

## Before The Hon'ble National Green Tribunal

Principal Bench, New Delhi

Original Application No. 06 of 2012

## In the matter of

Nizamuddin West Association

Applicant

Vs.

Union of India &amp; Ors.

Respondent (s)

Index

Sr. No.	Particulars	Page No.
1.	<b>Status report</b> in compliance of Hon'ble NGT order dated 09.01.2024 in O.A No. 06/2012, titled as Nizamuddin West Association Vs. Union of India & Ors.	
2.	<b>Annexure- I</b> State-wise List of STPs and drains discharging into river Yamuna	
3.	<b>Annexure- II</b> Summary of submission made by NCT of Delhi, Government of Haryana and Government of U.P.	
4.	<b>Annexure- III</b> Monitoring data of 24 drains and Water quality of drains monitored.	
5.	<b>Annexure- IV</b> A copy of Hon'ble NGT order dated 09.01.2024, in O. A. No. 06/2012, titled as Nizamuddin West Association Vs. Union of India & Ors.	



(P.K. Mishra)

Scientist 'F'

Central Pollution Control Board

Delhi- 110032

Place: Delhi

Date: 12.02.2024

**STATUS REPORT IN THE MATTER OF OA NO. 06/2012 TITLED;  
NIZAMUDDIN WEST ASSOCIATION VS UNION OF INDIA & ORS.**

## **1.0 BACKGROUND**

The Hon'ble NGT vide order dated 09.01.2024 in the matter of OA no. 06/2012 titled; Nizamuddin West Association Vs Union of India & Ors. directed CPCB as follows:

**“Para 6: Report of CPCB has been on website which could not be perused as the counsel was not Online. CPCB is directed to update the Status and file the report before next hearing.”**

Earlier, Hon'ble NGT vide order dated 17.10.2023 directed CPCB as follows:

*“Para 7: CPCB is directed to verify the facts and figures disclosed in the report placed on record by the States and the authorities and file a comprehensive report reflecting the correct position. CPCB will also place on record the material disclosing that the sewage treatment being done is accordance with the prescribed standards and also the details of the proposed activities for the treatment of sewage/effluent.*

## **2.0 COMPLIANCE TO THE DIRECTIONS OF NGT**

In compliance to directions dated 17.10.2023 of Hon'ble NGT, CPCB has filed status report on 06.12.2023 highlighting Water Quality of River Yamuna, Compliance Status of STPs, Water quality of drains discharging wastewater into river Yamuna and same is attached as **Annexure-I**.

As directed by NGT vide order dated 09.01.2024, the report is updated. The present report envisages Water quality status of river Yamuna for the year 2023, Water quality status of drains of Delhi for the month of December, 2023 and Compliance status of 19 STPs of Delhi for the month of December, 2023 & January, 2024. Further, summary of submission made by NCT of Delhi, Government of Haryana and Government of U.P are also incorporated in the report and attached as **Annexure-II**.

## **3.0 Status of STPs and Drains in catchment of river Yamuna**

### **3.1 Water Quality of River Yamuna**

CPCB carried out water quality monitoring of river Yamuna at 12 locations (06 in Haryana and 06 in Delhi). The analytical results are compared with the Primary Water

Quality Criteria for Outdoor Bathing notified under the Environment (Protection) Rules, 1986. Water quality data of river Yamuna is given below in notified under the E(P) Rules, 1986. Water quality data of river Yamuna is given below in Table 1.

Table 1: Water quality data of river Yamuna for the month of January in year 2023 and 2024.						
Monitoring Location	State	Date of sampling	Dissolved Oxygen (mg/L)	pH	Biochemical Oxygen Demand (mg/L)	Fecal Coliform (MPN/100ML)
Primary Water Quality for Outdoor Bathing notified under the E(P) Rules, 1986			> 5 mg/L	6.5-8.5	< 3 mg/L	< 2500 MPN/100 ML
Hathnikund, Yamunanagar	Haryana	2023	7.6	8.18	1.2	200
		2024	7	7.76	1.4	–
Kalanaur, Yamunanagar	Haryana	2023	7.7	8.22	1(BDL)	100
		2024	6.4	7.84	2.6	100
Mangalaura, Karnal	Haryana	2023	5.7	8.1	9	1500
		2024	–	–	–	–
Khojkipur, Panipat	Haryana	2023	7.1	7.82	2.6	200
		2024	7.53	6.2	3.0	400
Sonapat	Haryana	2023	6.2	8.12	1.6	100
		2024	5.8	7.85	2.8	100
Palla	Haryana/ Delhi Border	2023	10	7.3	1.5	200
		2024	6.4	7.38	2.5	400
Wazirabad	Delhi	2023	7.1	7.24	6.5	5500
		2024	4	7.33	9	820
ISBT	Delhi	2023	0.3(BDL)	7.11	38	100000
		2024	BDL	7.3	37	17000
ITO	Delhi	2023	1	7.42	35	81000
		2024	0.3	7.27	31	12000
Nizamuddin	Delhi	2023	0.3(BDL)	7.44	42	14000
		2024	0.3	7.2	42	22000
Okhla U/S	Delhi	2023	0.3(BDL)	7.38	48	230000
		2024	NIL	7.12	47	270000
Asagarpur	Delhi/ U.P Border	2023	0.3(BDL)	7.46	56	200000
		2024	NIL	7.52	54	310000

Based on the water quality analysis of river Yamuna during January 2023 & 2024, following observations are made:

- Two locations at Mangalaura, Karnal and Khojkipur, Panipat in the state of Haryana observed non-complying w.r.t BOD (9 mg/L) in January,2023 and BOD (3 mg/L) in January,2024 whereas, rest of the locations observed complying w.r.t parameters DO, pH, BOD and FC during January 2023 and January 2024.

- ii. All the locations in Delhi observed non-complying w.r.t DO, BOD & FC except, Palla.
- iii. No significant variation observed during January 2024 as compared to January 2023 w.r.t parameters DO, pH, BOD and FC.

### **3.2 State-wise List of STPs and drains discharging into river Yamuna**

CPCB inspected 29 number of drains in the month of September, 2023 and December, 2023 for verification of interception / diversion and water quality monitoring. The status of verification of interception /diversion of drains is mentioned in **Table 1 of Annexure-I**. During inspection in the month of December, 08 drains in Delhi were found tapped. Schematic diagram depicting drains of river Yamuna including status of interception is shown in Figure 1 and 2.

Details of 53 STPs inspected are mentioned in **Table 2 of Annexure-I**.

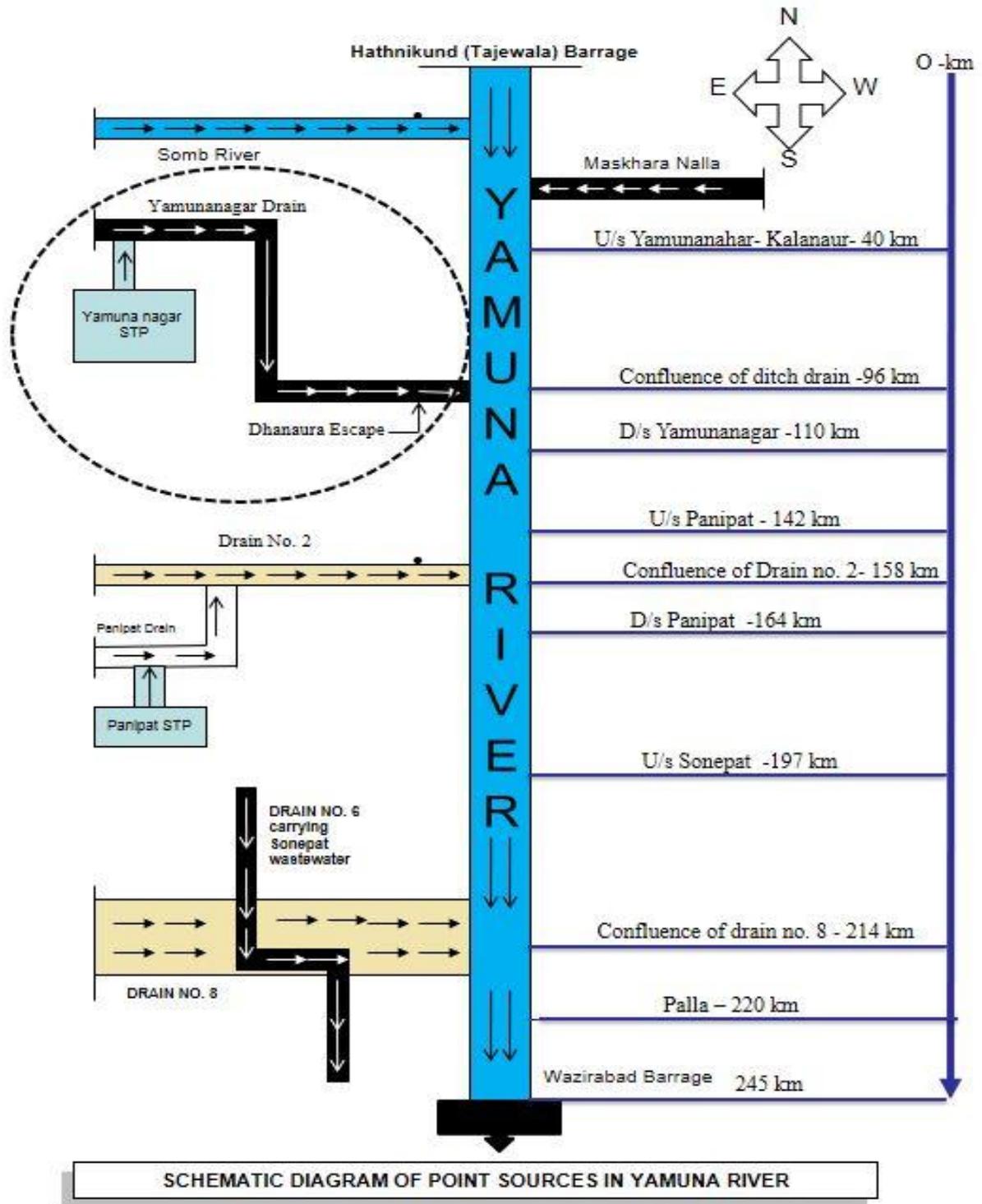


Figure 1: Schematic Diagram depicting drains between stretch of river Yamuna from Hathnikund to Wazirabad

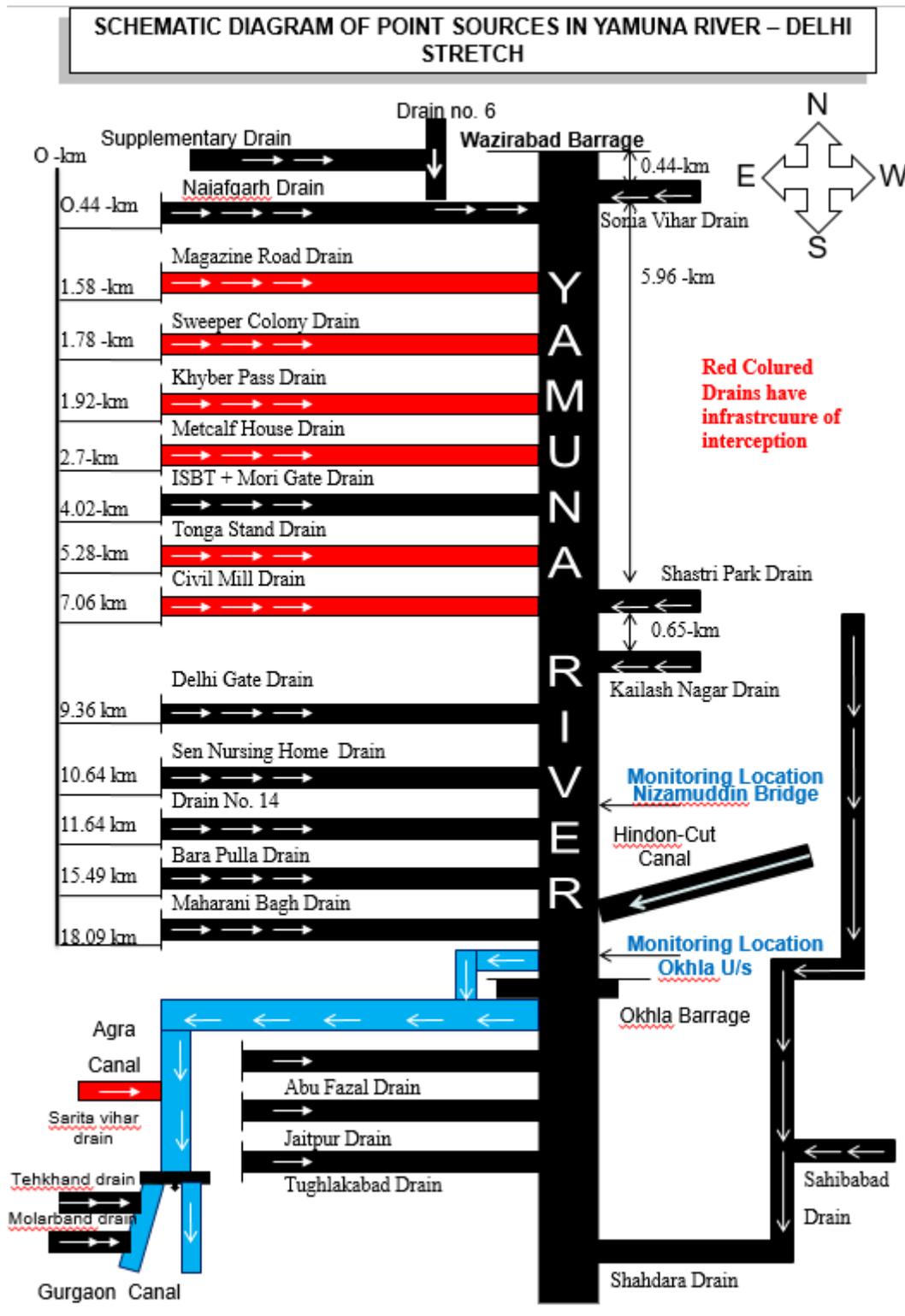


Figure 2: Schematic Diagram depicting drains between stretch of river Yamuna from Wazirabad to Okhla barrage

### 3.3 Status of Water quality of drains

The analytical results of water quality 29 number of drains monitored by CPCB in the month of September, 2023 are attached in Table 3 of Annexure-I. CPCB also conducted

monitoring of 24 drains in the month of December, 2023 and Water quality of drains monitored for pH, TSS, NH<sub>3</sub>-N, COD, BOD, PO<sub>4</sub>-P are summarized **Annexure-III**. Comparative assessment of drains for the month of September, 2023 and December, 2023 for NCT of Delhi in terms of BOD load is summarized in Table 2.

<b>Table 2: Comparative Assessment of drains for the month of September, 2023 and December,2023</b>							
S. No.	Drain Name	September, 2023			December,2023		
		Flow Values in September (MLD)	BOD Values (in mg/L)	BOD Load in Kg/day	Flow Values in December (MLD)	BOD Values (in mg/L)	BOD Load in Kg/day
1	Sonia Vihar Drain	56.16	103	5784.48	51.84	179	9279.36
2	Najafgarh + Supplementary Drain	2280.96	49	111767.04	2194.56	28	61447.68
3	Magazine Drain	6.91	104	718.64	Tapped	-	-
4	Sweeper Colony Drain	57.02	44	2508.88	Tapped	-	-
5	Khayberpass Drain	28.51	17	484.67	Tapped	-	-
6	Metcalf Drain	10.36	17	176.12	Tapped	-	-
7	ISBT Drain	27.64	52	1437.28	30.24	71	2147.04
8	Tonga Stand	10.36	24	248.64	Tapped	-	-
9	Shastri Park	5.18	187	968.66	6.91	361	2494.51
10	Kailash Nagar Drain	12.09	151	1825.59	12.09	148	1789.32
11	Civil Mill Drain	No Flow	-	-	Tapped	-	-
12	Power House	No Flow	-	-	No Flow	-	-
13	Delhi Gate Drain	120.96	189	22861.44	125.28	102	12778.56
14	Sen Nursingh Home Drain	86.4	232	20044.8	86.4	106	9158.4
15	Drain No. 14	12.96	18	233.28	No flow	-	-
16	Barapullah Drain	136.51	23	3139.73	143.42	39	5593.38
17	Maharani Bagh Drain	29.37	66	1938.42	31.96	96	3068.16
18	Abul Fazal Drain	19.01	108	2053.08	22.46	59	1325.14
19	Old Agra Canal	No Flow	-	-	No Flow	-	-
20	Sarita Vihar Drain	43.2	566	24451.2	Tapped	-	-

S. No.	Drain Name	September, 2023			December,2023		
		Flow Values in September (MLD)	BOD Values (in mg/L)	BOD Load in Kg/day	Flow Values in December (MLD)	BOD Values (in mg/L)	BOD Load in Kg/day
21	Jaitpur Drain	26.78	106	2838.68	18.14	86	1560.04
22	Molar Band Drain	20.73	385	7981.05	10.36	86	890.96
23	Tughlakabad Drain	57.02	130	7412.6	44.92	69	3099.48
24	Shahdara Drain	521.85	101	52706.85	518.4	127	65836.8
Total		3569.98		271581.13	3296.98		180468.83

### 3.4 Status of STPs in catchment of river Yamuna

As mentioned earlier, CPCB inspected 53 number of STPs installed in the catchment of river Yamuna. The samples of inlet and outlet collected for compliance verification with respect to standards prescribed directed by Hon'ble NGT in the matter of Nitin Shankar Deshpande Vs UOI & Ors in O.A. 1069 of 2018. Earlier in the month of April-June, 2023, CPCB inspected 134 number of STPs in entire catchment of river Yamuna.

Status of STPs with respect to qualitative analysis and compliance verification for 53 number of STPs for the month of November-December, 2023 are placed in **Table - 4 of Annexure-I**.

In addition, CPCB inspected 27 number of STPs in the month of December, 2023 and January, 2024. The analytical results of said STPs are placed in Table 3.

S. No.	STP	Sample Location	Physiochemical Parameters						Biological Parameters	
			pH	BOD (mg/L)	COD (mg/L)	TSS (mg/L)	PO <sub>4</sub> -P (mg/L)	TN (mg/L)	Total Coli-form (MPN/100 ml)	Feacal Coli form (MPN/100 ml)
Standards prescribed by Hon'ble NGT			5.5-9.0	10 mg/L	50 mg/L	20 mg/L	1 mg/L	10 mg/l		230 MPN/100 ml
1	Akshardham STP	Inlet	7.1	683	1487	576	3.9	50.79	92x10 <sup>14</sup>	28x10 <sup>3</sup>
		Outlet	2.5	9	42	BDL	1.4	14.91	17x10 <sup>4</sup>	39x10 <sup>5</sup>
2	Chilla STP	Inlet	7.2	89	285	129	4	31.96	92x10 <sup>13</sup>	22x10 <sup>13</sup>
		Outlet	7.6	9	47	10	1.1	11.22	92x10 <sup>5</sup>	54x10 <sup>5</sup>

S. No.	STP	Sample Location	Physiochemical Parameters						Biological Parameters	
			pH	BOD (mg/L)	COD (mg/L)	TSS (mg/L)	PO <sub>4</sub> -P (mg/L)	TN (mg/L)	Total Coli-form (MPN/100 ml)	Feacal Coli form (MPN/100 ml)
Standards prescribed by Hon'ble NGT			5.5-9.0	10 mg/L	50 mg/L	20 mg/L	1 mg/L	10 mg/l		230 MPN/100 ml
3	Delhi Gate STP Phase - II	Inlet	6.9	141	454	202	3.3	NA	28x10 <sup>7</sup>	94x10 <sup>6</sup>
		Outlet	7.4	18	74	19	1.3	NA	790	140
4	Delhi Gate STP Phase - I	Inlet	6.9	344	746	422	4.3	NA	39x10 <sup>7</sup>	24x10 <sup>7</sup>
		Outlet	7.0	10	47	14	0.4	NA	35x10 <sup>4</sup>	17x10 <sup>4</sup>
5	Sen Nursing Home STP	Inlet	6.8	299	898	640	3.2	NA	22x10 <sup>11</sup>	14x10 <sup>10</sup>
		Outlet	6.9	11	57	14	2.4	NA	54x10 <sup>4</sup>	54x10 <sup>4</sup>
6	Keshopur Phase-III	Inlet	7.1	253	499	312	2.7	NA	35x10 <sup>7</sup>	49x10 <sup>6</sup>
		Outlet	7.0	04	38	BDL	3.7	NA	130	78
7	Keshopur Phase-I	Inlet	7.1	225	400	238	2.9	NA	35x10 <sup>7</sup>	24x10 <sup>6</sup>
		Outlet	7.2	14	50	17	1.3	NA	24x10 <sup>5</sup>	41x10 <sup>4</sup>
8	Keshopur Phase-II	Inlet	7.1	225	400	238	2.9	NA	35x10 <sup>7</sup>	24x10 <sup>6</sup>
		Outlet	7.6	22	59	16	1.9	NA	17x10 <sup>6</sup>	17x10 <sup>5</sup>
9	Rohini Sector-25	Inlet	7.3	217	624	427	4.0	NA	13x10 <sup>5</sup>	34x10 <sup>4</sup>
		Outlet	7.7	25	74	17	0.4	NA	38x10 <sup>7</sup>	17x10 <sup>7</sup>
10	Rithala Phase-II	Inlet	7.0	323	714	400	5.5	NA	92x10 <sup>7</sup>	32x10 <sup>6</sup>
		Outlet	7.6	11	42	12	1.1	NA	46x10 <sup>3</sup>	17x10 <sup>3</sup>
11	Rithala Phase-I	Inlet	7.2	194	433	205	2.7	NA	16x10 <sup>5</sup>	92x10 <sup>4</sup>
		Outlet	7.3	08	32	BDL	1.4	NA	35x10 <sup>3</sup>	17x10 <sup>3</sup>
12	Okhla Phase-VI	Inlet	6.7	465	1132	335	5.9	NA	49x10 <sup>7</sup>	13x10 <sup>7</sup>
		Outlet	7.2	19	109	14	2.4	NA	790	68
13	Okhla Phase-V	Inlet	6.7	465	1132	335	5.9	NA	49x10 <sup>7</sup>	13x10 <sup>7</sup>
		Outlet	7.2	14	89	24	2.2	NA	17x10 <sup>5</sup>	33x10 <sup>4</sup>
14	Okhla Phase-IV	Inlet	6.7	465	1132	335	5.9	NA	49x10 <sup>7</sup>	13x10 <sup>7</sup>
		Outlet	7.2	18	96	25	2.4	NA	17x10 <sup>4</sup>	14x10 <sup>4</sup>
15	Okhla Phase-III	Inlet	6.7	465	1132	335	5.9	NA	49x10 <sup>7</sup>	13x10 <sup>7</sup>
		Outlet	7.3	13	91	32	2.7	NA	49x10 <sup>4</sup>	17x10 <sup>4</sup>
16	Okhla Phase-II	Inlet	6.7	465	1132	335	5.9	NA	49x10 <sup>7</sup>	13x10 <sup>7</sup>
		Outlet	7.3	18	105	30	2.5	NA	13x10 <sup>4</sup>	34x10 <sup>3</sup>
17	Yamuna Vihar Phase - III	Inlet	7.5	171	428	242	4.7	41.59	35x10 <sup>10</sup>	84x10 <sup>9</sup>
		Outlet	7.8	24	79	26	2.6	15.33	11x10 <sup>5</sup>	70x10 <sup>4</sup>
18	Yamuna Vihar Phase - II	Inlet	7.4	194	459	279	2.8	40.29	35x10 <sup>10</sup>	38x10 <sup>9</sup>
		Outlet	7.5	17	74	35	0.7	13.12	22x10 <sup>7</sup>	14x10 <sup>7</sup>
19	Yamuna Vihar Phase - I	Inlet	7.3	257	634	325	3.7	47.98	17x10 <sup>8</sup>	13x10 <sup>8</sup>
		Outlet	7.5	13	45	19	0.8	8.33	35x10 <sup>4</sup>	14x10 <sup>4</sup>

Based on above analytical results, following observations are made:

### 1. Compliance Status of Drains

- i. There are total 24 no. of drains outfalling in river Yamuna in Delhi, 08 drains are found tapped (Magzine Drain, Sweeper Colony Drain, Khayberpass Drain, Metcalf Drain, Tonga Stand Drain, Civil Mill Drain and Sarita Vihar Drain and Power House drain) & no flow observed in 02 other drains (Drain No.14 & Old Agra Canal).
- ii. Further as per qualitative assessment of drains in the jurisdiction of Delhi with reference to General Standards for Discharge of Environmental Pollutants for inland waters under Schedule-VI of The Environment (Protection) Rules, 1986, untapped drains (Sonia Vihar Drain, Nazafgarh + Supplementary Drain, ISBT Drain, Shastri Park Drain, Kailash Nagar Drain, Delhi Gate Drain, Sen Nursing Home, Barapulla Drain, Maharani Bag Drain, Abul Fazal Drain, Jaitpur Drain, Molar Band Drain, Tuglaqabad Drain, Shahadara Drain) are observed non-complying

### 2. Status of Sewage Treatment Plants

**Qualitative Assessment of Sewage Treatment Plants for compliance to Hon'ble NGT order dated 30.04.2019 in the matter of Nitin Shankar Deshpande Vs UOI & Ors in O.A. 1069 of 2018.**

Of the 19 STPs monitored in Delhi, only 01 STP viz. Keshopur Phase-III were observed complying with respect to norms prescribed by **Hon'ble NGT in the matter of Nitin Shankar deshpande Vs UOI & ors in O.A. 1069 of 2018.**

#### 4.0 MAJOR FINDINGS

Based on the information received from Haryana SPCB, UPPCB and DPCC and field verification / inspection conducted by CPCB, following findings are made:

##### A. NCT of Delhi

As reported by DJB, Sewage Generation of NCT of Delhi is estimated to 792 MGD and installed treatment capacity of 37 operational STPs is 667 MGD. The capacity utilization of existing 37 STPs is 570 MGD. The gap in treatment capacity is 125 MGD and in actual treatment is 222 MGD. Further, there are 24 major drains discharging wastewater into river Yamuna. The findings in respect of tapping of major drains, performance of STPs and water quality of river Yamuna are summarized below:

- i. As mentioned earlier, there are 24 drains discharging wastewater into river Yamuna. Out of 24 drains, 08 drains namely Magazine drain, Sweeper Colony Drain, Khyber Pass drain, Metcalf drain, Tonga Stand Drain, Civil Mill, Power House and Sarita Vihar Drain are found tapped and 02 drains namely Old Agra Canal and Drain no. 14 has no flow.
- ii. In 06 drains namely Sonia Vihar drain, ISBT drain, Delhi Gate Drain, Sen Nursing Home Drain, Barapullah Drain, Maharani Bagh Drain, the work for interception / diversion is under progress. In three major drains, namely Najafgarh, Supplementary and Shahdara Drain, work of interception of minor drains is also under process.
- iii. The water quality data of untapped drains also depicts that no drain is complying to the General Standards for Discharge of Environmental Pollutants for inland waters under Schedule-VI of The Environment (Protection) Rules, 1986. Of the 19 STPs monitored in Delhi, only 01 STP viz. Keshopur Phase-III, was observed complying discharge standards.
- iv. Comparative analysis of BOD load of drains discharging wastewater into river Yamuna depicts that BOD load has decreases from 271581.1 Kg/day to 180469 Kg/day.
- v. The water quality data of river Yamuna for Delhi stretch depicts that out of 07 locations, only 01 location at Palla is meeting the Primary Water Quality Criteria for Outdoor Bathing notified under the Environment

(Protection) Rules, 1986. Downstream of Wazirabad, the water quality of river Yamuna deteriorates.

- vi. The reasons for deterioration of water quality of river Yamuna at downstream of Wazirabad is due to non-availability of fresh water and discharge of partially treated wastewater from 16 drains into river Yamuna.

## **B. State of Haryana**

As mentioned by Haryana Government, Sewage Generated in catchment of river Yamuna is 1098 MLD and installed treatment capacity of 59 operational STPs is 1075 MLD. The gap in installed capacity reported is 240.44 MLD in towns namely Samalkha (0.56 MLD), Palwal (9.38 MLD), Faridabad (144.5 MLD) and Gurugram (86 MLD). Further, there are 11 major drains discharging wastewater into river Yamuna. The findings in respect of tapping of major drains, performance of STPs and water quality of river Yamuna are summarized below:

- i. CPCB has monitored 04 major drain namely Yamunanagar Drain, Panipat drain, Sonipat drain (Drain no. 6 and 8) and Ballabhgarh drain. The water quality data of untapped drains also depicts that only Of the 04 drains, 01 drain viz. Drain no. 8 is observed complying to the General Standards for Discharge of Environmental Pollutants for inland waters under Schedule-VI of The Environment (Protection) Rules, 1986
- ii. Of the 33 STPs monitored in Haryana, 06 STPs viz. Dhanwapur - II (68 MLD); Badshapur Faridabad (30 MLD), Sewah Road Phase - I, Sewah Road Phase - II, Jattal Road Phase - I & Jattal Road Phase - II were observed complying discharge standards with respect to Physico-chemical parameters i.e. pH, BOD, TSS, COD, NH<sub>3</sub>-N and PO<sub>4</sub>-P.
- iii. Of the 33 STPs, 10 STPs were observed complying to the discharge standards for bacteriological parameter i.e. Fecal Coliform viz. Dhanwapur - II (68 MLD), Behrampur - I, Behrampur - II; Rathdana Road Sonapat, Kakrai Road Sonapat, Rajeev Gandhi Education City Sonapat, Sewah Road Phase - I, Gogari Road Karnal, Gharaunda and Shamsabad Radaur Road.

- iv. The water quality data of river Yamuna for Haryana stretch from Hathnikund to Palla (Haryana -Delhi Border) depicts that out of 06 locations, Only One location of river Yamuna at Khojkipur, Panipat is non-complying w.r.t BOD for Primary Water Quality Criteria for Outdoor Bathing notified under the Environment (Protection) Rules, 1986. However, water quality of river Yamuna for the stretch Asgarpur (Delhi-Haryana Border) - Hasanpur (Haryana -U.P Border), deteriorates and not meeting the Primary Water Quality Criteria for Outdoor Bathing standards.
- v. The water quality data of 06 locations for January 2023 and January 2024 depicts no major change in water quality of river Yamuna.
- vi. The reasons for deterioration of water quality of river Yamuna for the stretch Asgarpur - Hasanpur is due to due to non-availability of fresh water and discharge of wastewater from towns namely Faridabad and Palwal.

### C. State of Uttar Pradesh

The Government of U. P has reported the information for 02 towns namely Ghaziabad and Noida. The Sewage Generation estimated for these 02 towns is 790 MLD and installed treatment capacity available is 926 MLD. There is gap of 60 MLD in treatment capacity for Ghaziabad and in Noida, there is no gap in treatment capacity. In U.P inspection of major drains were carried out and results from laboratory are awaited. The findings w.r.t. STPs compliance and water quality are summarized below:

- i. Of the 10 STPs monitored in Uttar Pradesh, 01 STP viz. Morty Rajnagar Extn was observed complying discharge standards with respect to Physico-chemical parameters i.e. pH, BOD, TSS, COD, NH<sub>3</sub>-N and PO<sub>4</sub>-P. Of the 10 STPs, 02 STPs were observed complying to the discharge standards for bacteriological parameter i.e. Fecal Coliform viz. Govindpuram and Bapudham Madhuban
- vii. The water quality data of river Yamuna for U.P for the stretch Asgarpur (Delhi-Haryana Border) - Hasanpur (Haryana -U.P Border),

deteriorates and not meeting the Primary Water Quality Criteria for Outdoor Bathing standards

- viii.** The reasons for deterioration of water quality of river Yamuna for the stretch Asgarpur - Hasanpur is due to non-availability of fresh water and discharge of wastewater from towns namely Ghaziabad, Noida and Greater Noida.

Table 1: State-wise list of drains discharging into river Yamuna						
Sl. No.	State	Town / City	Name of Drain	Flow (in MLD)		Current status
				Sept, 2023	Dec, 2023	
1.	Haryana	Yamuna Nagar	Yamuna Nagar	108.00	-	Interception/tapping of minor drains planned by ULBs.
2.		Panipat	Panipat	858.88	-	
3.		Sonipat	Drain No. 6	13.45	-	
4.		Ballabgarh	Gocchi Drain	-	-	
5.	Delhi	Delhi	Sonia Vihar Drain	56.16	51.84	Planned to intercept and divert the drain into Sonia vihar STP. Work for construction of 31.8 MLD (7 MGD) STP for tapping and treating waste water of Sonia Vihar Drain is under progress
6.			Nazafgarh + Supplementary Drain	2280.96	2194.56	Trapping of minor drains are in progress.
7.			Magzine Drain	6.91	Tapped	Tapped into Aruna Nagar SPS and conveyed to Okhla STP for treatment.
8.			Sweeper Colony Drain	57.02	Tapped	
9.			Khayberpass Drain	28.51	Tapped	
10.			Metclaf Drain	10.36	Tapped	
11.			ISBT Drain	27.64	30.24	Waste water of this drain will be carried to Nehru Vihar SPS by laying a rising main from proposed SPS at ISBT Kashmere Gate for treatment in the Coronation Pillar STP. Construction of SPS is in process.
12.			Tonga Stand Drain	10.36	Tapped	Tapped into Yamuna Bazar SPS and conveyed into Okhla STP
13.			Shastri Park Drain	5.18	6.91	DJB has requested MCD for diversion of wastewater. No
14.			Kailash Nagar Drain	12.09	12.09	

Table 1: State-wise list of drains discharging into river Yamuna

Sl. No.	State	Town/ City	Name of Drain	Flow (in MLD)		Current status
				Sept, 2023	Dec, 2023	
						action initiated till date.
15.			Civil Mill Drain	No Flow	Tapped	Tapped in to Trunk sewer and conveyed into Okhla STP
16.			Power House Drain	No Flow	No Flow	No Flow
17.			Delhi Gate Drain	120.96	125.28	There are 2 operational STPs of 68.2 MLD (15 MGD) capacity and 10 MLD (2.2 MGD) capacity for treatment of tapped wastewater of this drain. Another STP of 45.46 MLD (10 MGD) is proposed for the treatment of remaining untapped waste water of this drain.
18.			Sen Nursingh Home	86.4	86.4	There is one operational STP of 10 MLD (2.2 MGD) capacity for treatment of tapped waste water of this drain. Over flow is observed from this drain. Sen Nursing Home Drain is planned for tapping into Ring Road Trunk Sewer.
19.			Drain No. 14	12.96	No Flow	No Flow
20.			Barapulla Drain	136.51	143.42	Flow is proposed to be diverted by laying of interceptor sewer through micro tunneling for conveying to Okhla STP for treatment.
21.			Maharani Bag Drain	29.37	31.96	
22.			Abul Fazal Drain	19.01	22.46	No action plan for interception/tapping
23.			Old Agra Canal	No flow	No flow	
24.			Sarita Vihar Drain	43.2	Tapped	Sarita Vihar SPS to Okhla STP
25.			Jaitpur Drain	26.78	18.14	

Table 1: State-wise list of drains discharging into river Yamuna						
Sl. No.	State	Town/ City	Name of Drain	Flow (in MLD)		Current status
				Sept, 2023	Dec, 2023	
26.			Molar Band Drain	20.73	10.36	No action plan for interception/tapping
27.			Tuglaqabad Drain	57.02	44.92	
28.			Shahadara Drain	521.85	518.4	Trapping of minor drains are in progress.
<b>NOIDA</b>						
29.	Uttar Pradesh	Noida	Noida Drain	-	99.9	Trapping of minor drains are in progress.

Table 2: State-wise list of STPs installed in catchment of river Yamuna						
Sl. No.	City / Town	Location of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Technology	Discharge into Drain / River
<b>State- Delhi</b>						
1	Akshardham	Akshardham	4.54	0.6	MBR	Reuse at Common wealth Village
2	Chilla	Chilla	40.86		SBR	River Yamuna
3	Coronation Pillar	Coronation Pillar Phase I & II	90.8	59.02	ASP	Irrigation & Flood Control channel
4		Coronation Pillar New	317.8	217.92	ASP with A <sub>2</sub> O	Jahangirpuri Drain
5	Delhi Gate	Delhi Gate Phase I	10	11	Densadeg	Pragati Power Plant
6		Delhi Gate Phase II	68.1	74.91	Densadeg	River Yamuna
7	Ghitorni	Ghitorni	22.7	9.08	EA	Mehrauli Drain
8	Kapashera	Kapashera	23	23	SBR	Kapashera Drain
9	Keshopur	Keshopur Phase I	54.48	54.48	ASP	Najafgarh Drain
10		Keshopur Phase II	90.8	90.8	ASP	Najafgarh Drain
11		Keshopur Phase III	181.6	181.6	ASP	Najafgarh Drain
12	Kondli	Kondli Phase I	45.4	45.4	ASP	Shahdra Link Drain
13		Kondli Phase III	45.4	45.4	ASP	Shahdra Link Drain
14		Kondli Phase IV	204.3	102	ASP	Shahdra Link Drain
15	Mehrauli	Mehrauli	22.73	22.73	EA	Saket D Block drain
16	Molarband	Molarband	3	2.45	MBBR	Agra Canal
17	Najafgarh	Najafgarh	22.7	22.7	ASP	Najafgarh Drain
18	Narela	Narela	45.4	31.78	ASP	
19	Nilothi	Nilothi Phase I	181.6	181.6	ASP	Najafgarh Drain

<b>Table 2: State-wise list of STPs installed in catchment of river Yamuna</b>						
<b>Sl. No.</b>	<b>City / Town</b>	<b>Location of STP</b>	<b>Capacity (in MLD)</b>	<b>Capacity Utilization (in MLD)</b>	<b>Technology</b>	<b>Discharge into Drain / River</b>
20		Nilothi Phase II	90.8	90.8	ASP	Najafgarh Drain
21	Okhla	Okhla Phase I	54.48	31.24	ASP	Agra Canal
22		Okhla Phase III	167.98	116.50	ASP	Agra Canal
23		Okhla Phase IV	204.3	135.16	ASP	Agra Canal
24		Okhla Phase V	72.64	49.08	ASP	Agra Canal
25		Okhla Phase VI	136.2	127.26	ASP	Agra Canal
26	Pappankalan	Pappankalan Phase I	91	91	ASP	Najafgarh Drain
27		Pappankalan Phase II	91	91	ASP	Najafgarh Drain
28	Rohini	Rohini	68.1	45.4	ASP	Nangloi Drain
29	Rithala	Rithala Phase I	Under Rehabilitation			
30		Rithala Phase II	182	190	High load ASP	Drain
31	Sen Nursing Home	Sen Nursing Home	10	11	Densadeg	Pragati Power Plant
32	Vasant Kunj	Vasant Kunj	13.64	7.5	EA	Sanjay Van & Hauz Khas Lake
33		Vasant Kunj	10	8.2	EA	Sanjay Van & Hauz Khas Lake
34	Yamuna Vihar	Yamuna Vihar Phase I	45.4	45.4	ASP	River Yamuna
35		Yamuna Vihar Phase II	45.4	22.7	ASP	River Yamuna
36		Yamuna Vihar Phase III	113.5	167.98	ASP	River Yamuna
<b>State- Uttar Pradesh</b>						
37	Agra	Bury ka Nangla	2.25	2.25	OP	River Yamuna

Sl. No.	City / Town	Location of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Technology	Discharge into Drain / River
38		Pilakhar Shahadara, Nunhai	10	10	OP	Pilakhar Drain
39		Dhandhupura	78	77.5	UASB	River Yamuna
40		Jaganpura, dayalbagh	14	14	UASB	River Yamuna
41		Devri	12	7.5	UASB	River Yamuna
42		Sadarvan Bichpuri	40	28	UASB	River Yamuna
43		Dhandhupura	24	18	UASB	Irrigation
44		Sadarvan Bichpuri	36	16	SBR	Irrigation
45		Kalindi Vihar	4.5	2.10	UASB	River Yamuna
46	Mathura	Laxmi Nagar	16	16	UASB	IOCL refinery
47		Masani	30	30	SBR	River Yamuna
48		Pagal Baba	4	4	WSP	River Yamuna
49		Mant Road	8	8	UASB	River Yamuna
50		Goverdhan	2.76	1.5	OP	River Yamuna
51	Noida	Sector 50	34	25	SBR	Use in golf course
52		Sector 50	25	11	SBR	Uses in irrigation
53		Sector 54	33	21	SBR	River Yamuna
54		Sector 54	54	40	SBR	River Yamuna
55		Sector 123	80	30	SBR	River Yamuna
56		Sector 123	35	32.5	SBR	River Hindon
57		Sector 168	50	25	SBR	River Yamuna
58		Sector 168	100		SBR	River Yamuna

Sl. No.	City / Town	Location of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Technology	Discharge into Drain / River
59	Gurugram	Dhanwapur, Gurugram	50	50	SBR	Najfgarh drain through irrigation canal
60		Dhanwapur, Gurugram	68	68	ASP	Najfgarh jheel through irrigation canal
61		Dhanwapur, Gurugram	100	100	ASP	Najfgarh jheel through irrigation canal
62		Farrukhnagar	3	2.8	SBR	Stored and used in irrigation
63		Hailly Mandi	5.5	1.85	MBBR	Stored and used in irrigation
64		Pataudi	4.5	3	MBBR	Stored and used in irrigation
65		Behrampur I	50	45	SBR	Badshahpur drain
66		Behrampur II	120	110	SBR	Badshahpur drain
67	Faridabad	Badshapur, Faridabad	45	-	SBR	Budhiya Nallah
68		Badshapur, Faridabad	30	14	SBR	Budhiya Nallah
69	Sonapat	Rathdana Road, Sonapat	30	22	UASB	Drain
70		Kakrai Road, Sonapat	25	7	SBR	Kakori Drain
71		Rajeev Gandhi Education City, Sonapat	7.5	2	ASP-EA	Irrigation
72		Kharkhoda, Sonapat	4.5	3	MBBR	Drain No. 6 Kharkhoda Drain
73		Gannaur,	7	5.5	MBBR	Drain No 6

Table 2: State-wise list of STPs installed in catchment of river Yamuna						
Sl. No.	City/ Town	Location of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Technology	Discharge into Drain/ River
		Sonepat				
74		Gohana, Sonepat	8.3	6.89	MBBR	Drain No 8
75		Gohana, Sonepat	3	2	MBBR	Drain No 8
76	Panipat	Sewah Road, Panipat	25	13	SBR	Panipat Drain
77		Sewah Road, Panipat	35	18	UASB+EA	Panipat Drain
78		Jattal Road, Panipat	10	6	UASB+EA	Nohra Drain Panipat
79		Jattal Road, Panipat	20	13	SBR	Nohra Drain Panipat
80		Samalkha, Panipat	5	4.25	MBBR	Drain No. 6 Panipat
81		Sector 19, Panipat	30	8	SBR	Drain No. 2 Panipat
82		Sector 6, Panipat	0.8	0.7	SBR	Drain No.1 Panipat
83		Karnal	R.K. Puram, Karnal	8	3.5	SBR
84	Karnal		50	45	SBR	Drain
85	Gogari Road, Karnal		10	6.70	SBR	Drain
86	Gharaunda, Karnal		7	4.25	SBR	Drain
87	Inderi, Karnal		4	2.65	SBR	Irrigation Drain
88	Asandh, Karnal		5	3.84	MBBR	Assandh Drain
89	Nilokheri, Karnal		6	3.75	MBBR	Indri Drain
90	Nissing, Karnal		4	3.25	MBBR	Indri Drain
91	Taraori, Karnal		5.5	4.17	MBBR	Indri Drain
92	Yamuna Nagar		Shamsabad Radaur Road, Yamuna Nagar	3.5	1.6	MBBR
93		Radaur Road, Yamuna Nagar	20	17	SBR	Ditch Drain
94		BadiMajra, Yamuna Nagar	10	7.9	SBR	Yamuna Nagar Drain

Sl. No.	City / Town	Location of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Technology	Discharge into Drain / River
95		Chhachhrauli, Yamuna Nagar	3	2.68	MBBR+TTP	Som River
96		Parwalo, Yamuna Nagar	24	18.5	SBR	River Yamuna
97		Radaur, Yamuna Nagar	25	20	SBR	Ditch Drain

Sl. No.	Name of Drain	Flow (in MLD)	Parameters					
			pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	NH <sub>3</sub> -N (mg/l)	FC (MPN/100 mL)
<b>General Discharge Standards</b>			5.5-9.0	250	30	100	50	
<b>State- Haryana</b>								
1	Yamuna Nagar	108.00	7.6	<b>547</b>	<b>222</b>	<b>129</b>	<b>51</b>	-
2	Panipat	858.88	7.6	218	<b>72</b>	78	16	-
3	Drain No. 6	13.45	6.7	182	<b>52</b>	<b>102</b>	30	-
4	Drain No. 8	-	6.9	27	04	51	01	-
<b>NCT of Delhi</b>								
5	Sonia Vihar Drain	56.16	7.5	174	<b>103</b>	<b>3239</b>	21	17x10 <sup>5</sup>
6	Nazafgarh Drain	2280.96	7.1	135	<b>49</b>	<b>166</b>	19	34x10 <sup>5</sup>
7	Magzine Drain	6.91	6.8	221	<b>104</b>	<b>103</b>	11	35x10 <sup>8</sup>
8	Sweeper Colony Drain	57.02	7.2	127	<b>44</b>	63	08	11x10 <sup>9</sup>
9	Khayberpass Drain	28.51	7.3	42	17	38	07	54x10 <sup>6</sup>
10	Metclaf Drain	10.36	7.2	55	17	42	05	12x10 <sup>7</sup>
11	ISBT Drain	27.64	7.0	103	<b>52</b>	84	16	17x10 <sup>9</sup>
12	Tonga Stand Drain	10.36	7.0	83	24	62	04	12x10 <sup>8</sup>
13	Shastri Park drain	5.18	7.4	<b>327</b>	<b>187</b>	94	32	79x10 <sup>7</sup>
14	Kailash Nagar Drain	12.09	7.3	<b>287</b>	<b>151</b>	<b>269</b>	40	11x10 <sup>9</sup>
15	Power House Drain	120.96	7.1	<b>326</b>	<b>189</b>	<b>182</b>	28	14x10 <sup>7</sup>
16	Sen Nursing Home	86.4	6.9	<b>390</b>	<b>232</b>	<b>259</b>	32	35x10 <sup>9</sup>
17	Drain No. 14	12.96	7.5	47	18	20	08	49x10 <sup>7</sup>

Sl. No.	Name of Drain	Flow (in MLD)	Parameters					
			pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	NH <sub>3</sub> -N (mg/l)	FC (MPN/100 mL)
<b>General Discharge Standards</b>			<b>5.5-9.0</b>	<b>250</b>	<b>30</b>	<b>100</b>	<b>50</b>	
18	Barapulla Drain	136.51	7.3	85	23	47	24	16x10 <sup>7</sup>
19	Maharani Bag Drain	29.37	7.1	166	<b>66</b>	<b>122</b>	26	35x10 <sup>7</sup>
20	Abul Fazal Drain	19.01	7.1	238	<b>108</b>	<b>115</b>	44	23x10 <sup>5</sup>
21	Sarita Vihar Drain	43.2	6.6	1205	<b>566</b>	<b>227</b>	47	92x10 <sup>9</sup>
22	Jaitpur Drain	26.78	7.1	226	<b>106</b>	88	38	68x10 <sup>4</sup>
23	Molar Band Drain	20.73	6.7	<b>643</b>	<b>385</b>	<b>197</b>	33	11x10 <sup>7</sup>
24	Tuglaqabad Drain	57.02	7.2	236	<b>130</b>	<b>165</b>	33	28x10 <sup>6</sup>
25	Sahadara Drain	521.85	7.0	210	<b>101</b>	<b>136</b>	19	17x10 <sup>6</sup>

Sl. No.	Name of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Source	Parameters						
					pH	BOD (mg/l)	TSS (mg/l)	COD (mg/L)	Fecal Coliform (MPN/100 mL)	NH <sub>3</sub> -N (mg/l)	PO <sub>4</sub> -P (mg/l)
<b>NGT Norms</b>					5.5-9.0	10	20	50	100	10	1
<b>DELHI</b>											
1.	Kondli Phase I	45.4	45.4	Inlet	7.1	227	332	599	22x10 <sup>9</sup>	31	2.7
				Outlet	7.2	5	BDL	30	1.8	02	2.3
2.	Kondli Phase II	114.5	114.5	Inlet	7.1	227	332	599	22x10 <sup>9</sup>	31	2.7
				Outlet	7.5	10	12	46	<b>94x10<sup>4</sup></b>	03	0.9
3.	Kondli Phase III	45.4	45.4	Inlet	7.1	227	332	599	22x10 <sup>9</sup>	31	2.7
				Outlet	7.4	<b>11</b>	BDL	<b>51</b>	<b>79x10<sup>4</sup></b>	04	0.5
4.	Kondli Phase IV	204.3	102	Inlet	7.1	227	332	599	22x10 <sup>9</sup>	31	2.7
				Outlet	7.1	5	BDL	31	<b>21x10<sup>4</sup></b>	03	0.4
5.	Kondli Phase I, II, III & IV	-	-	Outlet	7.2	<b>129</b>	<b>170</b>	<b>346</b>	<b>78x10<sup>5</sup></b>	<b>23</b>	<b>2.4</b>
6.	Nilothi Phase I	181.6	181.6	Inlet	7.0	201	376	569	68x10 <sup>11</sup>	31	3.0
				Outlet	7.5	07	12	38	<b>13x10<sup>5</sup></b>	04	0.2
7.	Nilothi Phase II	90.8	90.8	Inlet	7.1	330	483	750	20x10 <sup>10</sup>	32	2.9
				Outlet	6.8	<b>25</b>	<b>27</b>	<b>133</b>	<b>68x10<sup>3</sup></b>	<b>22</b>	0.6
8.	Pappankalan Phase I	91	91	Inlet	7.1	276	406	822	68x10 <sup>11</sup>	32	5.4
				Outlet	7.3	<b>11</b>	17	49	<b>13x10<sup>5</sup></b>	06	0.6
9.	Pappankalan Phase II	91	91	Inlet	6.9	199	347	685	92x10 <sup>4</sup>	36	03
				Outlet	6.8	08	BDL	43	<1.8	03	<b>1.3</b>
<b>10.</b>											
11.	Dhanwapur, Gurugram	50	50	Inlet	6.9	175	274	423	14x10 <sup>8</sup>	25	1.06
				Outlet	7.2	<b>24</b>	<b>26</b>	<b>71</b>	<b>49x10<sup>4</sup></b>	<b>11</b>	0.13
12.		68	68	Inlet	6.7	379	82	1181	28x10 <sup>10</sup>	41	0.98

Table 4: Status of STPs with respect to qualitative analysis and compliance verification											
Sl. No.	Name of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Source	Parameters						
					pH	BOD (mg/l)	TSS (mg/l)	COD (mg/L)	Fecal Coliform (MPN/100 mL)	NH <sub>3</sub> -N (mg/l)	PO <sub>4</sub> -P (mg/l)
NGT Norms					5.5-9.0	10	20	50	100	10	1
	Dhanwapur, Gurugram			Outlet	7.5	09	10	49	240	08	0.03
13.	Dhanwapur, Gurugram	100	100	Inlet	6.7	379	82	1181	28x10 <sup>10</sup>	41	0.98
				Outlet	7.8	57	40	170	54x10 <sup>5</sup>	26	0.39
14.	Farrukhnagar	3	2.8	Inlet	6.8	773	1203	1803	17x10 <sup>7</sup>	47	0.81
				Outlet	7.6	23	39	72	26x10 <sup>3</sup>	21	0.22
15.	Hailly Mandi	5.5	1.85	Inlet	6.8	75	188	231	32x10 <sup>7</sup>	22	1.14
				Outlet	7.5	25	31	62	54x10 <sup>4</sup>	05	0.58
16.	Pataudi	4.5	3	Inlet	7.2	100	203	304	26x10 <sup>7</sup>	25	2.68
				Outlet	7.1	29	46	82	92x10 <sup>4</sup>	32	1.11
17.	Behrampur I	50	45	Inlet	6.9	164	340	410	17x10 <sup>7</sup>	32	0.79
				Outlet	7.5	25	24	64	<1.8	11	0.80
18.	Behrampur II	120	110	Inlet	6.9	164	340	410	17x10 <sup>7</sup>	32	0.79
				Outlet	7.3	43	31	129	<1.8	11	0.63
19.	Badshapur, Faridabad	30	15	Inlet	7.4	105	232	400	33x10 <sup>6</sup>	32	2.3
				Outlet	7.1	07	14	38	78x10 <sup>3</sup>	02	0.1
20.	Palwal	15	5	Inlet	7.1	65	267	328	39x10 <sup>8</sup>	38	1.6
				Outlet	7.3	11	27	96	23x10 <sup>4</sup>	06	0.2
21.	Hassanpur	3	1.5	Inlet	6.9	24	93	122	14x10 <sup>8</sup>	19	0.6
				Outlet	7.2	9	25	49	20x10 <sup>4</sup>	06	0.2
22.	Rathdana Road, Sonapat	30	22	Inlet	7.1	481	1270	1131	33x10 <sup>8</sup>	52	3.3
				Outlet	7.0	15	34	80	< 1.8	12	0.8
23.	Kakrai Road, Sonapat	25	7	Inlet	7.2	96	73	323	46 X10 <sup>6</sup>	23	1.5
				Outlet	6.8	06	30	39	6.1	02	1.5
24.	Rajeev Gandhi Education City, Sonapat	7.5	2	Inlet	6.8	184	544	471	32 X10 <sup>6</sup>	20	1.9
				Outlet	7.2	09	34	51	< 1.8	01	0.9
25.	Kharkhoda, Sonapat	4.5	3.0	Could not monitored due to up-gradation.							
26.	Ganaur, Sonapat	7	5.5	Inlet	7.3	56	150	187	47 x10 <sup>5</sup>	19	2.6
				Outlet	7.2	44	58	138	13 x10 <sup>5</sup>	12	0.3
27.	Gohana, Sonapat	3	2	Inlet	7.1	363	595	878	40 x10 <sup>9</sup>	43	3.1
				Outlet	6.8	12	49	71	13 x10 <sup>3</sup>	07	0.4
28.	Gohana, Sonapat	8.3	6.89	Inlet	7.3	84	120	225	63 x10 <sup>8</sup>	30	0.5
				Outlet	7.0	12	52	63	49 x10 <sup>3</sup>	06	0.5
29.	Sewah Road, Panipat	35	18	Inlet	7.4	77	146	268	70 x10 <sup>7</sup>	36	1.5
				Outlet	7.7	05	BDL	44	17 x10 <sup>4</sup>	02	0.2
30.	Sewah Road, Panipat	25	13	Inlet	7.5	80	102	260	14 x10 <sup>7</sup>	31	0.9
				Outlet	7.3	05	BDL	41	45	03	0.2
31.	Jattal Road, Panipat	10	6	Inlet	7.2	95	232	284	17 x10 <sup>7</sup>	24	0.7
				Outlet	7.6	09	BDL	48	13 x10 <sup>3</sup>	06	0.3
32.	Jattal Road, Panipat	20	13	Inlet	7.4	70	217	236	14 x10 <sup>8</sup>	25	0.6
				Outlet	7.6	07	BDL	42	49 x10 <sup>4</sup>	05	0.2

Table 4: Status of STPs with respect to qualitative analysis and compliance verification											
Sl. No.	Name of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Source	Parameters						
					pH	BOD (mg/l)	TSS (mg/l)	COD (mg/L)	Fecal Coliform (MPN/100 mL)	NH <sub>3</sub> -N (mg/l)	PO <sub>4</sub> -P (mg/l)
NGT Norms					5.5-9.0	10	20	50	100	10	1
33.	Samalkha, Panipat	5	4.25	Could not monitored due to up-gradation.							
34.	Sector 19, Panipat	30	8	Inlet	7.3	65	379	287	78 x10 <sup>4</sup>	20	1.6
				Outlet	7.5	09	BDL	<b>55</b>	<b>47x10<sup>2</sup></b>	06	0.2
35.	Sector 6, Panipat	0.8	0.7	Inlet	7.3	73	95	244	32 x10 <sup>5</sup>	40	0.7
				Outlet	7.6	10	BDL	<b>59</b>	<b>68 x10<sup>4</sup></b>	02	0.3
36.	R.K. Puram, Karnal	8	3.5	Inlet	7.7	122	108	307	54 x10 <sup>9</sup>	02	3.1
				Outlet	7.4	<b>56</b>	<b>22</b>	<b>148</b>	<b>22 x 10<sup>6</sup></b>	03	<b>3.6</b>
37.	Karnal	50	45	Inlet	7.9	362	216	516	17 x10 <sup>7</sup>	33	3.2
				Outlet	8.4	<b>107</b>	BDL	<b>221</b>	-	01	0.7
38.	Gogari Road, Karnal	10	6.70	Inlet	8.0	142	165	456	33 x10 <sup>8</sup>	19	2.2
				Outlet	8.1	<b>93</b>	BDL	<b>212</b>	< 1.8	06	0.7
39.	Gharaunda, Karnal	7	4.25	Inlet	7.7	170	197	479	12 x10 <sup>8</sup>	01	0.7
				Outlet	7.6	<b>68</b>	10	<b>192</b>	< 1.8	01	<b>2.5</b>
40.	Shamsabad Radaur Road, Yamuna Nagar	25	20	Inlet	7.6	397	BDL	685	28 x10 <sup>12</sup>	21	1.8
				Outlet	7.3	<b>72</b>	BDL	<b>217</b>	280	01	<b>1.0</b>
41.	Radaur Road, Yamuna Nagar	20	17	Inlet	8.2	299	264	635	94 x10 <sup>11</sup>	19	1.8
				Outlet	8.4	<b>88</b>	BDL	<b>195</b>	< 1.8	02	<b>1.4</b>
42.	BadiMajra, Yamuna Nagar	10	7.9	Inlet	7.0	222	172	406	28 x10 <sup>10</sup>	20	1.4
				Outlet	8.5	<b>55</b>	12	<b>148</b>	<b>22 x10<sup>4</sup></b>	01	0.6
43.	Parwalo, Yamuna Nagar	24	18.5	Inlet	7.2	128	160	327	18 x10 <sup>12</sup>	18	1.4
				Outlet	8.2	<b>86</b>	10	<b>237</b>	<b>12 x10<sup>2</sup></b>	01	0.1
<b>44.</b>											
45.	Indirapuram, Ghaziabad	74	74	Inlet	7.0	95	133	333	-	-	-
				Outlet	7.1	<b>58</b>	<b>49</b>	<b>266</b>	<b>33x10<sup>2</sup></b>	-	0.96
46.	Indirapuram, Ghaziabad	56	50	Inlet	7.1	157	380	467	-	-	-
				Outlet	7.3	<b>13</b>	14	<b>77</b>	<b>17x10<sup>3</sup></b>	-	0.25
47.	Indirapuram, Ghaziabad	56	56	Inlet	7.1	143	274	454	-	-	-
				Outlet	7.1	<b>71</b>	<b>74</b>	<b>224</b>	<b>33x10<sup>6</sup></b>	-	3.26
48.	Dudahaida, Vijay Nagar	70	70	Inlet	7.4	157	289	423	-	-	-
				Outlet	7.4	<b>39</b>	<b>54</b>	<b>182</b>	<b>34x10<sup>5</sup></b>	-	3.45
49.	Dudahaida, Vijay Nagar	56	56	Inlet	7.4	99	210	334	-	-	-
				Outlet	7.6	7	15	<b>63</b>	<b>12x10<sup>4</sup></b>	-	1.71
50.	Morty Rajnagar Extn	56	22.5	Inlet	7.1	108	179	336	-	-	-
				Outlet	7.3	5	20	48	<b>79x10<sup>5</sup></b>	-	0.51
51.	Govindpuram	26	12.38	Inlet	7.3	96	132	281	-	-	-
				Outlet	7.4	2	10	12	110	-	3.42
52.	Bapudham Madhuban	56	1.5	Inlet	7.6	15	94	95	-	-	-
				Outlet	7.6	6	15	44	2	-	2.94
53.	Ankur Vihar Loni	30	22	Inlet	7.1	211	360	596	-	-	-
				Outlet	7.2	<b>24</b>	<b>85</b>	<b>183</b>	<b>13x10<sup>5</sup></b>	-	4.24
54.	Trans Delhi	5	3.5	Inlet	7.3	10	28	67	-	-	-

<b>Table 4: Status of STPs with respect to qualitative analysis and compliance verification</b>											
Sl. No.	Name of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Source	Parameters						
					pH	BOD (mg/l)	TSS (mg/l)	COD (mg/L)	Fecal Coliform (MPN/100 mL)	NH <sub>3</sub> -N (mg/l)	PO <sub>4</sub> -P (mg/l)
<b>NGT Norms</b>					5.5-9.0	10	20	50	100	10	1
	Signature City, Loni			Outlet	7.3	5	16	40	<b>12x10<sup>4</sup></b>	-	1.24

## ANNEXURE-II

<b>Summary of submission made by NCT of Delhi, Government of Haryana and Government of U.P</b>			
<b>Directions of Hon'ble NGT</b>	<b>Status of Delhi#</b>	<b>Status of Haryana*</b>	<b>Status of Uttar Pradesh@</b>
Quantity of sewage being discharged into Yamuna through drains (major drains and other drains) directly by Delhi. Haryana and UP and indirectly through Hindon.	22 drains out-falling in river Yamuna, out of which 9 are tapped, 2 are partially tapped and 9 are yet to be tapped. Further 2 large drains (Najafgarh and Shahdara) will be substantially tapped under Interceptor Sewer Project. No timeline provided for one partially tapped drains and the other will be commissioned by June 2024. 4 drains to be tapped by March 2024 and 1 by December 2023. No timeline for 3 untapped drains namely Kailash nagar drain, Shastri Park drain & Tughlakabad drain.	11 major drains discharging treated/ untreated effluent in river Yamuna. Approx., 921 MLD treated and 540 MLD untreated effluent discharged. Proposed plan for completion of tapping of all untapped drains by 31.12.2025.	No. of drains out-falling in river Yamuna: 14 (of Ghaziabad) & 01 (of Noida). No. of tapped drains: 01 (of Ghaziabad- Sahibabad drain). Proposed plan of tapping of Sahibabad drain completed. No timeline specified for 9 untapped drains of Ghaziabad out of 13 untapped drains. 2 drains namely Arthala drain and Karheda drain have timeline till June 2026. 1 drain in Noida drain is untapped.
Quantifying sewage going to STPs for treatment and whether treated sewage meets standards including FC.	Sewage generation: 4500 MLD Operational STPs: 37 Sewage being treated: 2591.22 MLD Gap in treatment: 1008.78 MLD Complying STPs: 36 w.r.t discharge standards as per the design criteria and 15 w.r.t discharge standards a per the discharge norms laid by Hon'ble NGT Order.	Sewage generated: 1098 MLD (34 towns) Gap in sewage treatment: Palwal (9.38 MLD), Faridabad (144.5 MLD) and Gurugram (86 MLD).	Ghaziabad No. of STPs: 10 Installed capacity: 515 MLD Capacity utilization: 376.5 MLD Out of 10, 8 STPs meeting the MoEF&CC Standards & 1 STP meeting the prescribed standards as per Hon'ble NGT Order. However, 07 STPs are meeting all other parameters except FC.  Noida No. of STPs: 8 Installed capacity:411 MLD Capacity utilization: 349 MLD All 8 STPs meeting the MoEF&CC standards. Only 1 STP (Noida Sector-168 (110 MLD)) meeting the prescribed standards as per Hon'ble NGT Order.
Time line of bridging the gap (by capacity and compliance) by the state of Haryana, Delhi and UP.	By June, 2024 sewage treatment capacity will be enhanced to 4191 MLD. By March, 2025 sewage treatment capacity will be enhanced to 4384 MLD. All the STPs will be compliant to discharge standards of BOD/TSS: 10/10.	The existing gap in treatment (240 MLD) is expected to be tapped by 08 Nos of STPs with capacity of 254.5 MLD. The project was expected to be completed by December, 2023.	The treated effluent from all the STPs is being discharged into River Hindon. The construction of Chlorine Contact Tank is started in following STPs for controlling Faecal Coliform with expected date of completion as December,2023: 56 MLD STP at Indrapuram 70 MLD STP at Dundaheda STP of 21.5 MLD at Sidharth Vihar has been constructed & trial

Summary of submission made by NCT of Delhi, Government of Haryana and Government of U.P			
Directions of Hon'ble NGT	Status of Delhi#	Status of Haryana*	Status of Uttar Pradesh@
			run carried out. The same is expected to start by January, 2024. STP of 68 MLD is proposed under Ghaziabad Karheda Zone Sewage Scheme. LOI issued to firm on 17.11.2023.
Reuse plans and timelines	<p>Quantum of available treated STP water: 2591.22 MLD. Mandatory return flow to river Yamuna: 1213.782 MLD Present use of treated STP water for horticulture/ rejuvenation of water bodies: 568.25 MLD Horticulture/Farming Purpose by IFCD from coronation Pillar: 97.739 MLD Quantum of treated water which can be brought in beneficial use: 711.449 MLD No timeline specified for proposed plan of enhancement of reuse of treated water from Coronation Pillar Phase I &amp; II. Timeline till December 2023, January 2024, March 2024, and June 2024 for Treated Water (340.95 MLD) from Other STPs for Development/ Rejuvenation of Lakes</p>	<p>Plan to reuse treated sewage for micro-irrigation in phase 1 &amp; 2. Phase 1- 9 STPs (172 MLD) Phase 2- 25 STPs (307 MLD)</p>	<p>Ghaziabad 1 Tertiary Treatment Plant (TTP) at Indirapuram of 40 MLD-Under construction. Timeline- by December 2025.</p> <p>Noida 1 TTP (Sector 168)-Operational Proposed: 2 TTPs (311 MLD) under tendering. Timeline- by March 2024.</p>
Rejuvenation of flood plains	<p>Restoration work sub divided in 10 parts:</p> <p>Asita east (total area- 197 Ha) Part A- 90 Ha- under DDA- Completed Part B- 107 Ha- under UP Irrigation Dept- by 31-03-2024 Kalindi Aviral (263 Ha) Part A (100 Ha)- Completed Part B (163 Ha)- Restoration work in progress. Kalindi Bio-diversity Park (115 Ha)- Wetland completed in available space. No timeline. Asita West (200 Ha) Part A: (90 Ha)- Complete Part B: (107 Ha)- No timeline. Proposal is under revision a per directions of Hon'ble LG. Timeline is expected on approval of proposal. Amrut Biodiversity Park</p>	<p>No plans for rejuvenation of flood plains available in report.</p>	<p>U.P Government has released Rs 10.49 crores in December,2020 to DDA for development of Bio Diversity Park (Eastern Bank of River Yamuna i.e from Old Railway to ITO Barrage) on UP Portion of Land measuring 86 Hectares out of 167 hectares.</p>

Summary of submission made by NCT of Delhi, Government of Haryana and Government of U.P			
Directions of Hon'ble NGT	Status of Delhi#	Status of Haryana*	Status of Uttar Pradesh@
	Part A (under DDA): 90 Hac- Timeline by 22-05-2024. Part B (under DDA): 18 Hac- No timeline Part C (under CPWD): 8.25 Hac- No timeline Ghat Area: (66 Ha) Part A (16 Ha)- No timeline Part B (50 Ha)- No timeline Yamuna Vanasthali (236.5 Ha)- No timeline Mayur Nature Park (397.75 Ha) Part A (235 Ha)- No timeline Part B (162.75 Ha)- No timeline Eco-tourism Area (30 Ha)- No timeline Hindon Sarovar (53.6 Ha) Part Area II- Hindon Cut Wetlands I & II Part A (under DDA): 15 Ha- No timeline Part B (under UP Irrigation Dept): 30 Ha- No timeline.		
# Based on reports submitted by Environment & Forest Department, Government of NCT of Delhi to Hon'ble NGT on 20.12.2023 * Based on reports submitted by Environment Department, Government of Haryana to Hon'ble NGT on 28.04.2023 @ Based on reports submitted by Environment, Forest and Climate Change Department, Government of Uttar Pradesh to Hon'ble NGT on 15.12.2023			

S. No.	Drain	Physiochemical									Biological	
		pH	COD (mg / L)	BOD (mg / L)	TSS (mg/ L)	NH3-N (mg/ L)	PO4-P (mg/ L)	NO3-N (mg/ L)	NO2-N (mg/ L)	TKN (mg/ L)	Total Coliform (MPN/ 100 mL)	Faecal Coliform (MPN/ 100 mL)
1	ISBT Drain	7.2	240	71	97	20	2.3	5.5	BDL	24	70x10 <sup>6</sup>	46x10 <sup>6</sup>
2	Delhi Gate Drain	7.3	358	102	108	33	3.4	1.7	BDL	39	23x10 <sup>6</sup>	13x10 <sup>6</sup>
3	Sen Nursing home Drain	7.1	378	106	91	31	3.1	2.1	BDL	35	21x10 <sup>6</sup>	61x10 <sup>6</sup>
4	Barapula Drain	7.4	150	39	39	24	1.9	2.7	0.06	28	23x10 <sup>9</sup>	23x10 <sup>9</sup>
5	Maharani Bagh Drain	7.4	254	96	87	22	2.9	2.1	BDL	26	49x10 <sup>6</sup>	78x10 <sup>5</sup>
6	Sarita Vihar Pull	7.4	374	110	199	26	3.5	1.7	BDL	30	17x10 <sup>7</sup>	33x10 <sup>6</sup>
7	Molar band Drain	7.1	296	86	71	31	2.9	2.6	BDL	36	13x10 <sup>7</sup>	93x10 <sup>5</sup>
8	Tughlakabad Drain	7.4	271	69	115	31	3.5	2.4	BDL	35	11x10 <sup>8</sup>	31x10 <sup>7</sup>
9	Jaitpur Drain	7.5	321	86	109	40	4.1	1.7	0.03	47	13x10 <sup>6</sup>	11x10 <sup>5</sup>
10	Abu Fazal Drain	7.7	281	59	187	30	4.0	2.7	BDL	37	12x10 <sup>7</sup>	63x10 <sup>6</sup>
11	Shahdara Drain	7.3	473	127	398	32	4.0	2.2	BDL	41	79x10 <sup>6</sup>	49x10 <sup>6</sup>
12	Kailash Nagar Drain	7.4	498	148	161	44	1.5	1.4	BDL	54	47x10 <sup>11</sup>	20x10 <sup>11</sup>
13	Shastri Park Drain	7.5	993	361	552	38	2.8	4.5	BDL	45	35x10 <sup>9</sup>	41x10 <sup>8</sup>
14	Sonia vihar Drain	7.5	527	179	438	36	2.3	3.9	BDL	41	94x10 <sup>6</sup>	12x10 <sup>6</sup>
15	Nazafgarh Drain	7.6	156	28	215	21	2.1	5.1	BDL	25	49x10 <sup>9</sup>	49x10 <sup>9</sup>

Item No. 06

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No.06/2012

Nizamuddin West Association

Applicant

Versus

Union of India &amp; Ors.

Respondent(s)

Date of hearing: 09.01.2024

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

Applicant: Mr. A.Q Zaidi, Adv. for Applicant in OA 06/2012

Respondent: Ms. Jyoti Mendiratta, Adv. for Govt. of NCT of Delhi  
Mr. Bhanwar Pal Singh Jadon, Mr. Navin Kumar & Mr. Hardik Saxena,  
Adv. for the State of UP  
Mr. Rahul Khurana, Adv. for the State of Haryana & HSPCB  
Ms. Puja Kalra & Mr. Virendra Singh, Adv. for MCD with Mr. S.K.  
Meena, EE, Mr. Sanjeev Mudgal, EE & Mr. N. Ahuja, AE  
Mr. Narender Pal Singh & Ms. Anjali, Adv. for DPCC  
Ms. Deeksha L. Kakar & Ms. Akansha Choudhary, Adv. for DDA

**ORDER**

1. This Original Application involves issue of rejuvenation of river Yamuna. In the proceedings dated 17.10.2023, the Tribunal had considered various reports and had found that the situation regarding cleaning of river Yamuna was far from satisfactory and had noted the deficiencies in following respect:-

*“6. The situation with regard to cleaning of river Yamuna is far from satisfactory. The report submitted by all the above agencies seems to be deficit on the following issues.*

- i. Details of the drains discharging into the River Yamuna (both with treated waste water/untreated waste water). The details include the quantity and quality of the discharge water.*
- ii. Details of the STPs that have been constructed and operational to treat the waste water discharged from the above drains.*

*The capacity of the existing STP and the quality of the treated waste water, if it is meeting the standards or not.*

- iii. Details of upgradation of the existing STPs.*
- iv. Details of those areas/colonies which have so far not been covered in the above scheme shall be furnished indicating timelines for laying down sewage network system to trap all the sewage generated from authorized and unauthorized colonies and linking to the main drain for treatment & disposal.*
- v. Measures/steps taken for utilization of the treated waste water for agriculture, horticulture, construction activities, dust mitigation and other non-contact purposes.*
- vi. Details of monitoring of the functioning of the STPs, water quality monitoring.*
- vii. Rejuvenation and restoration of the Yamuna River Flood Plain and the associated wetlands.*

2. CPCB was also directed to verify the facts and figures disclosed in the report and place on record the requisite information as directed in paragraph 7 of the order as under:-

*“7. CPCB is directed to verify the facts and figures disclosed in the report placed on record by the States and the authorities and file a comprehensive report reflecting the correct position. CPCB will also place on record the material disclosing that the sewage treatment being done is accordance with the prescribed standards and also the details of the proposed activities for the treatment of sewage/effluent.”*

3. The reports, at the instance of the State of Haryana, NCT Delhi and State of UP have been filed but we find that the requisite information which is necessary for ascertaining the correct factual situation has not been disclosed. The reports must disclose each drain which is discharging the treated or untreated effluent in river Yamuna in the state/NCT concerned, the total quantity of treated/untreated discharge by that drain in the river, the STPs set up on that drain at different locations and end point local body which is ultimately responsible to ensure that no untreated discharge takes place from the drain.

4. River Yamuna is the major and second largest tributary of river Ganga and in Delhi stretch alone is responsible for 76% of river's

pollution. NCT of Delhi has 11 Districts- North, North-East, North-West, West, South, South-West, South-East, New Delhi, Central, Shahadra and East. A District-wise approach may be undertaken for rejuvenation of river Yamuna in Delhi.

5. As per River Ganga (Rejuvenation, Protection and Management Authorities Order, 2016, every District Level Committee has the powers and responsibility in relation to River Ganga and its tributaries flowing through it.

6. We have considered the reports submitted by the State of Haryana, NCT Delhi and UP which are deficient in following aspects:-

#### **Delhi**

1) Out of 22 drains meeting river Yamuna, only nine drains have been tapped and untapped 13 drains are still discharging huge quantity of sewage (2976.4 MLD)

2) Najafgarh and Shahdara drains which are the major source of sewage discharge (507.4 MGD), are said to be not feasible for interception. No timeline is disclosed for completion of Interceptor Sewer Project to divert flow of these two drains.

3) There is a gap of 222 MGD in sewage treatment thus untreated sewage is being discharged into Yamuna. For assessing the factual status, sewage being discharged through drains and sewage diverted to STPs is to be accounted for.

4) In the Performance results provided in R-6 of the report on STPs, no data has been provided for fecal coliform. The performance results provided by CPCB in their report on nine STPs, show that only two STOs are meeting with FC norms.

#### **Haryana (Report dated 4.12.2023)**

1) Treated and untreated sewage are mixed together and thereby making all the efforts futile.

2) Location of STPs with respect to each town and in context of each drain joining river Yamuna is not provided.

3) Connectivity of 378866 households to the sewer lines is yet to be provided.

4) Annexure - 3 provides the status of STPs in form of Complying and Non-complying but not in context of Parameters particularly in terms of FC.

#### **Uttar Pradesh**

1) Out of 14 drains in Ghaziabad, only one drain has been tapped and one drain in NOIDA remains untapped.

2) Ninety (90) MLD of treated sewage, instead of being utilised, is simply discharged into Ghazipur drain which is meeting Yamuna.

3) Two drains namely, Indirapuri and Banthala are discharging 52 MLD untreated sewage to Shahdara drain meeting Yamuna.

4) Untreated sewage of 150 MLD is reaching Yamuna via river Hindon.

5) Data on Fecal coliform for STPs in Noida has not been disclosed.

#### **CPCB**

Report of CPCB has been on website which could not be perused as the Counsel was not online. CPCB is directed to update the Status and file the Report before next hearing.

7. In the circumstances of the case, we direct the State of Haryana, NCT Delhi and UP to furnish the requisite information as required by preceding paragraphs of this order and file fresh report within a period of four weeks by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. CPCB is also directed to file fresh report in terms of the above directions.

8. Learned Counsel for the applicant submits that he has filed the Execution Application. Let the same be also listed for consideration on the next date of hearing.

9. List this matter on 13.02.2024.

Prakash Shrivastava, CP

Sudhir Agarwal, JM

Dr. A. SenthilVel, EM

January 09, 2024  
Original Application No.06/2012  
SN.