 th Street Ambattur Industrial estate, Chennai-600 058.	Waste will be removed and the area will be fenced accordingly and CCTV will be installed to avoid dumping	Waste removed and plantation work completed to avoid further dumping. CCTV cameras will be fixed shortly. Meanwhile we have engaged security staff to prevent garbage dumping by outsiders.	Solid waste dumped in the said areas have been removed. The CAIIUC have developed green belt in the said locations. It is reported that orders have been placed to carry out the fencing work & CCTV and will be completed by December 2021.
ii)	Dumping of Municipal solid waste in SP Sector-1 13 th Street Ambattur Industrial estate, Chennai-600 058.	Waste will be removed and the nearby units is agreed to fence the area and maintain it to avoid further dumping		
iii)	Dumping of Municipal Solid waste in SP Sector-1, 1 st Main road, 5 th Lane, Ambattur Industrial estate, Chennai-600 058.	Waste will be removed and idea of providing gate with CCTV to avoid dumping of waste		
iv)	Dumping of Municipal Solid waste in post office road SP Sector – 1 near 2 nd Street Junction, Ambattur Industrial estate, Chennai-600 058.	Area was Cleared and nearby Units agreed to Fence and maintain the place.		
v)	Dumping of Municipal waste in ATC Road, Ambattur Industrial estate, Chennai-600 058.	Area will be Cleared Immediately, because of entry gate not able to fence the area and Nearby units has agreed to provide CCTV to avoid dumping.		

vi)	Dumping of Municipal Solid waste in Tiny Sector SP Sector-1, Ambattur Industrial estate, Chennai-600 058.	Area will be Cleared and Fencing will be done by nearby unit holders.		
vii)	Dumping of Municipal Solid waste in 9 th Street NP Sector-1, Ambattur Industrial estate, Chennai-600 098.	Area will be Cleared and Fencing will be done by nearby unit holders and the Quotation has been given for fencing and 4 nearby units has agreed to fence and maintain.		
2a	Mixed Waste			
i)	Mixed Solid waste dumped in SP Sector-1 Tiny sector near 15 th street, Ambattur Industrial estate, Chennai-600 058.	Mixed Solid waste will be removed immediately by Authorised Service provider.	The waste has been segregated and disposed through Quality Business System.	Mixed solid wastes were segregated & disposed through Quality Business System.
ii)	Mixed Solid waste dumped in NP Sector-1 9 th Street near Padavattamman estate, Ambattur Industrial estate, Chennai-600 098.	Mixed Solid waste will be removed immediately by Authorised Service provider.	The waste has been segregated and disposed through Quality Business System.	
3	Disposal Of Hazardous Waste			
i)	Hazardous Waste Generation in Ambattur Industrial estate.	We have engaged M/s. Quality Business System for Collection of Hazardous Waste generated in Ambattur Industrial Estate and already allotted and handed over 5000 sq.ft shed with impervious flooring Collection facility for both South & North phase for SIDCO holders, Currently we are collecting from 340 Unit to a tune of 473 tons per year.	M/s. Quality Business System is collecting the hazardous waste from our member units regularly. (Hazardous waste category 5.2 – wastes, residues containing oil (Oil chocked cotton waste, glows, filters, grinding mud). Sludge (Paint process waste, paint booth filters)	The hazardous waste generating units in Ambattur Industrial Estate dispose the waste through Quality Business system & TSDF Gummidipoondi.
ii)	Disposal of accumulated sludge at 2 MLD and 3 MLD CSTP	Accumulated sludge will be disposed to TSDF Gummidipoondi through Tamilnadu Waste Management Limited	Accumulated sludge has been used as manure for 6000 trees planted in Ambattur Industries Estate).	The CAIIUC has utilized the accumulated sludge for gardening / green belt development with SIDCO industrial estate.

4	Sewer Connection To Be Effectuated To Unsewered Units			
	Un sewerred Units	Remaining 226 units has to be connected with common sewer system, in this 40% of the units will be provided in Feb 2020 and the balance will be completed in March 2020.	New Sewer Connection for 133 units has been completed and 34 units in progress. Sewer Connection for Remaining 59 units will be completed within 2 months.	-
5	Coolant Disposal			
	The Coolant water is used by machining units using CNC/VMC machines. It is a mix of 95 to 97% of de-mineralized water and 5 to 3 % of water soluble coolant addition to keep the temperature down, so that the heat generated during the machining operation does not affect the material machined or the insert used. The units are using high value synthetic additive made by companies like Quaker USA, Blazer Switzerland etc which do not degenerate during use. Therefore the only requirement is filtering of the coolant and periodic removal of tramp oil floating on the coolant.	2 Nos. of coolant filtration machine has been purchased and the same is running effectively. We have plans to invest for another two more coolant machines, based on the response we get from our member units.	Two nos. of Coolant filtration machine has been purchased and successful installation done Coolant filtration work is in progress to all our Member units. We are sending the machine through our Tata ACE vehicle to each company, whoever wants to do the coolant filtration. We have appointed a person for doing this filtration work, who will be visiting each factory personally with the filtration machine and doing filtration according to our unit holders requirement.	CAAIUC has installed two mobile coolant filtration machine and the coolant waste generated from the industries in Ambattur Industrial Estate are treated through this system and recycled
6	3MLD & 2MLD STP			
	Treated water is not up to board standards	Both 2MLD & 3MLD STP is effectively running	Monthly test samples taken from 3mld & 2mld, shows Faecal Coliform is under limits	Samples collected at CSTP (3 MLD & 2 MLD) from January 2021 to June 2021 reveals that the parameters BOD, COD & Faecal Coliform are within the standards prescribed by the Board.

Long Term Action Plan:

1	Sewer main line to be provided in unsewer area			
	<p>Unsewered Area, i) 3rd main Road Near athipet petrol bunk (94c/1, 94c/2, 94c/3 & 94c/4 has to be connected. Chennai-58. ii) 1st Street SP sector-3, Ambattur Industrial estate, Chennai-58. iii) 3rd Main Road NP Service Road, NP Amabttur industrial estate, Chennai-98.</p>	<p>i) Survey has to be done for giving sewer connection to the unsewered area and after survey the work will be commenced. ii) Land survey has to be done with revenue people opposite to Telephone Exchange to carry the sewage work.</p>	<p>The balance 56 units need the secondary pumping station with collection well and is taken up with SIDCO.</p>	-
2	3MLD & 2MLD STP			
	<p>Reusing of Treated water</p>	<p>It is proposed to Increase green cover in Industrial Estate to use treated water to plants and also to units for flushing.</p>	<p>Tree plantation has already commenced and completed 2000 Nos. on 1st week of October 2020. Another 4000 sampling have been planted in CAIIUC & TANSIDCO; this work got completed in June 2021, many such areas has been located to continue our tree plantation.</p>	<p>Green belt development under progress. CAIIUC has planted more than 5000 tree saplings inside the SIDCO Estate.</p>



Before



After

Dumping Domestic Solid waste in SP Sector-29th Street, Ambattur Industrial Estate, Chennai-600058.



Before



After

Dumping of Municipal solid waste in SP Sector- 1 13th Street Ambattur Industrial estate, Chennai-600 058



Before



After

Dumping of Municipal Solid waste in SP Sector-1, 1st Main Road, 5th Lane, Ambattur Industrial estate, Chennai-600058



Before



After

Dumping of Municipal Solid waste in post office road SP Sector-1 near 2nd Street Junction, Ambattur Industrial estate, Chennai-600058



Before



After

Dumping of Municipal waste in ATC Road, Ambattur Industrial estate, Chennai-600 058



Before



After

Dumping of Municipal Solid waste in Tiny SectorSPSector-1, Ambattur Industrial estate, Chennai - 600058



Before

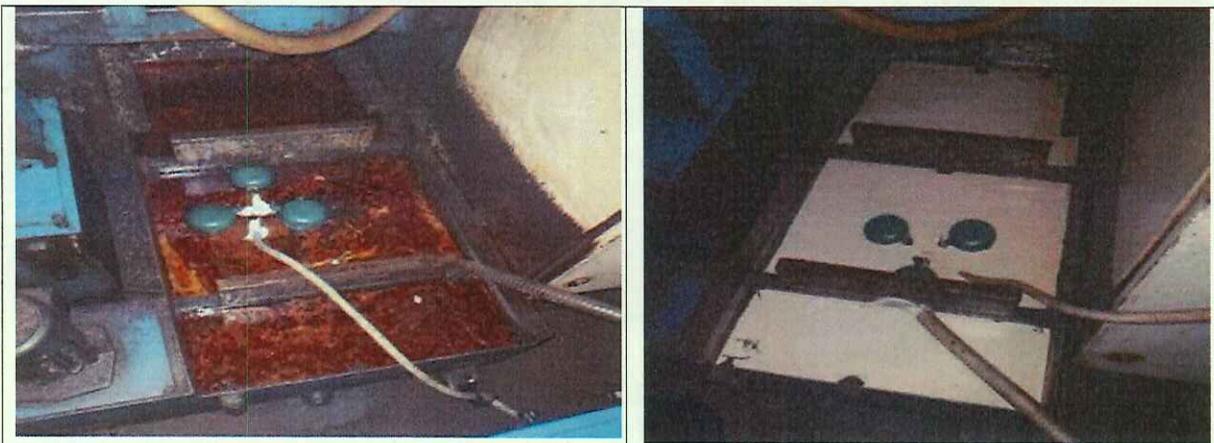


After

Dumping of Municipal Solid waste in 9th Street NP Sector-1, Ambattur Industrial estate, Chennai - 600098



Coolant filtration machine



Before

After

Coolant filtration machine



Green belt development

Remarks of the Joint Committee:

The CAIIUC has identified two places near the CSTPs for intermediate temporary storage of municipal solid wastes collected from the industrial estate units & its adjoining areas and thereafter disposed to MSW processing site at Athipattu by the GCC. Municipal solid wastes dumped in the seven locations within the estate have been removed, CAIIUC has developed fencing works as well as green belt in the said locations and the CAIIUC is yet to install CCTV & it was reported that the same will be completed by December 2021.

Mixed solid wastes dumped in two locations within the estate were segregated & disposed through authorized waste collector of M/s Quality Business System.

The hazardous waste generating units in Ambattur Industrial Estate dispose their wastes to CHWTSDF, Gummidipoondi and Cement Industries through authorized waste collector of M/s Quality Business System.

The accumulated CSTP sludge samples collected & analysed by the TNPCB reveal the presence of heavy metals such as copper, chromium, lead, nickel & zinc in both CSTPs sludge samples which indicate that the electroplating industrial effluents would have been discharged earlier with raw sewage. The above results are compared with the screening levels (Agricultural) prescribed by the MoEF vide "Guidance document for assessment and remediation of contaminated sites in India" Volume-II – Standards and Checklists which are within the screening level prescribed by the MoEF. Hence the CAIIUC has been instructed by the TNPCB to utilise the accumulated sludge generated in both CSTPs as manure.

CAIIUC has reported that new sewer connection for 133 units has been completed and 34 units in progress. Sewer connection for Remaining 59 units will be completed within 2 months.

CAIIUC has installed two mobile coolant filtration machines and the coolant waste generated from the industries in Ambattur Industrial Estate are treated through this system and recycled.

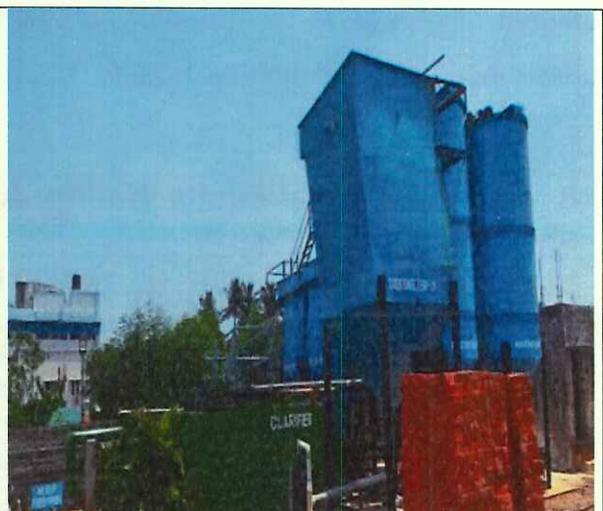
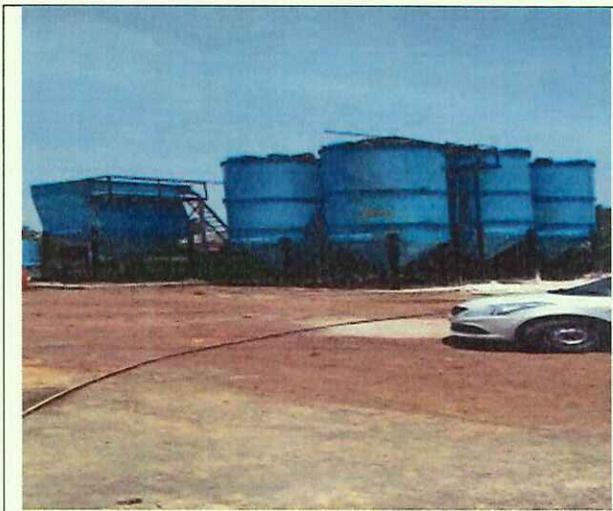
Treated sewage samples collected at CSTP (3 MLD & 2 MLD) by the TNPCB from January 2021 to June 2021 reveal that the parameters BOD, COD & Faecal Coliform are within the standards prescribed by the Board.

The CAIIUC shall continue to maintain the above completed works and to be completed the pending works as mentioned above within the timeline as committed.

The CAIIUC & TANSIDCO shall continue to develop Miyawaki method of green belt within the Estate/Unit premises and monthly progress report to be furnished to TNPCB in this regard.

7. M/s. JBR Technologies Ltd			
Short Term Action Plan:			
Description of each Issues	Action plan for the Issues	Target date	TNPCB Remarks
Improvements of existing CETP with addition or increase the capacity of components/equipments	1. Installation of Collection tank up to 120 KL for continuous Preparation of Batches.	30.09.2021	Reported that the installation of collection tank will be completed by the end of September 2021.
	2. Installation of Reactors & Tube settlers up to 120 KL	Completed	Completed
	3. Regeneration system of Cation and Anion exchangers	Completed	It is reported that the arrangement of Blowing air system for degasser, regeneration of Cation & Anion will be completed by the end of September 2021.
	4. Arrangement of Blowing air system for degasser	Completed	
	5. Modification of Reverse Osmosis system to reduce Reject water (Single stage to triple stage)	25.09.2021	Reported that the modification of RO system will be completed by September 2021.
	6. Preparation of DM water by installation of Mixed ion Exchange	25.09.2021	Reported that the DM water plant installation will be completed by September 2021.
	7. Installation of Filter press or Thickener for solid sludge formation	Completed	Filter press purchased & reported that installation of the same will be completed by the end of September 2021.

	8. Insulation of Multi Effective Evaporator to reduce Heat loss/Risk probability	30.09.2021	Reported that the insulation of MEE will be completed by the end of September 2021.
	9. Fabrication of Drain line from MEE to Sludge blankets	30.09.2021	
Long Term Action Plans:			
Improvements for reduce Cost & best treatment practices	Installation of ATFD for MEE Concentrate converts to solid form.	30.09.2021	Reported that the installation will be completed by the end of September 2021.



Installation of Reactors & Tube settlers up to 120 KL



Installation of Filter press



Installation of Regeneration system of Cation and Anion exchangers

Remarks of the Joint Committee:

The CETP is collecting trade effluent generated from the electroplating units regularly for further treatment and disposal.

The CETP has started to execute the works to resolve the issues mentioned in their action plan and reported that the entire improvement works will be completed by September 2021, thereafter the CETP will achieve 100% zero liquid discharge.

TNPCB shall closely monitor the operation & maintenance of Common Effluent Treatment Plant (CETP) to achieve zero liquid discharge consistently to curtail the trade effluent discharge in to Ambattur surplus canal & Korattur Lake by the electroplating units functioning in Ambattur Estate.

8. TASS Industrial Estate Welfare Association			
Short Term Action Plan:			
Sl. No	Description of each issues	Action Plan for the issues	Target Date
1	Dumping of Hazardous waste near Mahatma Gandhi 3 rd Street, Tass Industrial Estate, Chennai-98. Dumping of Hazardous waste in the water stagnation area, adjacent to Mahatma Gandhi Road, Tass Industrial Estate, Chennai-98	The mixed garbage has been cleared with the help of the municipal authorities and dumpes into the garbage yard.	Completed.
		The hazardous waste is removed through M/s.Dharani Barrels, No.G57/1, SIDCO Industrial Estate, Kakkalur, Tiruvallur on 21.02.2020.	Completed.
		The bags has been sent for recycling by the person who has kept it outside & it has been informed to him not to keep anything outside the compound. The premises have been rented to M/s.Kavitha Steels.	Completed.
		It has been cleared and there is no wastage near the water stagnant area.	Completed.
Long Term Action Plan:			
We have planted nearby 300 trees throughout TASS Industrial Estate to make the industrial estate as greenery. Apart from that we have instructed all industries to enroll with Quality Business System to remove the wastage either hazardous or non-hazardous.			



Before



After

Dumping of Hazardous waste near Mahatma Gandhi 3rd Street, TASS Industrial Estate, Chennai-98



Before



After

Dumping of Hazardous waste near Mahatma Gandhi 3rd Street, TASS Industrial Estate, Chennai-98



Before



After

Dumping of Hazardous waste near Mahatma Gandhi 3rd Street, TASS Industrial Estate, Chennai-98

Remarks of the Joint Committee:

The TASS industrial estate has completed the works mentioned in their action plan. No dumping of mixed solid waste (municipal solid waste and hazardous waste) inside the TASS industrial estate.

The TASS industrial estate welfare association shall continue to maintain the same in future also.

4. Status of Water Quality of the Lake & Sediments

4.1 Details of Samples Collection:

In order to comply with the Tribunal order para no.10, the sediments samples from Ambattur Lake & Korattur Lake and water samples from Ambattur Lake & Korattur Lake have been collected by the Joint Committee from the following locations.

Sediments samples:

Date of sampling collection	Location	Co-ordinates	Sample code no assigned	No of samples
30.07.2021	Ambattur Lake	13.109335N 80.139107E	AL/S-1	1
		13.110518N 80.139354E	AL/S-2	1
		13.108471N 80.145617E	AL/SE/S-3	1
		13.09927N 80.146706E	AL/ /S-4	1
		13.104945N 80.144887E	AL/S-5	1
		13.103402N 80.141323E	AL/SE/S-6	1
		13.108768N 80.152096E	AL/ /S-7	1
31.07.2021	Korattur Lake	13.115331N 80.176488E	KL/Center/S-1	1
		13.115662N 80.177725E	KL/Center/S-2	1
		13.116674N 80.180039E	KL/Center/S-3	1
		13.117753N 80.181610E	KL/Center/S-4	1
		13.119452N 80.185108E	KL/Center/S-5	1
		13.121398N 80.185884E	KL/Center/S-6	1
		13.114971N 80.176412E	KL/SE/S-1	1
		13.115311N 80.177867E	KL/SE/S-2	1
		13.116306N 80.180083E	KL/SE/S-3	1
		13.117729N 80.181639E	KL/SE/S-4	1

		13.119143N 80.185170E	KL/SE/S-5	1
		13.121220N 80.185954E	KL/SE/S-6-	1
		13.118213N 80.178350E	KL/NW/S-1	1
		13.118300N 80.178358E	KL/NW/S-2	1
		13.122065N 80.178973E	KL/NW/S-3	1
		13.124186N 80.180026E	KL/NW/S-4	1
		13.125902N 80.181782E	KL/NW/S-5	1
		13.127015N 80.181984E	KL/NW/S-6	1
		13.127063N 80.181984E	KL/NW/Sedi	1
		13.122217N 80174345E	KL/NW/Sedi	1

Water Samples:

Date of sampling collection	Location	Co-ordinates	Sample code no assigned	No of samples
30.07.2021	Ambattur Lake	13.109335N 80.139107E	Ambattur Lake Point - 1	1
		13.110518N 80.139354E	Ambattur Lake Point - 2	1
		13.108471N 80.145617E	Ambattur Lake Point - 3	
31.07.2021	Korattur Lake	13.124417N 80.189169E	Korattur Lake Point - 1	1
		13.114701N 80.174925E	Korattur Lake Point - 2	1



Water and Sediments Sample collection in Korattur Lake



Water and Sediments Sample collection in Korattur Lake



Water and Sediments Sample collection in Korattur Lake



Water and Sediments Sample collection in Korattur Lake



Water and Sediments Sample collection in Ambattur Lake



Water and Sediments Sample collection in Ambattur Lake

4.2 Samples analysis results and discussion

i. Sediment samples

Seven sediment samples were collected in Ambattur Lake in different locations and the report of analysis is illustrated in the following table.

Characteristics of sediment samples collected in Ambattur Lake										
Sl. No	Parameters	Units	Screening levels (Agricultural) mg/kg	AL/S-1	AL/S-2	AL/SE/S-3	AL/S-4	AL/S-5	AL/SE/S-6	AL/S-7
				1	2	3	4	5	6	7
1	Cation Exchange Capacity	mg/100	-	44.3	39.9	34.9	43	47.6	58	45.6
2	Hexavalent Chromium as Cr6+	mg/kg	0.4	BDL(DL-01)						
3	pH at 25°C	-	6 to 8	7.81	7.73	7.87	7.77	7.26	7.53	7.82
4	Total Organic Matter	%	-	0.47	0.15	0.51	1.57	0.68	0.36	0.36
5	Moisture	%	-	77	37	31	62	3	20	38
6	Antimony as sb	mg/kg	20	BLQ(LOQ 2.0)						
7	Arsenic as Ac	mg/kg	12	2.71	2.5	BLQ(LOQ 2.0)	6.1	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)
8	Cadmium (as Cd)	mg/kg	1.4	BLQ(LOQ 2.0)						
9	Calcium (as Ca)	mg/kg	-	5046.9	894.5	1382.5	1386.7	3477.5	2800.6	1475.8
10	Chromium	mg/kg	64	51.3	31.5	31	45.5	43.6	17	27.6
11	Copper	mg/kg	63	45	22.3	51.5	34.61	47.8	17.2	49.8
12	Lead	mg/kg	70	17.9	17.6	21.7	34.2	13.9	7.9	9.8
13	Manganes	mg/kg	-	255.3	145.2	59.2	89.2	183.1	275.8	44.7
14	Mercury	mg/kg	6.6	BLQ(LOQ 2.0)						
15	Molybdenum	mg/kg	5	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	3.9	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)
16	Nickle	mg/kg	50	21.6	23.7	30.8	36.17	34.8	22	21
17	Zinc	mg/kg	200	172.1	28.8	150.5	65.6	86.9	26	103
18	Cobalt	mg/kg	40	9.5	9.6	3.3	8.4	6.7	5.8	BLQ(LOQ 2.0)

Screening levels are important to assess the level of contamination. The MoEF vide "Guidance document for assessment and remediation of contaminated sites in India" Volume-II – Standards and Checklists illustrated the following.

Screening levels: Screening levels are generic concentrations of hazardous substances in soil and sediments, groundwater and surface water at or below which potential risks to human health or the environment are not likely to occur and where no further investigation and assessment is needed. These Screening levels are distinguished for land use.

From the above results, it is found that the sediments samples collected at various locations inside Ambattur Lake contains heavy metals such as Chromium, Lead, Nickle, Zinc & Copper which is compared with the screening levels (Agricultural) prescribed by the MoEF vide "Guidance document for assessment and remediation of contaminated sites in India" Volume-II – Standards and Checklists which are within the screening level prescribed by the MoEF.

The twenty sediment samples were collected in Korattur Lake in different locations and the report of analysis is illustrated in the following table.

Characteristics of sediment samples collected in Korattur Lake												
Sl. No	Parameters	Units	Screening levels (Agricultural) mg/kg	KL/Center/S-1	KL/Center/S-2	KL/Center/S-3	KL/Center/S-4	KL/Center/S-5	KL/Center/S-6	KL/SE/S-1	KL/SE/S-2	KL/SE/S-3
				1	2	3	4	5	6	7	8	9
1	Cation Exchange Capacity	mg/100	-	41.1	42.9	45	40.2	45.5	37.2	48.8	52.2	55.4
2	Hexavalent Chromium as Cr6+	mg/kg	0.4	BDL(DL-01)	BDL(DL-01)	BDL(DL-01)	BDL(DL-01)	BDL(DL-01)	BDL(DL-01)	BDL(DL-01)	BDL(DL-01)	BDL(DL-01)
3	pH at 25°C	-	6 to 8	6.91	7.28	6.89	7.64	7.69	7.35	7.59	7.59	7.38
4	Total Organic Matter	%	-	0.83	0.78	0.71	0.91	0.72	0.38	1.43	1.66	1.69
5	Moisture	%	-	49	27	29	33	61	47	31	48	44
6	Antimony as sb	mg/kg	20	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)					
7	Arsenic as Ac	mg/kg	12	4.7	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	3.6	2.4	BLQ(LOQ 2.0)	2.81	BLQ(LOQ 2.0)
8	Cadium as cd	mg/kg	1.4	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)					
9	Calcium as Ca	mg/kg	-	1073.7	1316.8	534	3490	9271.2	1030	1564.1	3445.9	1286.4
10	Chromium	mg/kg	64	48.6	48.3	23.1	23.4	44.8	18.7	45.7	49.2	24.1
11	Copper	mg/kg	63	25.8	48.6	19.2	18	25.2	9.4	31.2	39.1	25.6
12	Lead	mg/kg	70	33.3	13.8	10.6	17.9	19.5	7.3	17.1	28.58	10.9
13	Manganes	mg/kg	-	63.9	126.7	59.3	135.9	270.9	82.5	122	358.9	146.3
14	Mercury	mg/kg	6.6	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)					
15	Molybdenum	mg/kg	5	3.4	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)				
16	Nickel	mg/kg	50	26.7	35.3	14.7	17.2	25.4	8.6	21.8	38.8	39.6
17	Zinc	mg/kg	200	156.8	150.2	71.1	70.9	114	22.3	146.7	121.9	51.7
18	Cobalt	mg/kg	40	5.8	8.3	3.5	5.5	8.1	3.5	6.5	12.15	6.4

Sl. No	Parameters	Units	Screening levels (Agricultural) mg/kg	KL/SE/S-4	KL/SE/S-5	KL/SE/S-6	KL/NW/S-1	KL/NW/S-2	KL/NW/S-3	KL/NW/S-4	KL/NW/S-5	KL/NW/S-6	KL/NW/Sedi	KL/SS W/ Sedi
				10	11	12	13	14	15	16	17	18	19	20
1	Cation Exchange Capacity	mg/100	-	49.4	45	43.5	43.2	43.8	37.7	37.7	56.4	32	44.1	41.1
2	Hexavalent Chromium as Cr6+	mg/kg	0.4	BDL(DL-01)										
3	pH at 25°C	-	6 to 8	7.53	7.53	7.33	6.73	7.94	7.33	7.33	7.59	7.82	7.43	6.58
4	Total Organic Matter	%	-	1.07	0.71	0.51	0.48	0.18	0.2	0.2	0.55	0.61	0.58	0.83
5	Moisture	%	-	28	41	67	26	29	39	39	28	33	39	23
6	Antimony as sb	mg/kg	20	BLQ(LOQ 2.0)										
7	Arsenic as Ac	mg/kg	12	2.02	BLQ(LOQ 2.0)	2.09	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	2.1	BLQ(LOQ 2.0)	3.2	2.2
8	Cadmium as cd	mg/kg	1.4	BLQ(LOQ 2.0)										
9	Calcium as Ca	mg/kg	-	287.1.2	1360.7	4416.4	954.6	303.2	855.6	855.6	2118	3289.1	4355.8	564
10	Chromium	mg/kg	64	17.7	18.1	23.4	16.8	8.1	30.2	30.2	20.1	18.4	23.3	24.2
11	Copper	mg/kg	63	11.7	12.5	20.8	14.6	4.4	19.4	19.4	8	13.6	16.2	14
12	Lead	mg/kg	70	9.16	6.8	14.9	6.6	3.1	16.2	16.2	48.9	7.9	14.1	8.2
13	Manganes	mg/kg	-	127.3	112.6	152.2	93.7	30.9	118.4	118.4	6.7	119.5	181	166.1
14	Mercury	mg/kg	6.6	BLQ(LOQ 2.0)										
15	Molybdenum	mg/kg	5	BLQ(LOQ 2.0)										
16	Nickel	mg/kg	50	11.8	11.08	16.1	8.8	5.4	21.2	21.2	9	14	16	14.6
17	Zinc	mg/kg	200	36	53.9	104.7	34.5	26	27.1	27.1	18.4	39.1	40.4	16.4
18	Cobalt	mg/kg	40	4.8	3.9	5.4	3	2.4	12	12	3.5	4.4	6.2	9.9

From the above results, it is found that the sediments samples collected at various locations inside Korattur Lake contains heavy metals such as Chromium, Lead, Nickel, Zinc & Copper which is compared with the screening levels (Agricultural) prescribed by the MoEF vide "Guidance document for assessment and remediation of contaminated sites in India" Volume-II – Standards and Checklists which are within the screening level prescribed by the MoEF.

ii. Surface water samples:

Three water samples were collected in Ambattur Lake in different locations and the report of analysis is illustrated in the following table.

Ambattur Lake Water						
Sl. No.	Parameters	Units	Permissible limit in the absence of Alternate source IS 10500:2012 (Source CPCB.nic. in)	Ambattur Lake Point - 1	Ambattur Lake Point - 2	Ambattur Lake Point - 3
1	pH value	-	6.5-8.5	7.78	7.68	7.82
2	Conductivity	-	--	2000	2010	2010
3	Total Dissolved Solids	mg/L	2000	1180	1168	1185
4	Oil & Grease	mg/L	---	BDL(DL4.0)	BDL(DL4.0)	BDL(DL4.0)
5	Colour	Hazan units	15	10	10	10
6	Chloride (as Cl)	mg/L	1000	359	329	369
7	Fluorides (as F)	mg/L	1.5	0.23	0.35	0.19
8	Nitrates (as NO ₃)	mg/L	45	6.5	6.1	6.3
9	Sulphates (as SO ₄)	mg/L	400	153	155	150
10	Total Hardness as CaCO ₃	mg/L	600	337	390	350
11	Cyanides (as CN)	mg/L	0.05	BDL(DL0.01)	BDL(DL0.01)	BDL(DL0.01)
12	Chemical Oxygen Demand (COD)	mg/L	---	89	82	78
13	Dissolved Oxygen, Minimum	mg/L	---	6.8	6.5	6.1
14	Phosphates	mg/L	---	1.7	1.78	1.67
15	Bio Chemical Oxygen Demand (BOD)	mg/L	---	22	16	19.5
16	Hexavalent Chromium	mg/L	--	BDL(DL0.005)	BDL(DL0.005)	BDL(DL0.005)
17	Temperature	-	--	26.8	27.3	27.8
18	Copper (as Cu)	mg/L	1.5	BDL(DL0.002)	0.003	0.021
19	Manganese	mg/L	0.3	0.12	0.041	0.081
20	Zinc (as Zn)	mg/L	15	0.012	0.23	0.055
21	Cadmium (as Cd)	mg/L	0.003	BDL(DL0.002)	BDL(DL0.002)	BDL(DL0.002)
22	Lead (as Pb)	mg/L	0.01	BDL(DL0.002)	0.005	0.01
23	Mercury	mg/L	0.001	BDL(DL0.005)	BDL(DL0.005)	BDL(DL0.005)
24	Nickel	mg/L	0.02	0.01	0.011	0.02
25	Arsenic (As)	mg/L	0.05	BDL(DL0.002)	BDL(DL0.002)	BDL(DL0.002)
26	Total Chromium	mg/L	0.05	BDL(DL0.002)	0.006	0.021
27	Cobalt	mg/L	--	BDL(DL0.002)	BDL(DL0.002)	BDL(DL0.002)
28	Antimony	mg/L	--	BDL(DL0.002)	BDL(DL0.002)	BDL(DL0.002)

The above results were compared with drinking water standards prescribed in IS: 10500-2012 and found that the samples are meeting the permissible limits in the absence of alternate source.

Sl. No	Parameters	Units	Standards for Class C water(Drinking water source after conventional treatment and disinfection (Source CPCB.nic. in)	Ambattur Lake Point - 1	Ambattur Lake Point - 2	Ambattur Lake Point - 3
1	Bio Chemical Oxygen Demand (BOD)	mg/L	3 or less	22	16	19.5
2	pH value	-	6 to 9	7.78	7.68	7.82
3	Dissolved Oxygen, Minimum	mg/L	4 or more	6.8	6.5	6.1
4	Fecal Coilform	MPN/ 100 ml	-	90	140	140
5	E. coli	MPN/ 100 ml	-	70	90	50
6	Total Coliform	MPN/ 100 ml	5000 or less	170	220	220

Further, the above results of the water samples revealed that the quality of the water falls in Class C – of the Designated Best Use Water Quality Criteria (Drinking water source with conventional treatment followed by disinfection- source cpcb.nic.in). However, the higher value of BOD and presence of Coliforms indicates the mixing of untreated sewage from un sewerred area into the lake.

Also, two water samples were collected in Korattur Lake in different locations and the report of analysis is illustrated in the following table.

Korattur Lake Water					
Sl. No.	Parameters	Units	Permissible limit in the absence of Alternate source IS 10500:2012 (Source CPCB.nic. in)	Korattur Lake Point - 1	Korattur Lake Point - 2
1	pH value	-	6.5-8.5	7.48	7.38
2	Conductivity	-	--	1559	2070
3	Total Dissolved Solids	mg/L	2000	904	1221
4	Oil & Grease	mg/L	---	BDL(DL4.0)	BDL(DL4.0)
5	Colour	Hazan	15	10	10

6	Chloride (as Cl)	mg/L	1000	317	549
7	Fluorides (as F)	mg/L	1.5	0.22	0.36
8	Nitrates (as NO ₃)	mg/L	45	8.9	15.8
9	Sulphates (as SO ₄)	mg/L	400	25.5	47.4
10	Total Hardness as CaCO ₃	mg/L	600	260	449
11	Cyanides (as CN)	mg/L	0.05	BDL(DL4.0)	BDL(DL0.01)
12	Chemical Oxygen Demand (COD)	mg/L	---	65	83
13	Dissolved Oxygen, Minimum	mg/L	---	5.9	6.3
14	Phosphates	mg/L	---	1	2
15	Bio Chemical Oxygen Demand (BOD)	mg/L	---	16	20
16	Hexavalent Chromium	mg/L	--	BDL(DL0.005)	BDL(DL0.005)
17	Temperature	-	--	26.9	27
18	Copper (as Cu)	mg/L	1.5	BDL(DL0.002)	BDL(DL0.002)
19	Manganese	mg/L	0.3	0.123	0.05
20	Zinc (as Zn)	mg/L	15	0.04	0.25
21	Cadmium (as Cd)	mg/L	0.003	BDL(DL0.002)	BDL(DL0.002)
22	Lead (as Pb)	mg/L	0.01	BDL(DL0.002)	0.006
23	Mercury	mg/L	0.001	BDL(DL0.005)	BDL(DL0.005)
24	Nickel	mg/L	0.02	BDL(DL0.002)	0.003
25	Arsenic (As)	mg/L	0.05	BDL(DL0.002)	BDL(DL0.002)
26	Total Chromium	mg/L	0.05	0.012	0.003
27	Cobalt	mg/L	--	BDL(DL0.002)	BDL(DL0.002)
28	Antimony	mg/L	--	BDL(DL0.002)	BDL(DL0.002)

The above results were compared with drinking water standards prescribed in IS: 10500-2012 and found that the samples are meeting the permissible limits in the absence of alternate source.

Sl. No	Parameters	Units	Standards for Class C water(Drinking water source after conventional treatment and disinfection (Source CPCB.nic. in)	Korattur Lake Point - 1	Korattur Lake Point - 2
1	Bio Chemical Oxygen Demand (BOD)	mg/L	3 or less	16	20
2	pH value	-	6 to 9	7.48	7.38
3	Dissolved Oxygen, Minimum	mg/L	4 or more	5.9	6.3
4	Fecal Coilform	MPN/100 ml	-	80	170

5	E. coli	MPN/ 100 ml	-	30	110
6	Total Coliform	MPN/ 100 ml	5000 or less	130	280

Further, the above results of the water samples revealed that the quality of the water falls in Class C – of the Designated Best Use Water Quality Criteria (Drinking water source with conventional treatment followed by disinfection- source cpcb.nic.in). However, the higher value of BOD and presence of Coliforms indicates the mixing of untreated sewage from un sewerred area into the lake earlier.

5. Suggestions Submitted by Applicant & 11th Respondent

It is respectfully submitted that as per para no.12 of the order of the Hon'ble Tribunal, the applicant as well as the eleventh respondent to submit their suggestions and objections if any regarding the works so far taken before the committee within the week, so that, the same may be considered by the committee while submitting the report as directed by this Tribunal. Either the applicant or eleventh respondent has not submitted the suggestions and objections to the committee or to the stake holders. However, the applicant Thiru. Sekaran and the eleventh respondent AIEMA were called for inspection & discussion during the Joint Committee meeting on 30.07.2021 and obtained their suggestions which are submitted below.



AIEMA

AMBATTUR INDUSTRIAL ESTATE MANUFACTURERS' ASSOCIATION

President
M. Balachandran

30.07.2021
AIEMA / ADMIN / 2021-22 / 183

Vice President
A. N. Gireeshan

To
The Monitoring Officer,
Monitoring Committee constituted by NGT regarding Korattur Lake Case

Hon. Gen. Secretary
C. Raju

A) Item 6 of the Interim Order of the NGT – Order dated 24.06.2021

Hon. Jt. Secretary
D. Padmanabhan

We would like to place before the Monitoring Committee that TNPCB has classified 956 units under Green Category treating companies that use coolant water and oil soaked waste as hazardous waste. We have presented detailed explanation that coolant used by machine shops is 95-97% demineralised water with a small addition of 3-5% of emulsifying agent to keep the water temperature down during machine operations and there are no harmful chemicals. By filtering and removing the tramp oil, coolant life has been enhanced significantly and the need to change the coolant has been eliminated.

Hon. Treasurer
M. E. Kumaran

Executive Committee

K. S. Sudheer

S. Venkatesan

K.R. Rajeesh Kumar

B. Suresh Kumar

N.T. Ravi

G. Krishnamoorthy

A. Ramesh

G. Sathish Kumar

C.J. Venkatesh

We may also mention that the Ministry of Environment, Forest and Climate Changes, Government of India, vice Notification G.S.R. G.S.R. XX (E) dated 01 March 2019 has made certain amendments to simplify the Hazardous Waste Management & Transboundary Management Rules 2016, saying individual units not requiring consent under the rules being in White Category are exempted from requiring authorisation under Hazardous Waste Management Rules 2016, provided these units handover the hazardous and other waste to actual users, waste collectors or to disposal facilities.

By reclassifying these units from White to Green Category, they have been forced to apply for consent under TNPCB Act which has put to heavy burden on small, micro and tiny units which need to be revisited by the Board. We may add that this is imposed only on our estate and nowhere in Tamil Nadu.

B) Reasons for discharge of sewage in Storm Water Drain :

1. Although the authorities concerned with disposal of domestic sewage like Avadi Municipal Corporation, Greater Chennai Corporation, Zone VII, CMWSSB have all committed to have the underground sewage lines laid in the respective areas coming under the jurisdiction will be connected to pumping system for treatment

(PTO)



Registered Office : SIDCO AIEMA Tower, 1st Main Road, Ambattur Industrial Estate, Chennai - 600 058, TN, India.
Phone : 044-2625 0245 / 0489

Administrative Office : ATC Road, Ambattur Industrial Estate, Chennai - 600 058, TN, India.
Phone : +91 44 2625 8731 / 8619 | Email : mail@aiema.net | website: www.aiema.net



AIEMA

AMBATTUR INDUSTRIAL ESTATE MANUFACTURERS' ASSOCIATION

-2-

President
M. Balachandran

Vice President
A. N. Gireeshan

Hon. Gen. Secretary 2.
C. Raju

Hon. Jt. Secretary
D. Padmanabhan

Hon. Treasurer
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G. Sathish Kumar

C.J. Venkatesh

and evacuation, We observe that the Avadi Ambattur Canal maintained by PWD continues to carry substantial amount of sewage. This has been time and again reported by the local vernacular press. We may add that since Korattur entry has been blocked, this stream is being taken through beyond the estate behind TVS Group of Companies.

Since in several places the Storm Water Drains re-laid by Chennai Corporation inside the South and North phase has also damaged the sewer lines within the estate, it is possible that in spite of the rectification work undertaken by Zone VII & CAIIUC the flow of some sewage into the Storm Water Drain cannot be ruled out.

Similarly, the underground sewage lines laid in the surrounding areas like Mannurpet, Kachanakuppam, Athipet, Karukku, DTP Colony, Mangalapurametc where sewage connection have been effected have to be connected to a pumping station, which alone will eliminate the sewage flow in the Avadi Ambattur Canal to Korattur Lake, and storm water drains running through the estate.

PWD has themselves admitted that unauthorised sullage water disposal inlets in the Ambattur Surplus Channel can be blocked only after completion of UGSS by CMWSSB.

3. Green Cover : As per the commitment to increase green cover in the estate, AIEMA has completed the following in spite of the pandemic situation. On 2nd October 2020, we commenced plantation of 1000 trees on the Main Roads of the estate and the same has been completed. We planted 4000 more trees in SIDCO land under the 'Miyawaki Forest' concept. Further, IOC has come forward under their CSR responsibility to plant 15000 trees in the estate with some contribution from AIEMA in the open land available within the estate before December 2021.

We have constructed Public Toilets in all the Main Roads with financial assistance from Member Units with the CSR funds.

Regards,

For AIEMA

M. Balachandran
President, AIEMA



Registered Office : SIDCO AIEMA Tower, 1st Main Road, Ambattur Industrial Estate, Chennai - 600 058, TN, India.
Phone : 044-2625 0245 / 0489

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Phone : +91 44 2625 8731 / 8619 | Email : mail@aiema.net | website: www.aiema.net

COPY OF PETITIONER REPRESENTATION

KORATTUR PEOPLE'S WELFARE & AWARENESS TRUST
No.3, Duraisamy 1st Street, Korattur, Chennai - 600 050.

Founder
S. Sekharan

Mobile :
9840695674

To:
The Chairman,
TNPCCB
No 76, Anna Salai, Guindy,
Chennai - 600 032.

30/7/2021

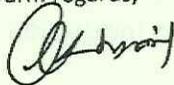
Dear Sir,

Ref. : 1. Our Letter Dated 30-12-2019
2. Case No.268/2016 Hon'ble NGT Ordered 24-06-2021.
3. Your Letter No. TNPCCB/LAW/LA-III/NGT/31499/2020-8.

With reference to the NGT court order for our petition (refer Annexure), and the responses from relevant government departments, we would like to request the followings:

1. Please submit the progress and status report of each departments for both short term and long term action plans.
2. As per earlier review dated 27/7/2020 it was mentioned that the short term plan has been delayed due to Covid 19 and the revised target timeline was December 2020. Hence the short term actions should have been completed. Request the report with corresponding photos please, after appropriate review by the Nodal agency- TNPCCB.
3. Request for review of the actions both short term and long term by us, with relevant department support.
4. Further, we humbly request TNPCCB – the Nodal agency, to review 3 months ^{ly} ~~the~~ progress and to submit the report to the NGT. For which, we are eager to participate to the extent, we can.
5. In addition, we kindly request to include M/s Aavin and M/s Godrej Industries, since both the industries are at the bank of the surplus canal.

Warm regards,



The details of suggestions submitted by the applicant & eleventh respondent and the committee remarks are submitted below.

i. Suggestions and objections submitted by the petitioner letter dated 30.07.2021.

Sl. No	Suggestions and objections	Remarks of the Joint Committee
1	Please submit the progress and status report of each departments for both short term and long term action plans.	Status report of short term and long term action plans furnished by each stake holders is incorporated in the joint committee report.
2	As per earlier review dated 27/07/2020 it was mentioned that the short term plan has been delayed due to COVID 19 and the revised target timeline was December 2020. Hence the short term actions should have been completed. Request the report with corresponding photos please, after appropriate review by the Nodal agency – TNPCB.	Many of short term action plans have been completed by the stake holders. It was reported by the stake holders that they have not able to complete all short term action plans due to COVID pandemic second wave, but the same would be completed by December 2021.
3	Request for review of the actions both short term and long term by us, with relevant department support.	Hon'ble Tribunal is to direct in this regard.
4	Further, we humbly request TNPCB – the Nodal agency, to review 3 monthly progress and to submit the report to the NGT. For which, we are eager to participate to the extent, we can.	Hon'ble Tribunal is to direct in this regard.
5	In addition, we kindly request to include M/s Aavin and M/s Godrej Industries, since both the industries are at the bank of the surplus canal.	The DEE, TNPCB, Ambattur has reported the following in respect of the units M/s Tamilnadu Co-operative Milk Producers Federation Ltd (Ambattur Dairy) & M/s Godrej & Boyce Mfg. Company Ltd Industries.

a.	<p><u>M/s. Godrej & Boyce Mfg. Co. Ltd.</u></p> <p>The unit of M/s Godrej & Boyce Mfg. Company Ltd is located at S.F.No. 167, 170, 171, 173, 174/1, 176, 177, 178, 190/1B1A, 1B1B1, 1B1B2, 1B1B3, & 1B2,191 & 192/1 / Plot No 1, SIDCO Industrial Estate, Ambattur Village, Ambattur Taluk and Chennai District. The unit has obtained consent to operate expansion to manufactures 1. Multiflex Systems 400 MT/M 2. Heavy duty systems 800 MT/M 3. Long span storage systems 180 MT/M 4. Drive In System 100 MT/M 5. Mezzanine 100 MT/M 6. Industrial Storage Systems 5000 MT/M vide Proc. Dated 18.05.2016 valid up to 31.03.2017. Finally, consent has been renewed up to 31.03.2021. The unit is generating 125.50 KLD of trade effluent and 50 KLD of sewage. The unit has provided ETP, RO followed by MEE and solar evaporation pans to achieve zero discharge of trade effluent. The unit has provided a sewage treatment plant for the treatment and disposal of sewage generated. The treated sewage is utilized for Toilet flushing and on land gardening within the unit premises. The results of treated sewage samples collected from the unit reveals that the parameters are within the standards prescribed by the Board. No raw / treated sewage/trade effluent is being discharged outside the premises. The unit has provided adequate air pollution and noise pollution control measures.</p>
b.	<p><u>M/s. Tamil Nadu Cooperative Milk Producers Federation Ltd, Ambattur Dairy</u></p> <p>Consent to Operate and further renewal was issued to the unit of M/s. Tamil Nadu Cooperative Milk Producers Federation Ltd, Ambattur Dairy, Plot No.29&30, Korattur Village, Ambattur Taluk, Chennai District for manufacturing Standardised Milk 9000 T/Month with vide Board's Proc. Dated: 23.12.2019 valid up to 31.03.2020. The unit is generating 325 KLD of trade effluent and 4.50 KLD of sewage. The unit has provided combined Effluent treatment plant for the treatment of sewage and trade effluent. The treated effluent partially reused for boiler feed, cooling tower, floor/grate washing & tankers tyre tip washing and remaining utilized for gardening within premises. The unit has 13.0 ha of land which is adequate to utilize the treated combined effluent on land for gardening. The results of treated effluent samples collected from the unit reveals that all the parameters are within the standards prescribed</p>

by the Board. No raw / treated sewage/trade effluent is being discharged outside the premises. The unit has provided adequate air pollution and noise pollution control measures.

ii. Suggestions and objections given by the eleventh respondent letter dated 30.07.2021.

Sl. No	Suggestions and objections	Remarks of the Joint Committee
1	<p>We should like to place before the Monitoring Committee that TNPCB has classified 956 units under Green Category treating companies that use coolant water and oil soaked waste as hazardous waste. We have presented detailed explanation that coolant used by machine shops is 95-97% demineralised water with a small addition of 3-5% of emulsifying agent to keep the water temperature down during machine operations and there are no harmful chemicals. By filtering and removing the tramp oil, coolant life has been enhanced significantly and the need to change the coolant has been eliminated.</p> <p>We may also mention that the Ministry of Environment, Forest and Climate Changes, Government of India, Vice Notification G.S.R. G.S.R. XX (E) dated 01 March 2019 has made certain amendments to simplify the Hazardous Waste Management & Transboundary Management Rules 2016, saying individual units not requiring consent under the rules being in White Category</p>	<p>Out of total 2976 industries, 859 industries have applied and obtained consent of the TNPCB, 255 industries have closed and vacated their premises, 197 sheds are godowns and the remaining 1665 no of industries have been categorized under white category as per TNPCB BP.No.06 dated 02.08.2016 which are not required to obtain consent of the TNPC Board as per CPCB revised categorization.</p> <p>Out of 1665 white category units, 891 industries are involved in machining operations using CNC machines which use coolant diluted with water (95% water and 5% coolant) for the purpose of cooling during machining operation. These machining industries do not generate waste on a daily basis. Coolant water is being re-circulated and once it has become contaminated, the waste coolant is</p>

<p>are exempted from requiring authorisation under Hazardous Waste Management Rules 2016, provided these unit handover the hazardous and other waste to actual users, waste collectors or to disposal facilities.</p> <p>By reclassifying these units from White to Green Category, they have been forced to apply for consent under TNPCB Act which has put to heavy burden on small, micro and tiny units which need to be revisited by the Board. We may add that this is imposed only on our estate and nowhere in Tamilnadu.</p>	<p>let out. The frequency of letting of coolant varies between once in 3 month /6 months/one year/ 2 years and the quantity varies between 10 Litres / annum to 1000 Litres/annum.</p> <p>The CAIIUC has provided 2 Nos. mobile treatment systems for reuse of coolant water. Based on the requirements, CAIIUC is planning to increase the mobile treatment systems. Industries have been instructed by the TNPCB to make use of mobile system to treat and reuse the coolant water.</p> <p>Those units have been strictly instructed by the TNPCB not to dispose the coolant water either in the sewer or any other water source and to store the coolant in barrels as and when generated and recycle the same after treating in the mobile system provided by CAIIUC.</p> <p>As CAIIUC has provided mobile filtration units for coolant water to the micro and small scale member units (891 Nos. of white category industries) in Ambattur Industrial Estate and as the CAIIUC takes the responsibility of treatment and reuse of coolant water from the member units, those units need not obtain consent of the Board,</p>
---	---

		<p>provided, the CAIIUC shall ensure that the coolant generated from these industries are not disposed outside the premises either in the sewer / storm water drain or on land under any circumstances.</p>
2	<p>Although the authorities concerned with disposal of domestic sewage like Avadi Municipal Corporation, Greater Chennai Corporation, Zone VII, CMWSSB have all committed to have the underground sewage lines laid in the respective areas coming under the jurisdiction will be connected to pumping system for treatment and evacuation, We observe that the Avadi Ambattur Canal maintained by PWD continues to carry substantial amount of sewage. This has been time and again reported by the local vernacular press. We may add that since Korattur entry has been blocked, this stream is being taken through beyond the estate behind TVS Group of Companies.</p> <p>Since in several places the Storm Water Drains re-laid by Chennai Corporation inside the South and North phase has also damaged the sewer lines within the estate it is possible that in spite of the rectification work undertaken by Zone VII & CAIIUC the flow of some sewage into the Storm Water Drain cannot be ruled out.</p> <p>Similarly, the underground sewage lines laid in the surrounding areas like Mannurpet, Kanchanakuppam, Athipet, Karukku, DTP Colony, Mangalapurametc</p>	<p>As stated by the AIEMA, only after completion of UGSS by CMWSSB in all areas of ZONE 7, untreated sewage disposal in to Ambattur surplus canal & Korattur Lake will be stopped.</p>

	<p>where sewage connection have been effected have to be connected to a pumping station, which along will eliminate the sewage flow in the Avadi Ambattur Canal to Korattur Lake, storm water drains running through the estate.</p> <p>PWD has themselves admitted that unauthorized sullage water disposal inlets in the Ambattur Surplus Channel can be blocked only after completion of UGSS by CMWSSB.</p>	
3	<p><u>Green Cover:</u> As per the commitment to increase green cover in the estate, AIEMA has completed the following in spite of the pandemic situation.</p> <p>On 2nd October 2020, we commenced plantation of 1000 trees on the Main Roads of the estate and the same has been completed. We planted 4000 more trees in SIDCO land under the 'Miyawaki Forest' concept. Further, IOC has come forward under their CSR responsibility to plant 15000 trees in the estate with some contribution from AIEMA in the open land available within the estate before December 2021.</p> <p>We have constructed Public Toilets in all the Main Roads with financial assistance from Member Units with the CSR funds.</p>	<p>The AIEMA, CAIIUC & TANSIDCO shall collectively continue to develop Miyawaki method of green belt within the Estate/Unit premises and monthly progress report to be furnished to TNPCB in this regard.</p>

6. Conclusion with respect to Hon'ble Tribunal order

Para 9 - However, considering the circumstances and also to ascertain the present status, we direct the Joint Committee to inspect the area in question again and submit the nature of progress of work that has been done in that area and whether the steps taken by the regulators are sufficient to avoid discharge of effluents/sewage into the Korattur Lake.

Status of work progress is reviewed by the committee, the works are being executed by individual departments/stake holders, except Avadi Corporation, where no significant physical progress in the field level is observed. Whereas, the delay in target timeline is observed due to COVID situation.

In addition to the short term & long term action plan, all the stakeholders involved in the control of sewage pollution, shall explore possibilities if any for providing the collection sump provision for collection of untreated sewage through tankers/ pumping and sending to STP for treatment, until completion & connection of UGD system.

Para 10 - The committee is also directed to ascertain the water quality and also the sediments from the lake, so as to ascertain as to whether there any heavy metals or other industrial effluents are mixing with the water in the lake

and

Para 11 - If on analysis of the sediments from the lake shows presence of any industrial effluents, then the committee is also directed to take steps against the concerned industries who are responsible for the same and they must suggest the remedial measures to remove the same and the expenses required for this purpose have to be realized from the responsible industries who have caused the mischief. The committee is also directed to take the sediment samples from the Ambattur Lake excess of water which is likely to reach the Korattur Lake as well.

Based on the analysis report, it is concluded that presently no industrial effluent is mixing with the lake water. The heavy metal concentration in the lake sediments are well below the Screening levels (Agricultural) prescribed by the MoEF vide "Guidance document for assessment and remediation of contaminated sites in India" Volume-II – Standards and Checklists. So the sediments may be used as manure for agriculture purpose.

Para 12 - The applicant as well as the 11th respondent are directed to submit their suggestions and objections, if any, regarding the work so far taken before the committee within a week, so that, the same may also be considered by the committee while submitting the report as directed by this Tribunal. The authorities must take into account the fact that the monsoon is approaching and all necessary steps to prevent mixing of sewage & other effluents into the lake have to be completed before the onset of monsoon.

Suggestions submitted by the applicant & 11th respondents were considered by the committee and the point wise reply/comments are given in section 6.1 & 6.2 respectively for further directions of Hon'ble Tribunal.



N. Elangovan,
RDO/Central, Chennai Division
representing
District Collector, Chennai.



V. Vijayakumari
Zonal Officer (Zone-VII),
representing
Commissioner,
Greater Chennai Corporation.



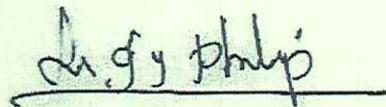
M. Malaiyandi
Joint Chief Environmental Engineer(M),
TNPC Board, Chennai Zone.



V.G. Ramaswami,
Superintending Engineer,
CMWSSB



R. Rajkumar
Scientist D,
Central Pollution Control Board,
Regional Directorate, Chennai.



Dr. Ligy Philip,
Professor,
Dept. of Civil Engineering,
IIT Chennai.



M. Vadivel,
Additional Secretary to Government,
MA&WS Department, Secretariat.



T. Ravindra Babu
Special Secretary to Government,
PWD, Secretariat.

ANNEXURE - I

Item No.9:

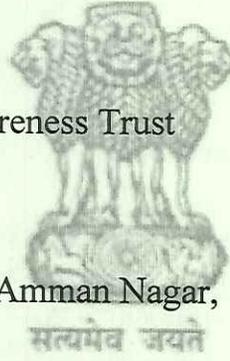
BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

Original Application No.268 of 2016 (SZ)

(Through Video Conference)

IN THE MATTER OF:

Korattur People's Welfare & Awareness Trust
Represented by Mr. S. Sekaran
Founder and Managing Trustee
Registered Office at:
Door No.04, 5th Main Road, Ellai Amman Nagar,
Korattur, Chennai – 600 076.



Versus

Government of India,
Rep. by its Secretary,
Ministry of Environment, Forests & Climate Change,
Central Secretariat,
Indira Paryawaran Bhavan, Jorbagh Road,
New Delhi and Ors.

...Applicant(s)

...Respondent(s)

Date of hearing: 24.06.2021.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE MR. Dr. K. SATYAGOPAL, EXPERT MEMBER

For Applicant(s): Mrs. D. Kamatchi.

For Respondent(s): Mrs. M. Sumathi for R1.
Mr. Arun represented
Mr. C. Harsharaj for R2 to R5.

Mrs. P.T. Ramadevi through
Mr. Ragul Adhithya for R6 to R8.
Mr. G. Janakiraman for R9.
Mr. C. Kasirajan through
Ms. D. Ashwini for R10.
Mr. Saravana Kumar for R11, R13 to R16 & R18.

ORDER

1. As per order dated 19.11.2020, this Tribunal had considered the Joint Committee report received on 17.10.2020 which was extracted in Para 3 of the order and then, passed the following order:-

“4. It is mentioned in Para 11 of the committee’s report the work that has been entrusted to each stakeholders for the purpose of meeting the situation in an effective manner. It is seen from the report that considerable work has been done, on the basis of the directions given by this Tribunal, by the concerned stakeholders for the purpose of protecting the water bodies against the encroachment and pollution. But still some more work has to be completed and unless such work is completed in a war-footing, the effort so far taken by them will be nullified and they will have to continue to proceed with the projects undertaken by them to implement the schemes launched by them for this purpose effectively and quickly as well.

5. It is seen from the report that certain work that has been started has come to a standstill due to the impact of Covid-19 but situation has changed now and people have become effective in their work. So, they can restart their work with the same zeal and see that the work is completed in a shorter time line and not take time till 2025. The environment cannot be allowed to be polluted for such a long time as it will have a greater impact on health of the people. Priority must be given in carrying out the work which is required for the purpose of protecting environment apart from

fulfilling their other statutory obligations of providing other facilities to the people.

6. It is also seen from the report that Pollution Control Board has also taken certain steps against the erring industries including imposition of environmental compensation.

7. It is also seen from the report that result of the analysis of soil at various locations in Korattur Lake, the presence of heavy metals were noted, especially Chromium and Zinc in a higher level. Though, it is seen from the water analysis report that there is some improvement in the quality of the water but steps will have to be taken for further improvement of the same to make it potable level.

8. Further, it is mentioned in the committee's report that they wanted the intervention of the Chief Secretary of Government of Tamil Nadu in certain aspects to quicken the implementation of the action plan that has been proposed by each stakeholder.

9. The learned counsel appearing for the industrial estate submitted that they have not received the copy of the report. In fact, the report was filed in the month of October 2020 and it was uploaded in the website of the Tribunal. They could have downloaded and perused the same. However, when the nature of progress that has happened after filing of the report was asked for, the counsel representing the committee as well as the individual regulating authorities submitted that if some time is granted, they will come with a progress report. We are aware that it is a long term process as things were not happening in a happy manner for a long time and in order to rectify those things in a right way, they may take some more time. But at the same time, no lethargic attitude should be shown by the stakeholders in implementing the scheme which they have launched and they must show all earnest attempt to complete the work so as to make the Korattur Lake free from pollution and encroachment and create an eco-friendly environment in that area so as to make the life of the people happy and healthy.

10. The learned counsel appearing for the applicant submitted that though earlier the unauthorized sewage connections were blocked and also the electricity connections were disconnected in respect of certain industries but due to political pressure, the

same have been opened and the unauthorized industries are still working with the same method of discharge as was been done earlier causing pollution to the river.

11. It is also seen from the subsequent newspaper report published in *The Time of India* dated 10.12.2019 that the sewage is being let into the Korattur Lake.

12. The learned counsel appearing for the applicant also showed some photographs taken by the residents of the locality which showed the pathetic contaminated condition of the water on account of discharge of untreated effluents into those drains by the industrial units.

13. The Pollution Control Board as well as the committee are directed to look into these issue as well and incorporate the action taken in respect of the same to remove the contaminated water and steps taken to improve the water quality in the areas affected by the same and action taken against those persons who are responsible for such illegal activities in the report to be filed.

14. The committee as well as the respective stakeholders namely, Tamil Nadu Pollution Control Board (TNPCB), Industrial Estate, Avadi Municipal Corporation, Greater Chennai Corporation, Chennai Metropolitan Water Supply Sewerage Board (CMWSSB), Public Works Department (PWD), CETP operator and Additional Secretary, Municipal Administration and Water Supply Department, State of Tamil Nadu, Member Secretary, Public Works Department (PWD), State of Tamil Nadu to submit their further progress of the work, action taken and further proposal for improving the situation within shorter time line required for completion of the same in an effective manner on or before 17.02.2021."

2. The case was posted to 17.02.2021 for filing further report and on 17.02.2021, the matter was adjourned to 18.03.2021 by notification. On 18.03.2021, this Tribunal had considered the order passed on 19.11.2020 and also considered the further report submitted by the Tamil Nadu

Pollution Control Board signed on 08.03.2021 by one of the committee member e-filed on 16.03.2021 which was extracted in Para 4 of the order and then, passed the following order:-

“5. It is seen from the report that none of the industries in the industrial estate are discharging the trade effluents and even the “White Category” industries have entered into some arrangement with a Common Effluent Treatment Plant provided within the industrial estate.

6. It is also mentioned that the unauthorized discharge of sewage into the canal is to be curtailed to avoid contamination of Korattur lake, for which, the CMWSSB has to implement and complete the unsewered area in the surrounding locality from where the sewage is disposed of into the canal with sewer connectivity at the earliest.

7. This Tribunal had by the order mentioned above directed the concerned departments including the local authority and CMWSSB to file their further progress report regarding the work that they have undertaken for this purpose. But no such report is seen filed so far.

8. However, the learned counsel appearing for the State departments submitted that in view of the declaration of election in the State, all the officials are busy with the same and they want some more time to submit the report and it may be posted beyond the polling date, so that they can come with the appropriate report.

9. So considering the circumstances, we feel that some more time can be given to the authorities to file a further progress report regarding the work that they have undertaken on the basis of the recommendations of the Joint Committee to avoid discharge of untreated sewage into the water body and protect the water today against pollution.

10. So, the authorities mentioned in the order dated, 19.11.2020 are directed to file a further report as directed on or before 20.04.2021 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.

11. If the applicant wants to file any objection to the report submitted by the Pollution Control Board, they are also at liberty to file the same before the next hearing date.”

3. The case was posted to 20.04.2021 for consideration of further reports and thereafter, the matter is being adjourned from time to time by successive notifications and lastly, it was adjourned to today by notification dated 02.06.2021.

4. When the matter came up for hearing today through Video Conference, Mrs. D. Kamatchi represented the applicant. Mrs. M. Sumathi represented 1st respondent, Mr. Arun represented Mr. C. Harsharaj for respondents 2 to 5, Mrs. P.T. Ramadevi through Mr. Ragul Adhithya represented respondents 6 to 8, Mr. G. Janakiraman represented 9th respondent, Mr. C. Kasirajan through Ms. D. Ashwini represented 10th respondent and Mr. R. Saravanakumar represented respondents 11, 13 to 16 & 18.

5. We have received the report filed by the 9th respondent dated 25.05.2021, e-filed and received on the same day which reads as follows:-

“REPORT FILED BY THE 9th RESPONDENT

I, V.G. Ramaswami, S/o. V.Gurusamy, Hindu, aged about 58 years now working as Superintending Engineer (Central/ Co-ordination) in the Chennai Metropolitan Water Supply and Sewerage Board, Chennai do here by solemnly affirm and sincerely state as follows:

1. I am the Superintending Engineer (Central/Co-ordination) of the Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB), Chennai and 9th Respondent herein and well acquainted with the facts of the case from the connected files.

2. I am filing this updated Short and Long term action plan on behalf of the Managing Director, Chennai Metropolitan Water Supply and Sewerage Board, Chennai-02 who has been cited as 9th respondent in the case filed by the Korattur people's Welfare & Awareness trust and taken up by Hon'ble National Green Tribunal, Southern zone, Chennai vide O.A. No. 268 of 2016(SZ)

3. I humbly submit that the Hon'ble Green Tribunal, Southern Zone has given a direction to the committee members as follows:

"the Hon'ble National Green Tribunal in its order dated 12.12.2019 felt it appropriate to constitute a joint committee, consisting of (1) Principal Secretary for Urban Development Department, (2) Secretary, Public Works Department, (3) District Collector, Chennai, (4) Commissioner, Greater Chennai Corporation, (5) Senior Officer of Chennai Metropolitan Water Supply & Sewerage Board, (6) Senior Scientist/ Officer of Central Pollution Control Board, (7) Senior Officer/ Senior Scientist, Tamil Nadu Pollution Control Board and (8) IIT, Chennai to consider the question involved in the mater and prepare an action plan to find a permanent solution for the issue and execution of the same with shorter time line."

4. In this regard, The Chief Secretary of the State has been directed to monitor and intervene, if there is any intervention required and give necessary instructions to resolve the issue and come with proper effective action plan with shorter time line.

5. Further, I humbly submit that the Tamil Nadu State Pollution Control Board has been appointed as the Nodal agency for co-ordination and the CMWSSB have communicated the progress of formulated action plan to the TNPCB in proper time interval.

6. In this regard, the Hon'ble Justices of the National Green Tribunal, Chennai have issued direction on 18.03.2021 that the

respondents cited in the application to submit their independent response and also further progress report regarding the work undertaken by CMWSSB.

7. Accordingly, I submit the updated progress of Short Term Action Plan (Within six months) to plug the Domestic Sewage Outfalls into the Korattur Lake by CMWSSB tabulated below before the Hon'ble tribunal for its kind perusal:

Sl. No.	Issues	Action Plan	Target Date
1.	Ramapuram/ Ward 85 : 25 Nos. of streets	<ul style="list-style-type: none"> • Total No. of houses: 700 Nos. • House Sewer connections effected: 675 Nos. • The balance 25 Nos. of house sewer connections are to be effected under "illam thorum inaipu" scheme. • Estimated Cost: Rs.1.47 Cr. • Fund G.O (Ms) No.107, MA & WS (MW1) Dept, dated 20.08.2019 for 224 Crores 	Work under progress and will be completed by 30.06.2021.
2.	Teachers Colony/ Ward 85 i) Underground sewer system available in 8 streets	<ul style="list-style-type: none"> • Total No. of houses: 340 Nos. • House Sewer connections effected: 335 Nos. • The balance 5 Nos. of house sewer connections are to be effected under "illam thorum inaipu" scheme. • Estimated Cost: Rs.0.71 Cr. • Fund G.O (Ms) No.107, MA & WS (MW1) Dept, dated 20.08.2019 for 224 Crores 	Work under progress and will be completed by 30.06.2021.

	<p>ii) Underground sewer system not available in 6 streets, the residents are using septic tank for collection of domestic sewage and over flow from septic tank is being letout into the SWD.</p>	<ul style="list-style-type: none"> • Total length of sewer main :1100m • Completed :1070 m ;Balance: 30 m (deep sewer main) awaiting permission from highways department • Entire 37 Numbers of Manholes constructed. • There are 190 houses are existing and all the house service connections are effected under illam thorum Inaipu" scheme • Estimated Cost: Rs. 8.39Cr • Fund : CMCDM 	<p>Work under progress and completed by 30.6.2021.</p>
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8. Further I also humbly submit the Long Term Action Plan (More than six months) to plug the Domestic Sewage Outfalls into the Korattur Lake as tabulated below before the Hon'ble tribunal for its consideration.

Sl.No	Issues	Action Plan	Target Date and Completed Date
1	<p>Ward 90 –Padikuppam, Golden gerorge Colony Ward 92 – Paaraisalai, Mogappair East (10-12 Blocks). Ward 93 – Mogappair East (1-6 Blocks) Underground Sewage System is completed recently.</p>	<ul style="list-style-type: none"> • Entire 12789 m length of sewer main and 522 number of Manholes construction completed • Total 1314 Nos. of House Sewer connections to be effected • Completed:230; • Balance:1084 • Estimated Amount: 7.24 Crores. • Fund : CMCDM • Sewer mains provided in 90 streets 	<p>Work under progress and will be completed by 31.12.2021</p>
2	<p>i) SIDCO Industrial Estate/ Depot 84 /Ward 85 & Depot 86/ Ward 86 (P) TINY SHED- 70 Nos. Provision of Underground sewer system is under progress. (Industries located in station road, 5th street and 4th cross street are discharging sewage into the storm water drain).</p>	<ul style="list-style-type: none"> • There are 683 Industries existing. • 70 House Sewer connections are to be effected under Illam thorum inaipu • Entire 2700m length of sewer main and 92 Nos of manholes construction completed • Sewer mains provided in 9 streets 	<p>Work under progress and will be completed by 30.06.2021</p>

	<p>ii) Depot 84 & 86 Korattur & Mannurpettai</p> <p>Underground sewer system is under progress. The residents are using septic tank for collection of domestic sewage and over flow from septic tank is being letout into the SWD.</p>	<ul style="list-style-type: none"> • 1300 Nos of House Sewer connections are to be effected • Completed:149 • Balance:1151 • Entire Sewer of length 10380m and 524 number of Manholes construction completed • Estimated Amount: Rs. 6.08 Cr • Fund : CMCDM • Sewer mains provided in 157 streets 	<p>Work under progress and will be completed by 31.12.2021</p>
3	<p>Patravakkam (84), Mannurpettai(84), Kachanankuppam (84), Ambattur, SIDCO Estate : 65 streets</p> <ul style="list-style-type: none"> • No Underground Sewerage System. • Work is under progress 	<ul style="list-style-type: none"> • Entire Sewer main of length 10380 m and 524 Nos of manholes construction completed • 1301 Nos of House Sewer connections are to be effected • Completed: 45 • Balance:1256 to be effected under illam thorum inaipu scheme • Estimated Amount: 9.98 Crores. • Fund : CMCDM 	<p>Work under progress and completed by 31.12.2021</p>
4	<p>Ward 86 – Athipattu, Mannurpettai (P), Ambattur Estate (P), ICF Colony. -211 streets</p> <ul style="list-style-type: none"> • No Underground Sewerage System. 	<ul style="list-style-type: none"> • Entire laying of 30823 m length of sewer main work completed • Entire 1377 Nos of Manholes constructed. • 2690 Nos of House Sewer connections are to be effected • Completed:182 • Balance:2508 to be effected under illam thorum inaipu scheme • Estimated Amount: 14.96 Crores. • Fund : CMCDM 	<p>Work under progress and completed by 31.12.2021</p>
5	<p>Karukku(D/82-40 streets), Gnanamoorthy (D/82-25 streets), DTP Colony(D/82-5 streets), Poompuhar Nagar(D/81-5 streets), Mangalapuram (D/85-8 streets)</p> <ul style="list-style-type: none"> • Underground sewer system available but not connected in the main sewer system. The residents are using septic tank for collection of domestic sewage and over flow from septic tank is being letout into the SWD. 	<ul style="list-style-type: none"> • Entire 3950 Nos. of House sewer connections effected • Estimated Cost: Rs.82.95 Cr • Fund: G.O (Ms) No.107, MA&WS (MW1) Dept, dated 20.08.2019 for Rs. 224 Cr 	<p>Completed.</p>

6	<p>TASS Industrial Estate/ Depot 85 (Corporation) -26 streets</p> <p>No Underground Sewer system available. & 143 Industries are existing</p>	<ul style="list-style-type: none"> • Total length of sewer main:2974 m • Balance to be completed:1450m • Total Manholes:100 • Balance to be constructed:29 • Entire 143 Nos of House Sewer connections are to be effected under illam thorum inaipu scheme • Estimated Amount: Rs. 8.39 Crore • Fund : CMCDM 	<p>Work under progress and will be completed on or before Dec' 2021.</p>
7	<p>Depot 79 to 83,87to 88 /Ward79 to 83,87to 88 Ambattur(OT) - 145 streets,Kallikuppam-90 streets</p> <p>Underground sewer system available but not connected in the main sewer system. The residents are using septic tank for collection of domestic sewage and over flow from septic tank is being letout into the SWD.</p>	<ul style="list-style-type: none"> • Total No. of houses : 29237 Nos. • House sewer connections effected under illam thorum inaipu scheme: 6778 Nos. • The balance 22459 Nos of house sewer connections are being effected under illam thorum innaipu scheme • Estimated Amount: Rs. 61.39 Crore • Fund: G.O (Ms) No.107, MA&WS (MW1) Dept, dated 20.08.2019 for Rs. 224 cr. 	<p>Work under progress and will be completed on or before Dec' 2021.</p>
8	<p>Depot 81/ Ward 81 KK Road, Ambattur OT, Indira Nagar, Kalayanapuram, Thiruvallur Nagar Ward 82 Kallikuppam Menambedu, Karruku, DTP Colony, Gnanamoorthy Nagar, Madanamkuppam(Part) Ward : 91- Ebinezer avenue</p> <p>Sewer mains are to be provided in 64 streets.</p>	<ul style="list-style-type: none"> • Entire Sewer main length: 11110m • Completed:6230 m; Balance:4880 m • 250 manholes completed out of 356 and balance 106 manholes has to be constructed and work is under progress • Estimate Amount : Rs. 7.45 Cr • Fund :CMCDM • 1115 House Sewer connections are to be given under illam thorum inaipu scheme. • Completed:395;balance:720 	<p>Work to be completed on or before 31.12.2021</p>

9	<p>Depot 79 / Ward 79 Oragadam, Gandhi Nagar, Ram Nagar, Ezhil Nagar Depot 80 / Ward 80 Puthur, Vijayalakshmi Puram, Banu Nagar</p> <p>Sewer mains are to be provided in 100 streets.</p>	<ul style="list-style-type: none"> • Entire Sewer main length : 10648m • Completed:2820 m; Balance:7828m • 131manholes completed out of 348 and balance 217 manholes has to be constructed and work is under progress • Estimate Amount : Rs. 8.05 Crore • Fund :CMCDM • 1246 House Sewer connections to be given under illam thorum inaippu scheme. • Completed:591;Balance:655 	Work to be completed on or before 31.12.21
10	<p>Depot 83 / Ward 83 Katchanankuppam, Korattur, TVS Nagar, Annai Nagar, Madanamkuppam (Part) Depot 85 / Ward 85 Kamaraja Puram, TASS Avenue, Vanchi nagar</p> <p>Sewer mains are to be provided in 56 streets.</p>	<ul style="list-style-type: none"> • Entire Sewer main length : 4205m • Completed:1800m; Balance :2405m • 81manholes completed out of 147 and balance 66 manholes has to be constructed and work is under progress • Estimate Amount : Rs. 8.39 Crore • Fund :CMCDM • 686 House Sewer connections to be given under illam thorum inaipu scheme. • Completed:0; Balance:686 	Work to be completed on or before 31.12.21
11	<p>Annai Sathiya Nagar (D/86)</p> <ul style="list-style-type: none"> • No Underground Sewer system available at present • Sewer mains are to be provided in 12 streets. 	<ul style="list-style-type: none"> • DPR is technically approved for 400 Nos of HSC to be given under Illam thorum innaipu and Total Sewer main of length of 1725 m and 60 Nos of Manholes. • Fund : G.O(Ms) No.107, MA&WS(MW1) Dept, dated 20.08.2019 for Rs. 2371 Crore. 	work will be completed on or before Dec. 2022
12	<p>Sivanandha Colony(D/85)</p> <ul style="list-style-type: none"> • No Underground Sewer system available at present • Sewer mains are to be provided in 12 streets. 	<ul style="list-style-type: none"> • DPR is technically approved for 450 No.s of HSC to be given under Illam thorum innaipu and Total Sewer main of length 887 m and 37 Nos. of Manholes • Fund : G.O(Ms) No.107, MA&WS(MW1) Dept, dated 20.08.2019 for Rs. 2371 Cr. 	work will be completed on or before Dec'2022

13	MKB Colony (Depot 85/Ward 85) <ul style="list-style-type: none"> • No Underground Sewer system available at present. • Sewer mains are to be provided in 21 streets. 	<ul style="list-style-type: none"> • DPR is technically approved for 630 Nos. of HSC to be given under Illam thorum inaipu and Total Sewer main of length 2852m and 120 Nos. of Manholes • Fund : G.O(Ms) No.107, MA&WS(MW1) Dept, dated 20.08.2019 for Rs. 2371 Cr. 	Work will be completed on or before Dec'2022
14	Patavatamman Estate and Tiny shed / Depot 84/Ward 84 <ul style="list-style-type: none"> • No Underground Sewer system available. • Sewer mains are to be provided in 15 streets. 	<ul style="list-style-type: none"> • DPR is technically approved for 237 Nos. of HSC to be given under Illam thorum innaipu and Industries and Total Sewer main of length of 1238 m and 45 Nos of Manholes • Fund: G.O (Ms) No.107, MA&WS (MW1) Dept, dated 20.08.2019 for Rs. 2371 Cr 	Work will be completed on or before Dec' 2022

9. I humbly submit that the total Sewerage generated in Area – VII from Depot 79 to 93 is 45 MLD. The sewage from Area – VII is diverted to Kodungaiyur and Koyambedu STPs through 23 nos. of Sewage Pumping Stations. The capacity of these 23 nos. of Sewage Pumping Stations are 259.92 MLD and the capacity of Kodangaiyur STP is 270 MLD and Koyambedu STP is 214 MLD.

10. I further humbly submit that high standards are maintained while disposing wastage from TTRO (Liquid and Solid). The Rejects received from TTRO is being blended with raw sewage to be treated in Secondary level into the waterways as per standards of CPCB/TNPCB norms. The treated Sewage is being let out into the water ways.

11. In this regard works of plugging the Domestic Sewage Outfalls into the Korattur Lake are being carried out expediently in Area VII through “ Illam Thorum Innaipu “scheme to effect House sewer connections to the residents in order to avoid the letting out sewerage into water bodies. In addition to that the works such as “laying of sewer mains and construction of machine holes are also being carried out simultaneously in the leftout streets to avoid unauthorized letting out their sewage into the lake.

6. It is seen from the report that certain works have been done by the Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) and they have mentioned that the plugging of Domestic Sewage Outfalls into the Korattur Lake in certain areas will be completed by 30.06.2021 by connecting the same to the regular sewage lines under '*Illam Thorum Innaipu*' scheme and certain works are expected to be completed by December-2021 and December – 2022 respectively.
7. The learned counsel appearing for the applicant submitted that the temporary measure of diverting the sewage from certain wards to the dumping station and thereafter, to the treatment plants are not effective as claimed by the Board and in fact, clandestinely this is being discharged into the lake, thereby, affecting the water quality. Further, the effluent that is coming from the industries adjacent to the lake area is also not properly monitored and they are also discharging the same into the drain which ultimately reaches the lake.
8. The learned counsel appearing for some of the industries submitted that there is no discharge of untreated effluents from the industrial estate and the Pollution Control Board is regularly making inspection and monitoring the same.
9. However, considering the circumstances and also to ascertain the present status, we direct the Joint Committee to inspect the area in question again and submit the nature of progress of work that has been done in that area

and whether the steps taken by the regulators are sufficient to avoid discharge of effluents/sewage into the Korattur Lake.

10. The committee is also directed to ascertain the water quality and also the sediments from the lake, so as to ascertain as to whether there any heavy metals or other industrial effluents are mixing with the water in the lake.

11. If on analysis of the sediments from the lake shows presence of any industrial effluents, then the committee is also directed to take steps against the concerned industries who are responsible for the same and they must suggest the remedial measures to remove the same and the expenses required for this purpose have to be realized from the responsible industries who have caused the mischief. The committee is also directed to take the sediment samples from the Ambattur Lake excess of water which is likely to reach the Korattur Lake as well.

12. The applicant as well as the 11th respondent are directed to submit their suggestions and objections, if any, regarding the work so far taken before the committee within a week, so that, the same may also be considered by the committee while submitting the report as directed by this Tribunal. The authorities must take into account the fact that the monsoon is approaching and all necessary steps to prevent mixing of sewage & other effluents into the lake have to be completed before the onset of monsoon.

13. The Tamil Nadu Pollution Control Board is also directed to file an independent report regarding the progress of the work done and whether

any improvement has been caused in preventing the discharge of industrial effluents and domestic sewage into the water body and quality of the water in the lake.

14. The Greater Chennai Corporation is also directed to submit a detailed report regarding the steps taken by them to protect the water body, as it is within their maintenance and supervision.

15. The Committee as well as the Tamil Nadu Pollution Control Board, Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) and the Greater Chennai Corporation and the Public Works Department are directed submit their respective reports as directed on or before 12.08.2021 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.

16. The Registry is directed to communicate this order to the members of the committee, Tamil Nadu Pollution Control Board, CMWSSB, Public Works Department and the Greater Chennai Corporation, apart from communicating this order to the Chief Secretary, Principal Secretaries for Environment, PWD & WRD, Irrigation and Additional Chief Secretary to Municipal Administration and Water Supply by e-mail immediately for their information and also for supervision of implementation of the directions issued by this Tribunal within a shorter time line by providing

necessary technical as well as financial support for this purpose, if any required.

17.For consideration of further reports, post on 12.08.2021.



सत्यमेव जयते

Sd/-

.....J.M.
(Justice K. Ramakrishnan)

Sd/-

.....E.M.
(Dr. K. Satyagopal)

O.A. No.268/2016,
24th June, 2021. Mn.



**BEFORE THE NATIONAL GREEN
TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 268 of 2016 (SZ)

Korattur People's Welfare & Awareness
Trust Represented by Mr. S. Sekaran
Founder and Managing Trustee
Korattur, Chennai – 600 076.

...Applicant(s)

Vs

Government of India,
Rep. by its Secretary, Ministry of
Environment, Forests & Climate Change,
New Delhi and Ors.

...Respondents

**REPORT OF THE JOINT COMMITTEE IN
COMPLINACE TO THE HON'BLE NGT
ORDER DATED 24.06.2021 IN O.A.NO.268
OF 2016(SZ) .**

**Advocate for Respondent: TNPCB
Thiru.Sai Sathya Jith,
Advocate, Chennai.**

Date: 30.09.2021.

Date of hearing on:04.10.2021

