BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION No. 183/2024

In the matter of:

News Item titled "Why 75 % of Delhi's STPs aren't ready to tackle Yamuna stink" appearing in The Times of India dated 19.02.2024

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1.	**Report** in the matter of O.A. No. 183/2024, News Item Titled; "why 75 % of Delhi's STPs aren't ready to Tackle Yamuna Stink" in compliance of Hon'ble NGT order dated 23.02.2024.	
2.	**Annexure- I** A copy of STPs details provided by Delhi Jal Board.	
3.	**Annexure-II** A copy of analysis results of STPs.	
4.	**Annexure- III** A copy of Hon'ble NGT order dated 23.02.2024.	

(Nazimuddin)
Scientist 'F'
Central Pollution Control Board

Place: Delhi
Dated: 05.08.2024

REPORT IN THE MATTER OF OA NO. 183/2024 NEWS ITEM TITLED; "WHY 75 % OF DELHI'S STPS AREN'T READY TO TACKLE YAMUNA STINK"

1.0 BACKGROUND

The Hon'ble NGT vide order dated 23.02.2024 in the matter of OA No. 183/2024 in the Suo Motu Matter regarding News Item titled; "Why 75 % of Delhi's STPs aren't ready to tackle Yamuna stink" directed CPCB to submit a report including the details of performance of STPs in the prescribed format and the details of utilization of treated sewage and timelines set for ensuring treatment of entire sewage generated in Delhi.

2.0 COMPLIANCE TO THE DIRECTIONS OF NGT

In compliance with Hon'ble NGT order dated 23.02.2024, CPCB inspected 38 STPs in NCT of Delhi during the month of March, 2024 and April, 2024. Samples of STPs were collected from Inlet and Outlet of STPs and analysed for pH, BOD, COD, TSS, TN and Faecal Coliform. Further, as per directions of NGT, the required details were collected for each STP.

The details of STPs as per the format provided by Hon'ble NGT order dated 23.02.2024 are provided in **Annexure I.** The quality of untreated and treated sewage as per analysis results of the samples collected from Inlet and Outlet of 38 STPs of NCT of Delhi is presented in **Annexure II.**

3.0 DETAILS AND PERFORMANCE OF STPs IN DELHI

3.1 Technology for Treatment Plants of Sewage

In Delhi, 38 Sewage Treatment Plants (STPs) are being operated by Delhi Jal Board at different locations. These plants are based on the Activated Sludge Process (ASP) and other modifications of ASP. The current treatment technologies adopted in STPs of Delhi for sewage treatment is tabulated below:

S. No.	Treatment Technologies	No. of Installed STPs in Delhi
1.	Membrane Bioreactor (MBR)	1
2.	Sequencing Batch Reactor (SBR)	2
3.	Conventional Activated Sludge Process (ASP)	19
4.	Densadeg BioFAR	3
5.	Activated Sludge Process with Biological Nutrient Removal (ASP with BNR)	3
6.	Activated Sludge Process with Integrated Fixed Film Activated Sludge technology (ASP with IFAS)	2

7.	Fluidised Aerobic Bed (FAB)	1
8.	Extended Aeration (EA)	6
9.	Modified Activated Sludge Process (anaerobic-anoxic-aerobic) with Biological Nutrient Removal (A2O with BNR)	1

3.2 Installed Capacity and Capacity Utilization of STPs

As per the information provided by the DJB to CPCB officials during the inspections of STP, the total installed capacity of STPs in Delhi is around 3,237 MLD and the capacity utilization of STPs is around 2,644 MLD.

As per the status during CPCB's Inspection, 38 No. of STPs were operational by DJB. These STPs treats around 2252 MLD of domestic sewage including 188 MLD of sewage from Integrated Sewer Project (ISP). Further, around 392 MLD of sewage from drains/ nalla and around 0.23 MLD of septage supplied through tankers is treated in these STPs. Also, one more STP at Okhla with an installed capacity of 124 MGD (563.7 MLD) was ready to be commissioned during CPCB's inspection.

3.3 Disinfection facility in STPs

Out of the 38 STPs of Delhi, 10 STPs use chlorination technique for disinfection of the treated water while Ultraviolet (UV) is used by 3 STPs.

S. No.	Disinfection Method	Name of the STPs
1.	**Chlorination**	Akshardham, Coronation Pillar New, Delhi Gate Phase-II, Keshopur Phase I, Kondli Phase-I, Kondli Phase-II, Kondli Phase-III, Nilothi Phase-II, Okhla Phase-VI, Pappan Kalan Phase II
2.	**Ultraviolet**	Kapashera, Rithala Phase-II, Yamuna Vihar Phase-II

Moreover, UV disinfection of treated sewage is proposed in 07 STPs (Keshopur Phase II, Keshopur Phase III, Kondli Phase IV, Narela, Rohini) and Chlorine disinfection of treated water is proposed in 01 STP (Rithala Phase I).

3.4 Sludge Management in STPs

As per the information provided during inspections, around 12,168 MT/month of sludge being disposed from 37 STPs of Delhi; information of 01 STP was not provided.

It has also been reported that, dried sludge from the STPs of Delhi is either used by farmers free of cost or disposed of for filling up of low lying areas of STPs. The exact quantification of sludge being used by farmers is not monitored since same is provided free of cost. According to the information provided, the sludge disposed in low lying areas comes to be around 11,249 MT/month.

In addition, DJB has installed following facilities for better utilization of sludge generated through STPs of Delhi.

1. The Sludge-to-Compost facility installed at Nilothi Phase-II processes the digested sludge from this STP. Around 345 MT/month of sludge is converted to compost at Nilothi Phase –II STP. The current quantity of the compost stored at the facility is around 1500 metric tons.
2. The Sludge Incineration facility at Kondli STP which processes sludge from STPs at different locations. As per the information provided by DJB, 3442.2 metric tons of sludge was incinerated from October, 2023 to March, 2024 in this facility. The quantity of sludge incinerated, and the ash used to make Fly Ash bricks) is approx. 574 MT/ month.

As per Consent to Operate issued by DPCC, STPs need to fulfil the following conditions for the sludge management:

a. STPs need to ensure that sludge is not discharged in the drain/open land.
b. The generated sludge from STP is properly dried and is disposed off safely in timely mannered and no leachate due to generated sludge.
c. The sludge handling and its record keeping must be properly maintained.

4.0 Utilization of treated sewage

As reported by DJB in High Level Committee (HLC) constituted by Hon'ble NGT vide order dated 09.01.2023 in OA No. 21/2023 (HLC) in its 9th meeting held on 20.02.2024, 125 MGD (568.25 MLD) out of 565 MGD (2568.49 MLD) of sewage treated water was being utilised. The treated sewage utilisation capacity was expected to be further increased by 100 MGD (454.6 MLD) by March, 2024.

5.0 Timelines for treatment of entire sewage in Delhi

As reported by DJB in 9th HLC Meeting on 20.02.2024, the proposed sewage treatment capacity is expected to increase to 922 MGD (4191.41 MLD) by December, 2024.

The updated information regarding current utilization of treated sewage and the expected timelines for entire sewage treatment has been sought by CPCB from DJB vide letters dated 15.03.2024, 26.04.2024, 10.05.2024 and 24.06.2024. However, the requested information is still awaited.

Annexure I

Details of STPs as provided by DJB

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
1	Akshardham STP	Through sewerage: 0.37	MBR	4.54 MLD	0.37 MLD	Chlorination	5	61362 kWh	Treated= 0.37 MLD Reused= 0.37 MLD in gardening and horticulture.	100 % reuse in gardening and horticulture	0.294	Used in gardening by Akshardham & CWG village
		Through Drain/ Nalla										
		Through Septage Tankers:										
		Others:										
2	Chilla STP	Through sewerage:	SBR	40.91 MLD	41.46 MLD	Facility not available	-	154480 kWh	Treated= 41.46 MLD Reused= 0.16 MLD	Shahdara Drain and finally into River Yamuna	3.44	Disposing in premises of Kondli STP
		Through Drain /Nalla: 41.46										
		Through Septage Tankers:										
		Others:										

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
3	Coronation Pillar Phase -I&II	Through sewerage: 20.44	ASP	90.92 MLD	20.44 MLD	UV (proposed)	-	137244 kWh	Treated= 20.44 MLD; Reused= 9.37 MLD from drain (Phase I &II)	Irrigation Drain to Jahangir Puri Drain which finally meets Supplementary Drain	13.95 (Estimated Values)	Coronation Pillar STP vacant area
		Through Drain /Nalla:										
		Through Septage Tankers										
		Others										
4	Coronation Pillar Phase -III	Through sewerage: 12 MLD (including sewage from ISP)	ASP	45.46 MLD	12 MLD	UV (proposed)	-	85988 kWh	Treated= 12 MLD; Reused= 9.37 MLD from drain (Phase I &II)	Irrigation Drain to Jahangir Puri Drain which finally meets Supplementary Drain	6.7 (Estimated Values)	Coronation Pillar STP vacant area
		Through Drain /Nalla:										
		Through Septage Tankers:										
		Others										
		Remarks for Coronation Pillar Phase I & II and III: Status of rehabilitation of STPs as informed by DJB: • The rehabilitation is done in alternate manner between the two aeration units in STPs of Coronation Pillar Phase I&II and Coronation Pillar Phase III • Disc filters & UV disinfection system is yet to be commissioned.										
5	Coronation Pillar New	Through sewerage: 232	A2O with BNR	318.22 MLD	232 MLD	Chlorination	5 Kg/ MLD	1081350kWh	Treated = 232 MLD	Jahangir Puri Drain to	42.43	Coronation Pillar STP

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		(including ISP)							Reused= 0 MLD	Supplementary Drain		vacant area
		Through Drain /Nalla										
		Through Septage Tankers:										
		Others:										
6	Delhi Gate STP Phase - I	Through sewerage:	Densadeg BioFAR,	10 MLD	11.55 MLD	Facility Not Available	-	Supplied by PPCL.	Treated = 11.55 MLD Reused = 11.55 MLD (for electricity production in Pragati Power Corporation Limited Corporation)	Reuse by PPCL.	1.09	Ghitorni & Kondli
		Through Drain /Nalla: 11.55										
		Through Septage Tankers:										
		Others:										
7	Delhi Gate STP Phase - II	Through sewerage:	Densadeg BioFAR,	68.19 MLD	82.90 MLD	Chlorination	4-6 Kg/MLD	170116 kWh	Treated = 82.90 MLD	Delhi Gate Drain which	7.39	Kondli & Ghitorni for manufact
		Through Drain										

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		/Nalla: 82.9							Reused = 0 MLD	finally meets into river Yamuna		ure of bricks
		Through Septage Tankers:										
		Others:										
8	Ghitorni	Through sewerage: 9.38	EA	22.73 MLD	9.38 MLD	Facility Not Available	-	80093.33 kWh	Treated = 9.98 MLD Reuse = 2.68 MLD	Ghitorni water body and Mehraul i drain finally leading to CPWD drain	1.22	Dumping and utilized by local farmers
		Through Drain /Nalla:										
		Through Septage Tankers:										
		Others:										
9	Kapashera	Through sewerage:	SBR	22.73 MLD	23.04 MLD	UV	-	63752 kWh	Treated = 23.04 MLD Reuse = 0 MLD	Najafgarh Drain	0.55	Horticultu re
		Through Drain /Nalla: 23.04										
		Through Septage Tankers:										
		Others:										
10	Keshopur Phase-I	Through sewerage: 54.75	ASP	54.55 MLD	54.75 MLD	Chlorination	2.38 Kg/MLD	203520 kWh	Treated= 54.75 MLD	Najafgarh Drain	9.67	Keshopur STP
		Through										

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		Drain/Nalla:							Reuse =0.67 MLD			
		Through Septage Tankers:										
		Others										
11	Keshopur Phase-II	Through sewerage: 57.01	ASP	90.92 MLD	57.01 MLD	UV (proposed)	-	339199 kWh [2]	Treated= 57.01 MLD	Najafgarh Drain	10.63	Keshopur STP
		Through Drain/Nalla:							Reuse =0.02 MLD			
		Through Septage Tankers:										
		Others:										
12	Keshopur Phase-III	Through sewerage :148.1 (including sewage from ISP)	ASP	181.84 MLD	148.1 MLD	UV (proposed)	-	678400 kWh [2]	Treated= 148.1 MLD	Najafgarh Drain	26.14	Keshopur STP
		Through Drain/Nalla:							Reuse =0.06 MLD			
		Through Septage Tankers:										
		Others:										
		Remarks for STPs at Keshopur: • The physical progress of work of rehabilitation is 58 % for both phase II and III as on 31.03.2024. • A single electricity connection supplies electricity to phase I, II and III of STP. The reported electricity consumption / month in Phase I, II and III is calculated based on the quantity of sewage treated phase wise.										

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
13	Kondli Phase-I	Through sewerage: 46.08(includ-ing sewage from ISP)	ASP	45.46 MLD	46.08 MLD	Chlorination	5 Kg /MLD	858715 kWh [2]	Treated= 46.08 MLD Reuse= 0 MLD	Shahdara drain which finally meets into river Yamuna	7.2	Kondli STP
		Through Drain/Nalla:										
		Through Septage Tankers:										
		Others:										
14	Kondli Phase-II	Through sewerage:1 14.12(includ ing sewage from ISP)	ASP	113.65 MLD	114.12 MLD	Chlorination	5 Kg/ MLD		Treated= 114.12 MLD Reuse =0 MLD	Shahdara drain which finally meets into river Yamuna	19.15	Kondli STP
		Through Drain/Nalla:										
		Through Septage Tankers:										
		Others:										
15	Kondli Phase-III	Through sewerage:4 6.57 (including sewage from ISP)	ASP	45.46 MLD	46.57 MLD	Chlorination	5 Kg/ MLD		Treated= 46.57 MLD Reuse= 0 MLD	Shahdara drain which finally meets into river Yamuna	7.8	Kondli STP
		Through Drain/Nalla:										

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		Through Septage Tankers:										
		Others:										
16	Kondli Phase-IV	Through sewerage:119.93 (including sewage from ISP)	ASP with IFAS	204.57 MLD	119.93 MLD	UV (proposed)	-	563100 kWh	Treated= 119.93 MLD Reuse= 0 MLD	Shahdara drain which finally meets into river Yamuna	9.72	Kondli STP
		Through Drain /Nalla:										
		Through Septage Tankers:										
		Others:										
		Remarks for STPs at Kondli: • The Phase IV STP after rehabilitation work was scheduled to be functional by 31.03.2024. The Sludge handling system was scheduled to be commissioned by 15.04.2024. • A single electricity connection supplies electricity to phase I, II and III of STP. The total electricity consumption by Phase I, II and III of STP is reported.										
17	Mehrauli	Through sewerage:17.2	EA	22.73 MLD	30.39 MLD	Facility Not Available	-	122950 kWh	Treated= 30.39 MLD Reuse =9.08 MLD	DDA and Saket D-Block Drain to Barapullah Drain	0.45	Ghitorni STP
		Through Drain /Nalla: 12.96										
		Through Septage Tankers: 0.23										

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		Others:										
18	Molarband	Through sewerage:2.44	FAB	3 MLD	2.44 MLD	Facility Not Available	-	995 kWh	Treated= 2.44 MLD Reuse = 0 MLD	Agra Canal	0.3	Okhla STP
		Through Drain /Nalla:										
		Through Septage Tankers:										
		Others:										
19	Najafgarh	Through sewerage:11.93	EA	22.73 MLD	11.93 MLD	Facility Not Available	-	105680 kWh	Treated= 11.93 MLD Reuse =0 MLD	Najafgarh Drain	10	
		Through Drain /Nalla:										
		Through Septage Tankers:										
		Others:										
20	Narela	Through sewerage:12.68	ASP	45.46 MLD	12.68 MLD	UV (proposed)	-	88618 kWh	Treated 12.68 MLD Reuse =0 MLD	DD-6 drain which meets into Supplementary Drain	13.18	Narela STP
		Through Drain /Nalla:										
		Through Septage Tankers:										
		Others:										

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		Remarks for STPs at Narela: • The physical progress of installation of IFAS technology (rehabilitation work) as on 31.03.2024 is 50 %. • Disc filters & UV disinfection system is yet to be commissioned.										
21	Nilothi Phase-I	Through sewerage:109.52	ASP	181.84 MLD	109.52MLD	Facility Not Available	-	225110 kWh	Treated= 90.92 MLD Reuse = 0MLD	Najafgarh drain	30.182	Not provided
		Through Drain /Nalla:										
		Through Septage Tankers:										
		Others:										
		Remarks for STPs at Nilothi Phase-I: The physical progress of installation of IFAS technology (rehabilitation work) as on 31.03.2024 is 38 %.										
22	Nilothi Phase-II	Through sewerage:89.24	ASP	90.92 MLD	89.24 MLD	Chlorination	10 Kg/MLD	409526 kWh (including power generated through biogas 88348 kWh)	Treated= 89.24 MLD Reuse = 8.85 MLD	Najafgarh drain	11.50 (sludge converted to compost)	Converting into compost
		Through Drain /Nalla:										
		Through Septage Tankers:										
		Others:										
23	Okhla Phase-II	Through sewerage:50.24	ASP	54.55 MLD	50.24 MLD	Facility Not Available	-	62015 kWh	Treated= 50.24 MLD	Agra Canal	4.80	Okhla STP

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		Through Drain /Nalla:							Reuse = 0 MLD			
		Through Septage Tankers:										
		Others:										
24	Okhla Phase-III	Through sewerage:158.55	ASP	168.20 MLD	158.55 MLD	Facility Not Available	-	191727 kWh	Treated= 158.55 MLD	Agra Canal	19.2	Okhla STP
		Through Drain /Nalla:							Reuse = 0 MLD			
		Through Septage Tankers:										
		Others:										
25	Okhla Phase-IV	Through sewerage:192.24	ASP	204.57 MLD	192.24 MLD	Facility Not Available	-	233183 kWh	Treated= 192.24 MLD	Agra Canal	21.60	Okhla STP
		Through Drain /Nalla:							Reuse = 43.26 MLD			
		Through Septage Tankers:										
		Others:										
26	Okhla Phase-V	Through sewerage:67.18	ASP	72.73 MLD	67.18 MLD	Facility Not Available	-	82909 kWh	Treated= 72.64 MLD	Agra Canal	7.5	Okhla STP

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		Through Drain /Nalla:							Reuse = 0 MLD			
		Through Septage Tankers:										
		Others:										
27	Okhla Phase-VI	Through sewerage:132.35	ASP with BNR	136.38 MLD	132.35 MLD	Chlorination	1.26	560590 kWh (Grid) +	Treated=130 MLD	Agra Canal	12.26	Okhla STP
		Through Drain /Nalla:							Reuse = 2 MLD			
		Through Septage Tankers:										
		Others:										
28	Pappankalan Phase-I	Through sewerage:48.6	ASP	90.92 MLD	48.6 MLD	Facility Not Available	-	109390 kWh	Treated = 48.6 MLD	Najafgarh Drain (	Data not provided	
		Through Drain /Nalla:							Reuse = 2MLD			
		Through Septage Tankers:										
		Others:										
29	Pappankalan Phase-II	Through sewerage: 95.76	ASP with BNR	90.92 MLD	95.76 MLD	Chlorination	11 Kg/MLD	449994 kWh	Treated=95.76 MLD	Najafgarh Drain	32.27	

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		Through Drain /Nalla:							Reuse = 4.546 MLD			
		Through Septage Tankers:										
		Others:										
30	Rithala Phase-I	Through sewerage:172.48 (including sewage from ISP)	A2O with BNR	181.84 MLD	172.48 MLD	Chlorination (proposed)		592800 kWh	Treated = 172.48 MLD	Nangloi Supplementary drain	Data not provided	Rithala STP
		Through Drain /Nalla:							Reuse = 0MLD			
		Through Septage Tankers:										
		Others:										
		Remarks for STPs at Rithala Phase-I: • The plant is under commissioning phase. • The details provided for phase I of STP is reported on the average values of March, 2024 only.										
31	Rithala Phase-II	Through sewerage:179.80	EA	181.84 MLD	179.80 MLD	UV		1529501 kWh (including power generated through biogas 609167 kWh)	Treated = 179.8 MLD	Nangloi Supplementray Drain	13.37	Rithala STP
		Through Drain /Nalla:							Reuse = 14.92MLD			
		Through Septage Tankers:										

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		Others:										
32	Rohini	Through sewerage: 36.48 MLD	ASP	68.19 MLD	36.48 MLD	UV (proposed)		149250 kWh	Treated = 45.32 MLD Reuse = 0.13 MLD	Nangloi Supplementray Drain	35.39 (based on calculations)	Rithala STP
		Through Drain /Nalla:										
		Through Septage Tankers:										
		Others:										
		Remarks for STP at Rohini: The physical progress of installation of IFAS technology (rehabilitation work) as on 31.03.2024 is 50 %.										
33	Sen Nursing Home STP	Through sewerage:	Densadeg BioFAR	10 MLD	11.56 MLD	Facility Not Available	-	Supplied by PPCL [1]	Treated =11.56 MLD Reuse = 11.56 MLD (supplied for power generation in PPCL)	Pragati Powerplant	1.1	Kondli & Ghitorni
		Through Drain /Nalla: 11.56										
		Through Septage Tankers:										
		Others:										

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
34	Vasant Kunj Phase-I	Through sewerage:16.24	EA	23.64 MLD (Phase-I:10 MLD and Phase-II: 13.64 MLD	16.24 MLD	Facility Not Available	-	140646 kWh (For Vasant Kunj Ph I & II)	Treated = 16.24 MLD Reuse = 15.41 MLD	Sanjay van Lake and Hauz Khas Lake	2.12 (approx.)	Ghitorni for dumping.
35	Vasant Kunj Phase-II	Through Drain /Nalla:										
		Through Septage Tankers:										
		Others:										
		Remarks for STP at Vasant Kunj: The details provided by DJB for STP at Vasant Kunj are the clubbed values for phase I and II.										
36	Yamuna Vihar Phase – I	Through sewerage:	ASP	45.4 MLD	45.38 MLD	Facility Not Available	-	131007 kWh	Treated = 45.4 MLD Reuse = 1.95 MLD	Yamuna River	2	Sludge disposal in low lying areas
		Through Drain /Nalla: 45.38										
		Through Septage Tankers:										
		Others:										
37	Yamuna Vihar Phase – II	Through sewerage:	ASP with IFAS	68 MLD	45.36 MLD	UV		445735 kWh	Treated = 45.47 MLD	Yamuna River	2	Sludge disposal

S. No.	Details of STP	Sewage received from (Quantity in MLD)	Treatment facility available (type of STP) with installed capacity and utilization capacity			Disinfection method	Quantity of Chlorine kg/MLD	Electricity consumed by STP per month	Discharge Quantity MLD	Receiving water body	Sludge disposed tons/day	Final disposal site of sludge
			Technology	Installed capacity	Utilization Capacity							
		Through Drain /Nalla: 45.36							Reuse = 0 MLD			in low lying areas
		Through Septage Tankers:										
		Others:										
38	Yamuna Vihar Phase – III	Through sewerage:	ASP	113.65 MLD	118 MLD	Facility Not Available	-	124320 kWh	Treated = 118 MLD Reuse = 1MLD	Yamuna River	19	Sludge disposal in low lying areas
		Through Drain /Nalla: 118										
		Through Septage Tankers:										
		Others:										
		Remarks for STP at Yamuna Vihar: The details provided for Yamuna Vihar Phase III are based on the average values of March, 2024 only.										

Annexure II:

Analysis results of STPs

S. No.	STP	Sample Location	Physiochemical Parameters					Biological Parameters
			pH	BOD (mg/L)	COD (mg/L)	TSS (mg/L)	TN (mg/L)	Faecal Coliform (MPN/100 ml)
1	Akshardham STP	Inlet	7.1	86	268	119	15.8	$15*10^8$
		Outlet	7.3	32	104	BDL	9.82	$41*10^3$
2	Chilla STP	Inlet	7.0	154	448	309	23.93	$27*10^5$
		Outlet	7.3	15	67	10	4.28	$26*10^3$
3	Coronation Pillar Phase-I&II	Inlet	7.0	177	440	282	40.63	$14*10^8$
		Outlet	7.5	32	99	11	20.6	$79*10^3$
4	Coronation Pillar Phase-III	Inlet	7.5	77	204	35	33.43	$49*10^5$
		Outlet	7.7	38	120	57	7.1	$40*10^2$
5	Coronation Pillar New	Inlet	7.0	222	608	389	48.43	$81*10^8$
		Outlet	7.3	31	97	11	8.23	<1.8
6	Delhi Gate STP Phase – I	Inlet	6.9	167	413	152	22.23	$37*10^7$
		Outlet	7.3	20	81	BDL	6.03	$14*10^2$
7	Delhi Gate STP Phase - II	Inlet	7.2	106	319	131	15.83	$33*10^6$
		Outlet	7.5	33	110	13	6.75	$48*10^3$
8	Ghitorni	Inlet	7	366	834	378	31.23	$14*10^{11}$
		Outlet	7.6	31	101	BDL	16.33	$17*10^4$
9	Kapashera	Inlet	7.1	152	465	124	95.13	$48*10^9$
		Outlet	8.1	18	79	13	24.42	$78*10^3$
10	Keshopur Phase-I	Inlet	6.9	340	862	486	25.53	$49*10^6$
		Outlet	7.3	33	124	17	8.93	$11*10^4$
11	Keshopur Phase-II	Inlet	7.8	331	711	380	23.03	$27*10^{10}$
		Outlet	7.1	32	120	BDL	7.23	$24*10^2$
12	Keshopur Phase-III	Inlet	7.8	331	711	380	23.03	$27*10^{10}$
		Outlet	7.2	84	229	51	11.93	$11*10^6$
13	Kondli Phase-I	Inlet	7.50	219	668	364	42.83	$40x10^6$
		Outlet	7.80	5	35	BDL	7.84	<1.8
14	Kondli Phase-II	Inlet	7.50	332	922	631	46.53	$21x10^8$
		Outlet	7.60	8	47	BDL	10.48	$24x10^4$
15	Kondli Phase-III	Inlet	7.50	332	922	631	46.53	$21x10^8$
		Outlet	7.60	6	39	BDL	8.59	$94x10^3$
16	Kondli Phase-IV	Inlet	7.60	200	652	656	41.63	$17x10^7$
		Outlet	7.80	17	77	12	12.93	$39x10^3$
17	Mehrauli	Inlet	6.9	225	641	303	26.13	$14*10^7$
		Outlet	7.6	47	160	80	11.77	$93*10^3$
18	Molarband	Inlet	7.5	426	1159	744	32.53	$94*10^5$
		Outlet	7.5	21	96	13	11.09	$23*10^3$
19	Najafgarh	Inlet	7.2	364	809	388	68.43	$47*10^{12}$
		Outlet	7.6	21	88	BDL	8.7	450

S. No.	STP	Sample Location	Physiochemical Parameters					Biological Parameters
			pH	BOD (mg/L)	COD (mg/L)	TSS (mg/L)	TN (mg/L)	Faecal Coliform (MPN/100 ml)
20	Narela	Inlet	7.2	160	490	198	37.23	$11*10^{6}$
		Outlet	7.7	33	106	19	6.13	$54*10^{5}$
21	Nilothi Phase-I	Inlet	7.1	338	777	506	22.03	$41*10^{10}$
		Outlet	7.6	63	204	26	10.44	$49*10^{5}$
22	Nilothi Phase-II	Inlet	7.3	408	1091	720	26.43	$47*10^{11}$
		Outlet	7.4	60	188	20	8.8	$17*10^{3}$
23	Okhla Phase-II	Inlet	7.1	332	734	436	25.53	$63*10^{7}$
		Outlet	7.6	14	68	11	6.8	$33*10^{3}$
24	Okhla Phase-III	Inlet	7.1	332	734	436	25.53	$63*10^{7}$
		Outlet	7.5	17	82	16	7.75	$33*10^{3}$
25	Okhla Phase-IV	Inlet	7.1	332	734	436	25.53	$63*10^{7}$
		Outlet	7.4	16	71	BDL	6.7	$22*10^{3}$
26	Okhla Phase-V	Inlet	7.1	332	734	436	25.53	$63*10^{7}$
		Outlet	7.5	13	60	13	5.68	$2*10^{4}$
27	Okhla Phase-VI	Inlet	7.1	332	734	436	25.53	$63*10^{7}$
		Outlet	7.6	11	58	BDL	5.96	$46*10^{3}$
28	Pappan Kalan Phase –I	Inlet	7.1	355	855	506	70.03	$43*10^{13}$
		Outlet	7.5	17	75	25	24.13	$47*10^{5}$
29	Pappan Kalan Phase –II	Inlet	7.1	351	805	523	76.13	$35*10^{13}$
		Outlet	7.9	19	87	BDL	8.56	$16*10^{7}$
30	Rithala Phase-I	Inlet	6.9	167	406	190	25.83	$39*10^{8}$
		Outlet	7.3	16	68	BDL	5.53	$46*10^{3}$
31	Rithala Phase-II	Inlet	6.8	388	722	430	43.13	$21*10^{8}$
		Outlet	7.4	34	115	BDL	8.98	$49*10^{3}$
32	Rohini	Inlet	7.1	171	430	309	25.33	$31*10^{10}$
		Outlet	7.8	34	116	BDL	9.63	$54*10^{4}$
33	Sen Nursing Home STP	Inlet	6.9	335	757	488	38.13	$45*10^{8}$
		Outlet	7.6	16	70	BDL	4.93	$17*10^{3}$
34	Vasant Kunj Phase-I	Inlet	6.9	357	760	336	30.73	$24*10^{10}$
		Outlet	7.8	13	78	10	9.43	$26*10^{8}$
35	Vasant Kunj Phase-II	Inlet	6.9	372	870	372	33.73	$17*10^{11}$
		Outlet	7.6	17	80	11	9.86	$34*10^{3}$
36	Yamuna Vihar Phase – I	Inlet	7	353	714	330	30.53	$48*10^{12}$
		Outlet	7.8	23	91	BDL	11.17	$31*10^{3}$
37	Yamuna Vihar Phase - II	Inlet	6.9	373	879	320	32.53	$12*10^{13}$
		Outlet	7.6	22	90	14	12.39	$24*10^{8}$
38	Yamuna Vihar Phase - III	Inlet	7	394	914	767	36.13	$28*10^{13}$
		Outlet	7.8	48	163	37	19.13	$35*10^{10}$

Annexure- III

Item No. 12 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 183/2024

News Item titled "**Why 75 % of Delhi's STPs aren't ready to tackle Yamuna stink**" appearing in The Times of India dated 19.02.2024

Date of hearing: 23.02.2024

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER

ORDER

1. This Original Application is registered on the basis of the news item titled "**Why 75 % of Delhi's STPs aren't ready to tackle Yamuna stink**" published in 'Times of India' dated 19.02.2024.

2. The news item reveals a very serious issue that the Sewage Treatment Plants (STPs) installed by the Delhi Jal Board along the river Yamuna are not functioning as per norms. About 75% have no or insufficient disinfecting equipments. Hence, outlets of STPs have very high coliform and fecal coliform counts. The news item also reveals that the STPs do not have facilities for bacterial disinfection such as chlorination, UV treatment or ozonation inspite of the repeated orders of the NGT. It also discloses that there is a gap of 227 MGD in treatment of sewage.

3. The news item raises substantial issue relating to the compliance of environmental norms and implementation of the provisions of Scheduled enactments.

4. Power of the Tribunal to take up the matter in *suo-motu* has been recognized by the Hon'ble Supreme Court in the matter of *"Municipal Corporation of Greater Mumbai vs. Ankita Sinha & Ors." reported in 2021 SCC Online SC 897.*

5. Hence, we implead the following as respondents in the matter:

i. Member Secretary, Delhi Pollution Control Committee (DPCC).
ii. Member Secretary, Central Pollution Control Board (CPCB).
iii. Chief Executive Officer, Delhi Jal Board (DJB).
iv. Director General, National Mission for Clean Ganga (NMCG).
v. Secretary, Ministry of Environment, Forest and Climate Change (MoEF&CC)

6. Let notice be issued to the above respondents for filing their response at least one week before the next date of hearing.

7. The CPCB is directed to submit the report including the details of performance of STPs in the following format:

Sewage received from	**Quantity MLD**	**Treatment facility available (type of STP) with installed and utilization capacity**	**Disin fection Method**	**Quantity of chlorine kg/MLD**	**Quality of discharge MLD**	**Electricity consumed by STP per month**	**Discharge quantity MLD**	**Water quality at discharge point**	**Receiving water body**	**Sludge disposed tons/ day**	**Final Disposal site of Sludge**
Through sewerage								All parameter as per EP Rules including Fecal Coliform Total Colifrom	Drain		
Drain/ Nalla									Nalla		
Through Septage Tankers									Land		
Other									River		
									Other		

8. In addition to furnishing information for each STP, the details of utilization of treated sewage and timelines set for ensuring treatment of entire sewage generated in Delhi be also disclosed.

9. List on 03.05.2024.

Prakash Shrivastava, CP

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

Dr. Afroz Ahmad, EM

February 23, 2024.
Original Application No. 183/2024
DV