

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL**

**SOUTHERN ZONE BENCH AT CHENNAI**

**ORIGINAL APPLICATION No 164 OF 2014 (SZ)**

IN THE MATTER OF

P. Edwin Wilson,  
Purasaiwalkam, Chennai

... Applicant

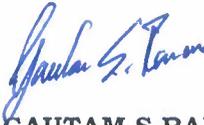
Versus

The State of Tamil Nadu,  
Rep. by its Chief Secretary,  
Chennai and Ors.

... Respondents

**REPORT FILED BY THE 10<sup>th</sup> RESPONDENT (CMWSSB)**

**DATE : 30.11.2023**



**M/s. GAUTAM S. RAMAN  
ADVOCATE**

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<b>SL. NO.</b>	<b>DESCRIPTION OF DOCUMENT</b>	<b>PAGE NO.</b>
1.	Status/Objection Report filed on behalf of the 10 <sup>th</sup> Respondent (CMWSSB)	<b>1 - 9</b>

Place: Chennai

Date : 30.11.2023

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI

ORIGINAL APPLICATION No 299 of 2013 (SZ)  
With  
ORIGINAL APPLICATION No 164 of 2014 (SZ)  
With  
ORIGINAL APPLICATION No 164 of 2015 (SZ)  
With  
ORIGINAL APPLICATION No 130 of 2016 (SZ)

IN THE MATTER OF

Tribunal on its own motion on the News item  
Reported in The Hindu Dt.25.10.2013  
About beach at Adyar Estuary with trash, rubble ... Applicant(s)

-VERSUS-

The Principal Secretary,  
Environment & Forests,  
Govt. of Tamilnadu, Chennai & ors. ... Respondent(s)

With

P. Edwin Wilson,  
Purasaiwalkam, Chennai. ... Applicant(s)

-VERSUS-

The State of Tamil Nadu,  
Rep. by its Chief Secretary,  
Chennai & ors ... Respondent(s)

With

Jawaharlal Shanmugam,  
Thiruvanmiyur, Chennai. ... Applicant(s)

-VERSUS-

Tamil Nadu Pollution Control Board & ors. ... Respondent(s)

With

S. Muthumeena,  
Egmore, Chennai ... Applicant(s)

-VERSUS-

The Secretary to the Government  
PWD, Secretariat, Chennai & Ors. ... Respondent(s)

## INDEPENDENT REPORT FILED ON BEHALF OF CMWSS BOARD

I, K. Bharathi, Daughter of Thiru. Kuppusamy, Hindu, aged about 56 years working as Superintending Engineer (Project) VI of Chennai Metropolitan Water Supply and Sewerage Board having office at 5<sup>th</sup> floor, No.1, Pumping Station Road, Chindadripet, Chennai 600 002 do hereby solemnly affirm and sincerely state as follows:

1. I am the Superintending Engineer (P) VI of the Chennai Metropolitan Water Supply and Sewerage Board and as such I am well acquainted with the facts and circumstances of the case.
2. I am filing this status report on behalf of the Managing Director, Chennai Metropolitan Water Supply and Sewerage Board, Chennai – 02, as per the orders issued by the Hon'ble National Green Tribunal, Chennai on 03.11.2023.
3. I respectfully hereby submit the status of works carried out by Chennai Metropolitan Water Supply and Sewerage Board for the mitigation of sewage outfalls into River Cooum, River Adyar and Buckingham canal within Chennai city.
4. I respectfully hereby submit the progress of works as detailed below:

### **Integrated Cooum River Eco – Restoration Project (ICRERP):**

CMWSSB has taken up the implementation of 15 sub-projects. The work components consists of 10 nos of Interception & Diversion arrangements along the river and 3 nos of Modular Sewage Treatment Plants (STPs) for treatment of the diverted Sewage at Chetpet, Nungambakkam and Maduravoyal, one 10 MLD Sewage Treatment Plant (TTUF) at Langs Garden and 1 Under Ground Sewerage Scheme (UGSS) at Nerkundram. Progress of 14 sub-projects are detailed below:

SI. No	Description of Work	Progress of work	Status of Work / Remarks
1	Interception and Diversion works :Package 1 – I & D - Chintadripet	100	Work completed. (Outfalls plugged – 1 no (CR 65)
2	Interception and Diversion works Package 2 – I & D – Chetpet	100	Work completed. Outfalls plugged – 4 nos (CL8200, CL8300, CI31A, CL31B)
3	Interception and Diversion works Package 3 - I & D – Nungambakkam	100	Work completed. Outfalls plugged – 2nos (CL27,CR28)

4	Interception and Diversion works: Package 4 - I & D - Metha Nagar	100	Work completed. Outfalls plugged -4 nos (CL31,CR30, CR28(N2), CR 30B)
5	Interception and Diversion works Package 5 - I & D - Anna Nagar	100	Work completed. Outfalls plugged -4 nos (CL4,CL5, CL6(OE), CL14100)
6	Interception and Diversion works Package 6 - I & D - Langs Garden Road	100	Work completed. Outfalls plugged – 10nos (CL54, CL38, CL2800, CL3150, CL44, CL3800,CL3600, CL4000, CL3400, CL3500)
7	Interception and Diversion works Package 7 - I & D - South Cooum River Road	100	Work completed. Outfalls plugged – 4nos (CL37, CL36, CL35, CL34(N1))
8	Interception and Diversion works Package 8 - I & D – Aminjikai	100	Work Completed. Outfalls plugged -6 nos (CR24, CR25, CL11, CR22, CL12(N1), CL12)
9	Interception and Diversion works Package 9 - I & D - NSK Nagar	-	Due to encroachment and non settlement of court case, the work couldn't be taken up.
10	Interception and Diversion works Package 10 - I & D - Anna Nagar	100	➤ Work Completed. Outfalls plugged–2 Nos. (CL7, CL9)
11	Modular STP – Package 11 –1.0 MLD, College Road, Chetpet	100	➤ Work completed and commissioned.
12	Modular STP- Package 12 – 1.2 MLD- Nungambakkam	100	➤ Work completed and commissioned.
13	Modular STPs- Package 13 –0.6 MLD – Maduravoyal		Modular STP is proposed only for septage management. As the existing nearby sewage pumping station located in Mogappair is sufficient for diversion of sewage (decanted from sewer lorries), the work is dropped and at present no out fall is reported.
14	Modular STP – Package 14 - 10 MLD TTUF at Langs Garden	95	➤ Expected date of completion: 15.12.2023.
15	Package 15 - UGSS – Nerkundram	96	➤ Expected date of completion: 31.03.2024.

37 nos of Sewage Outfalls into River Cooum are plugged by CMWSSB. CMWSSB has taken up the Under Ground Sewerage Scheme to Nerkundram through which 10 nos of outfalls from Nerkundram will be arrested on providing Sewerage Connections to households. This scheme is expected to be completed by March 2024.

The raw sewage collected from I&D works will be treated in the Modular STPs and will be let out into water bodies as per TNPCB norms.

In addition to the above works, CMWSSB has taken up 14 nos of works for an amount of Rs. 50.00 crores. The works include strengthening of sewage infrastructure of CMWSSB in areas around Cooum River, which in turn will prevent flow of raw sewage into the River.

### **Adyar River Restoration Project from Origin to Mouth (ARRP):**

CRRT Board approved 56 sub projects of short term plan at a cost of Rs.555.46 Crores to be implemented by various implementing agencies, line departments under Phase-III of Adyar River restoration origin to mouth for plugging of sewage outfalls into Adyar River. Out of 56 sub projects, 14 sub projects are to be implemented by CMWSS Board and the administrative sanction has already been accorded vide MA&WS (MC1) Department GO(MS) No.72 dated 12.07.2017 to a value of Rs. 123.19 Crores.

Of the original 14 sub projects (7 nos of Interception and Diversion works and 7 nos of Modular Sewage Treatment Plant works) prepared for the mitigation of sewage outfalls within Chennai city into River Adyar, CMWSSB has taken up 10 works, of which 7 nos of Interception and Diversion works and 3 nos of Modular STP works (1 no of Modular STP undertaken by CMWSSB for Kundrathur Town Panchayat) are undertaken along River Adyar.

For Package 2, it involves Interception and Diversion of two outfalls, one out fall is from Kotturpuram slum tenements. As this slum tenement is proposed to be reconstructed by TNUHDB, the outfall will be plugged. Another SWD and 2 additional SWDs in Greenways Avenue are found to be dry and carry only rain water and hence the work is dropped.

Originally for Package 12, modular STP of capacity 1.5 MLD is proposed for treating the 5 nos of outfalls to be intercepted and diverted under package VII. The outfalls in Package VII are later proposed to be diverted to the pumping station which is under construction in Manapakkam UGSS. Hence, the modular STP proposal in Package XII is dropped. Proposals of Modular STPs for Package 13 & 14 has been dropped due to ongoing sewerage schemes in Manapakkam, Ramapuram and Nandambakkam.

Originally 2 nos of 4 MLD Modular STPs were proposed for Mambalam drain in two packages Pac-9 & Pac-10. By carrying out two works of enlargement of sewer and improvement of pumping main taken up due to ageing and inadequacy under Mitigation of Sewage Outfalls - Phase I works, sewage discharge of 4MLD will be reduced in Mambalam drain. Hence, one no. of 4MLD Modular STP (Package 9) has been dropped and another 4MLD Modular STP (Package 10) has been established at Toddhunter Nagar.

For one no. of Modular STP proposal at MGR drain in Package 11 has been converted to Interception and Diversion work and the work is completed.

The progress of works is detailed below:

Sl. no	Description of Work	Progress of work	Status of work / Remarks
1	Package 1 - I & D - Adyar & Kotturpuram	100	➤ Work completed. Outfalls plugged - 9 nos (AR - 2000, AR -2200, AR -3000, AR-2500, AR-2600, AR - 37, AR-3800, AR-3900, AR-4000)
2	Package 2 - I & D - Greenways Road & Kotturpuram TNUHDB		Proposal dropped. (TNUHDB proposed to demolish and reconstruct new Kotturpuram slum tenements. Further, 3 nos of SWD in Greenways avenue is carrying only rain water)
3	Package 3 - I & D - Nandanam Extension, Turn Bulls Road & Radhakrishnapuram Slum	100	➤ Work completed. Outfalls plugged - 3 nos. (AL3500, AL34, AL33)
4	Package 4 - I & D - Mambalam Canal	100	➤ Work completed. Outfalls plugged - 1 no (AR - 5750)
5	Package 5 - I & D - Guindy & Ekkattuthangal	100	➤ Work Completed Outfalls plugged - 9 nos. (AR8200, AR21, AR18, AR17, AR14, AR13, AR12, AR10450, AR10850)
6	Package 6 - I & D - Samiyar Thottam, Jaffer Khanpet & MGR Drain	100	➤ Work completed Outfalls plugged - 10 no (AL-21, AL-20, AL-19, AL-8300, AL-9000, AL-9150, AL-9200, AL-16, AL-14, AL-13)
7	Package 7 - I & D - Nandambakkam	100	➤ Work completed. Outfalls plugged - 2 nos (AR-12650, AR-12800). 3 nos of outfalls to be plugged under Manapakkam UGSS.

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Sl. no	Description of Work	Progress of work	Status of work / Remarks
8	Package 8 - Modular STP - Kotturpuram	100	<ul style="list-style-type: none"> <li>➤ Work completed.</li> <li>➤ CTO under progress</li> </ul>
9	Package 9 - Modular STP - Mambalam Canal (P1)		<ul style="list-style-type: none"> <li>➤ Proposal dropped due to enlargement of sewer and improvement of pumping main taken up under Mitigation of Sewage Outfalls - Phase I works.</li> </ul>
10	Package 10 - Modular STP - Mambalam Canal (P2)	100	<ul style="list-style-type: none"> <li>➤ Work completed.</li> <li>➤ CTO under progress.</li> </ul>
11	Package 11 - Modular STP - MGR drain	100	<ul style="list-style-type: none"> <li>➤ Original proposal of Modular STP has been dropped.</li> <li>➤ Revised proposal as I&amp;D work.</li> <li>➤ Work completed</li> </ul>
12	Package 12 - Modular STP - Manapakkam		<ul style="list-style-type: none"> <li>➤ Proposal dropped due to ongoing sewerage schemes in Manapakkam, Ramapuram and Nandambakkam.</li> </ul>
13	Package 13 - Modular STP - Nandambakkam		
14	Package 14 - Modular STP - Nandambakkam		
15	Package 15 - Modular STP - Kundrathur drain	80	<ul style="list-style-type: none"> <li>➤ Scheduled date of completion: 01.03.2024.</li> </ul>

After the completion of I&D works, 39 nos of Sewage Outfalls into River Adyar within Chennai city are plugged. CMWSSB has completed the Under Ground Sewerage Schemes for Porur. At present, CMWSSB is executing the Under Ground Sewerage Schemes to Manapakkam, Ramapuram, Mugalivakkam and Nandambakkam and works are under progress. On completion of these UGS schemes, CMWSSB will be providing Sewer Connections to all households of these areas, in order to prevent the unauthorized letting out of Sewage into River Adyar.

In addition to the above works, CMWSSB has taken up 9 nos of works for an amount of Rs. 63.85 crores under savings fund of CRRT – ARRP. The works include strengthening of sewage infrastructure of CMWSSB in areas around Adyar River, which in turn will prevent flow of raw sewage into the River.

#### **Mitigation of Sewage Outfalls in Drains of Adyar, Drains of Cooum and Buckingham Canal and its Drains:**

Revised Administrative Sanction has been accorded by the Government vide G.O. (Ms) No. 11 MA&WS (MW1) Dept, dt: 24.01.2023. Till date, work Order has been issued for 6 nos of I&D works and 30 nos of Infrastructure Strengthening works amounting to Rs. 385.38 crores and works are under progress. On completion of

36 works, 20 nos of outfalls will be plugged into Drains of River Adyar, River Cooum and Buckingham canal under Mitigation of Sewage Outfalls – Phase I works.

Due to non removal of encroachments along Buckingham canal by PWD and TNUHDB, CMWSSB is not in a position to take up the Interception and Diversion proposals along B-Canal and also due to site constraints for proposals for drains of River Cooum and Adyar.

Moreover, when CMWSSB officials inspected the sewage outfalls, it was found that most of the outfalls were from Households in areas where Underground Sewage Schemes were not available in the 42 ULBs which have been added to Chennai city jurisdiction during 2011.

Though temporary measures are being carried out to arrest sewage flow into waterways, CMWSSB envisioned permanent measure of providing underground sewerage schemes. Hence, it has been decided to curb the sewage flow, into side drains and storm water drains which drains into waterways of the city, from its origin by providing Underground Sewerage Schemes to the newly added 42 ULBs. The status of Underground sewerage schemes executed / to be executed in the newly added areas, under funding from GoI, GoTN, Loan / Grant, is given below.

S. No	Description	No. of areas	Remarks
1	UGSS completed	17	Valasaravakkam, Alandur, Madhavaram, Meenambakkam, Maduravoyal, Nolambur, Surapet, Puthagaram, Kathirvedu, Ullagaram – Puzhuthivakkam, Porur, Kathivakkam, Thiruvottiyur, Sholinganallur, Karapakkam, Perungudi, Ambattur.
2	UGSS under progress	15	Pallikaranai, Mugalivakkam, Manali, Chinnasekkadu, Karampakkam, Madipakkam, Nandambakkam, Ramapuram, Nerkundram, Manapakkam, Kottivakkam, Palavakkam, Neelankarai, Uthandi, Injambakkam
3	UGSS tendered	10	Okkium – Thoraipakkam, Semmenchery, Jalladampettai, Edayanchavadi, Sadayankuppam, Kadapakkam, Puzhal, Mathur, Theeyambakkam, Vadaperumbakkam.
	Total	42	

Once the above mentioned schemes are completed, House Service Connection to every household will be provided under 'Illam thorum inaippu' scheme. Hence, perennial source of sewage from household premises will be completely arrested, which will be permanent solution to mitigate sewage outfalls.

It is also submitted that, the Government of Tamil Nadu has come up with a unique approach of "One River, One Operator" to restore River Adyar. The Government of Tamil Nadu intends to appoint a private Concessionaire for Restoration of Adyar River under Hybrid Annuity Model (HAM), through Public Private Partnership Mode on Design, Build, Finance, Operate and Transfer basis. It has also been proposed to set up a Special Purpose Vehicle (SPV) named Ms. Chennai Rivers Transformation Company Limited, fully owned by the Govt. of Tamilnadu, to be headed by Principal Secretary, MA&WS Dept with representations from various stakeholders.

The major development obligations of Concessionaire are to

1. Take necessary steps to ensure that Adyar River meets the required water quality standards for propagation of wildlife and fisheries (Class D Water Body),
2. Improve the overall ecological health of the river by implementing measures to intercept, divert, and treat polluting outfalls
3. Undertake rehabilitation and development of sewage treatment facilities (STFs) comprising of traditional sewage treatment plants (STPs) of appropriate size, capacity and technology, and other innovative means of sewage treatment in accordance with Good Industry Practice
4. Undertake river channel management works to enhance water flow, reduce erosion, and improve the overall stability of the river system.
5. Implement flood protection measures to mitigate the risk of flooding in the surrounding areas.
6. Develop riverfront areas to enhance public access, recreational opportunities, and aesthetic value. Riverfront development to include landscaping, construction of pedestrian walkways, cycle tracks, public parks, and other such recreational amenities;
7. Establish efficient solid waste management systems to prevent pollution and maintain the cleanliness of the river and its surroundings. Solid waste management to include, but not limited to, the following: collection, transportation, and disposal of waste generated within the right-of-way of the Adyar River (including removal and disposal of waste and debris collected from the surface of Adyar River).

8. As of now, tender has called for Selection of Concessionaire with bid opening date as 01.12.2023.

In addition to the above efforts to curb flow of sewage into waterways, the Sewage Treatment Capacity of CMWSSB has been enhanced to 924 MLD to counter the additional sewage received by commissioning UGS schemes in added areas.

The action taken by CMWSS Board for the mitigation of Sewage Outfalls for prevention of pollution of River Adyar, River Cooum and Buckingham Canal and the status of the ongoing works is hereby submitted before the Hon'ble Green Tribunal for consideration.

Solemnly affirmed at Chennai  
on this 30<sup>th</sup> day of ~~November~~, 2023 and  
signed her name in my presence

30<sup>th</sup> November, 2023.

9<sup>th</sup> and last page.  
No. of corrs: ....

*Gautan S. Raman.*

GAUTAN S. RAMAN,  
Counsel for 10<sup>th</sup> Respondent/CMWSSB.

*K. Raman*  
SUPERINTENDING ENGINEER-VI (P)  
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Before me

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