BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

Principal Bench, New Delhi

O.A. No. 6 of 2012

With

O.A No. 21 of 2023

In the matter of

Nizamuddin West Association — Applicant(s)

Vs

Union of India & Ors. — Respondent(s)

With

Ashwani Yadav — Applicant(s)

Vs

Govt. of NCT of Delhi — Respondent(s)

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2.	**Annexure I:** State-wise list of drains discharging into river Yamuna (March – April, 2023)	
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(P.K. Mishra)
Scientist-E,
Central Pollution Control Board,
Delhi-110032

Place: Delhi

Date: 16.10.2022.

STATUS REPORT ON SEWAGE TREATMENT PLANTS AND DRAINS LOCATED IN CATCHMENT OF RIVER YAMUNA IN THE STATE OF HARYANA, NCT OF DELHI AND UTTAR PRADESH.

1.0 BACKGROUND

Hon'ble NGT vide order dated 16.02.2023 directed CPCB as follows:

CPCB is directed to monitor performance of STPs in Delhi, Haryana and UP including the drains joining river Yamuna on quarterly basis.

2.0 COMPLIANCE TO DIRECTIONS OF NGT

In compliance to directions of NGT, following actions were initiated by CPCB:

1. CPCB identified major cities / towns in catchment of river Yamuna in the State of Haryana, NCT of Delhi and Uttar Pradesh for monitoring of STPs and drains.
2. Monitoring of STPs carried out jointly with SPCBs and concerned ULBs in the month of March-April, 2023. The samples collected from Inlet and Outlet of STPs for the Physio-chemical parameters (pH, TSS, NH_3-N, Total Nitrogen, COD, BOD, PO_4-P), Heavy Metals, Bacteriological (Fecal Coliform) and actual volume of wastewater treated in each STP.
3. Water quality of Drains monitored for pH, TSS, NH_3-N, COD, BOD, PO_4-P, Heavy Metals and actual volume of wastewater discharged into river Yamuna.

3.0 Status of STPs and Drains in catchment of river Yamuna

3.1 River Yamuna- Introduction

River Yamuna, a major tributary of river Ganges, originates from Yamnotri glacier in the district of Uttar Kashi (Uttarakhand). The stream flows through Shivalik range in Himachal Pradesh and Uttar Pradesh. The river enters into plains at Dak Patthar in Uttarakhand and flows through Haryana, Delhi and Uttar Pradesh before it confluences with river Ganga at Allahabad.

Number of barrages have been constructed on the river to meet the demand of water for power generation, agriculture and domestic purposes. First barrage on the river is at Hathnikund from where River water is diverted to Western Yamuna Canal and Eastern Yamuna Canal for meeting the requirement of irrigation and drinking water. Some augmentation in river flow takes place in this stretch after

getting the river water from drain no.8 at the down-stream (D/s) of Sonepat. In this segment, wastewater (industrial + domestic) from the towns namely Yamunanagar, Karnal, Panipat, Sonepat and Kundli, Haryana into river Yamuna.

Second major barrage on the river is at Wazirabad, Delhi where entire water is impounded to meet the drinking water requirement of Delhi. No water is released from the Wazirabad barrage to flow downstream except during monsoon season. At the downstream of Waziarabad barrage, waste-water of Delhi is discharged into river Yamuna through 22 drains. Out of these 22 drains, Nazafgarh drain is the major drain which discharges around 60 % of Delhi waste-water into river Yamuna. As the river traverses further downstream, next barrage is constructed at Okhla, Delhi.

Here, major part of the water is diverted to Agra Canal and Gurgaon canal.

Downstream of Okhla Barrage, the river flow is contributed by wastewater discharges from Shahdara drain, Noida drain, Hindon river and Gauchi drain.

After Okhla, the river flows through Faridabad, Ballabgarh, Palwal, Virindavan, Mathura and Agra. Major tributaries of Yamuna are Chambal, Ken and Betwa which augment the river flow before it confluences with river Ganga at Allahabad.

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

44 number of drains discharges wastewater into river Yamuna and 134 No. of STPs are installed in the catchment of river Yamuna. The total treatment capacity in catchment of river Yamuna is 4678.77 MLD. The Sewage Generation against the treatment capacity in catchment of river Yamuna is 6136.143 MLD.

Table - 1 depicts State-wise list of drains discharging into river Yamuna. **Table - 2** depicts State-wise list of STPs installed in catchment of river Yamuna. **Table - 3** shows state-wise sewage generation and treatment capacity available in catchment of river Yamuna.

Annexure - I

Table 1: State-wise list of drains discharging into river Yamuna (March – April, 2023)

Sl. No.	State	Town / City	Name of Drain	Flow (in MLD)
1.	Haryana	Yamuna Nagar	Yamuna Nagar	Flow not measured
2.		Panipat	Panipat	
3.		Sonipat	Drain No. 6	
4.			Drain No. 8	
5.		Faridabad	Buriya drain	
6.		Ballabhgarh	Gocchi Drain	
7.	Delhi	Delhi	Nazafgarh Drain	2073.6
8.			Magzine Drain	No flow
9.			Sweeper Colony Drain	No flow
10.			Khayberpass Drain	No flow
11.			Metclaf Drain	23.56
12.			ISBT Drain	11.30
13.			Tonga Stand Drain	No flow
14.			Kailash Nagar Drain	5.74
15.			Mori Gate Drain	No flow
16.			Civil Mill Drain	No flow
17.			Delhi Gate Drain	99.88
18.			Sen Nursingh Home	2
19.			Drain No. 14	No flow
20.			Barapulla Drain	146.88
21.			Maharani Bag Drain	31.97
22.			Abul Fazal Drain	118.36
23.			Old Agra Canal	No flow
24.			Sarita Vihar Pull	266.97
25.			Jaitpur Drain	100.22
26.			Molar Band Drain	12.96
27.			Tuglaqabad Drain	38.02
28.			Sahadara Drain	509.76
29.	Uttar Pradesh	Mathura	Gocchi Drain Shahapur	27.20
30.			Kosi Drain Vrindavan	24.51
31.			Masani drain	16.82
32.			Ambakhar Drai, Mathura	26.49
33.			Aurangabad Drain, Mathura	1.98
34.			Mahadev Ghat Drain, Mathura	2.46

Sl. No.	State	Town / City	Name of Drain	Flow (in MLD)
35.			Refinary Drain Mathura	2.50
36.			Goverdhan Drain, Mathura	45.32
37.			Tajmahal East Gate Drain	5
38.			Mantola Drain, Agra	123
39.			Water works Drain	26
40.		Agra	Peelakhar Drain	6
41.			Naraich Drain	5
42.			Bhairon Nala Drain	26
43.			Boodhi ka Nagla drain	14
44.			Anurag Nagar Drain	No flow

Annexure - II

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
State- Delhi						
1	Akshardham	Akshardham	4.54	0.6	MBR	Reuse at Common wealth Village
2	Chilla	Chilla	40.86		SBR	RiverYamuna
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_2O	Jahangirpuri Drain
5	Delhi Gate	Delhi Gate Phase I	10	11	Densadeg /Bio-far	Pragati Power Plant
6		Delhi Gate Phase II	68.1	74.91	Densadeg /Bio-far	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	

Sl. No.	City / Town	Location of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Technology	Discharge into Drain / River
19	Nilothi	Nilothi Phase I	181.6	181.6	ASP	Najafgarh Drain
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 Rehabilation			
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
State- Uttar Pradesh						

Sl. No.	City / Town	Location of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Technology	Discharge into Drain / River
37	Agra	Bury ka Nangla	2.25	2.25	OP	River Yamuna
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

Sl. No.	City / Town	Location of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Technology	Discharge into Drain / River
58		Sector 168	100		SBR	River Yamuna
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	Sonepat	Rathdana Road, Sonepat	30	22	UASB	Drain
70		Kakrai Road, Sonepat	25	7	SBR	Kakori Drain
71		Rajeev Gandhi Education City, Sonepat	7.5	2	ASP-EA	Irrigation
72		Kharkhoda, Sonepat	4.5	3	MBBR	Drain No. 6 Kharkhoda Drain

Sl. No.	City / Town	Location of STP	Capacity (in MLD)	Capacity Utilization (in MLD)	Technology	Discharge into Drain / River
73		Gannaur, Sonepat	7	5.5	MBBR	Drain No 6
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	Drain
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	Ditch Drain
93		Radaur Road, Yamuna Nagar	20	17	SBR	Ditch Drain
94		BadiMajra, Yamuna Nagar	10	7.9	SBR	Yamuna Nagar Drain
95		Chhachhrauli, Yamuna Nagar	3	2.68	MBBR+TTP	Som River

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

Annexure - III

Table 3: State – Wise Sewage Generation and Treatment Capacity in catchment of river Yamuna

Sl. No.	State	Sewage Generation (in MLD)	Treatment Capacity (in MLD)	Number of STPs	Capacity Utilization (in MLD)
4.0	Haryana	1097.57	1075.2	59	1038.93
5.0	Delhi	3491	2874	35	2485
6.0	Uttar Pradesh	1547.573	1594.81	40	1154.84

Source: Information submitted by respective SPCBs in the matter of SWM (C) No.1/2021 – In RE Remediation of Polluted Rivers during March, 2023

Annexure – IV

POLLUTION CONTROL BOARD

CHECK LIST FOR MONITORING OF PERFORMANCE OF SEWAGE TREATMENT PLANTs (STPs) by CPCB

1.	Name / Location of STP	:	
2.	Date of Inspection	:	
3.	Administrative Agency for Control	:	
4.	Operation through Sub Contractor, if any	:	
5.	Process of Sewage Treatment a) ASP – Activated Sludge Process b) TF – Trickling filter c) AL – Aerated Lagoon d) UASB – Upflow anaerobic sludge blanket e) OP – Oxidation pond / waste f) Stabilization ponds g) EA – Extended Aeration h) SBR – Sequential Batch Reactor i) MBR – Membrane Bio Reactor j) MBBR – Moving Bed Bio Reactor k) Any other, please specify	:	
6.	Design Parameters: BOD (mg/L) COD (mg/L) TSS (mg/L) Fecal Coliform (MPN / 100 ml)	:	
7.	Consented Parameters	:	

	BOD (mg/L) COD (mg/L) TSS (mg/L) Fecal Coliform (MPN / 100 ml)		

8. Equipment Details:

S. No.	Equipment / Unit	Total in No.	Operational	Non-Operational	Reasons of Non-Operational	Remarks
I.	Screens (Fine / Coarse)					
II.	Grit Chambers					
II.	Primary Settling Tanks					
IV	Aerators					
V.	Final Settling Tank					
VI.	Tertiary Treatment					
	Filters (Sand Filter)					
	Disinfection unit (Chlorination / U.V. or any other)					
VII.	Number of sludge Pumps (PST)					
VIII.	Sludge Thickeners					
IX.	Sludge Drying Beds					
X.	Sludge Digesters					
XI.	Gas Holders					

9.	Flow sheet of STP (to be attached)	:	
10.	Designed Capacity in MLD	:	
11.	Actual treatment in MLD	:	
	Flow Meter reading at Outlet	:	
12.	Tertiary Treatment a. Filter (Sand / Activated Carbon Filter / any other) b. Disinfection unit (Chlorination / U.V. / any other)	:	

13.	Sludge Generation (Tonnes/day)	:	
14.	Sludge Disposal Method	:	
15.	Biogas produced, if any and its composition	:	
16.	Operational status of gas utilization	:	
17.	Power generation, if any	:	
18.	a. Point of treated sewage disposal (river / lake / irrigation / land and disposal / pisciculture / aquaculture / any other) b. Name of disposal point (Name of river/drain/canal)	:	
19.	Bypass arrangement at STPs, if any	:	
20.	Method of sludge disposal and status (satisfactory / unsatisfactory	:	
21.	i. Re-use of treated Sewage, if any ii. Quantity of treated Sewage reuse	:	
22.	Operation and maintenance of Sewage Treatment Plant (satisfactory / unsatisfactory)	:	
23.	Power requirement in KwA	:	
24.	Status of power availability for uninterrupted and continuous running of STP	:	
25.	Standby arrangement for power, if any	:	
26.	Annual expenditure on O&M & STP		
27.	Volume of industrial waste being mixed in sewage, if any.	:	
28.	Status of maintenance of Log Books	:	
29.	Status of Laboratory facility	:	
30.	Field Observations	:	

Signature of STP Manager **Signature of Team Leader**

APPENDIX A

FORM I

(See rule 7)

NOTICE OF INTENTION TO HAVE SAMPLE ANALYSED

To

……..

……..

Take this notice that it is intended to have analysed the same of …….

Which has been taken today, the …….. day of …… 20……...

From ……... (Name and Designation of the person who takes the sample)

_____

*Specify the place where the sample is taken

(SEAL)

DATE

Annexure – V

Notified Standards by Hon'ble NGT in O.A. No. 1069 of 2018

"

Sl. No.	Industry	Parameters	Standards (Applicable to all mode of disposal)			
1	2	3	4			
	Sewage Treat-ment Plants (STPs)		Mega and Metropolitan Cities	Class I Cities	Others	Deep Marine Outfall
		pH	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0
		Bio-Chemical Oxygen Demand (BOD)	10	20	30	30
		Total Suspended Solids (TSS)	20	30	50	50
		Chemical Oxygen Demand (COD)	50	100	150	150
		Nitrogen-Total	10	15	-	-
		Phosphorus-Total(For Discharge into Ponds, Lakes)	1.0	1.0	1.0	
		Fecal Coliform (FC) (Most Probable	Desireable-100 Permissible-	Desireable-230 Permissi	Desireable-1000 Permissible-	Desirable-1000 Permissibl

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		Number per 100 mililiter, MPN/100 ml	*230*	*ble-1000*	*10,000*	*e-10,000*

Note:

(i)	*Mega-Metropolitan Cities have population more than 1 crore, Metropolitan Cities-Population more than 10 Lakhs and Class-1 Population more than 1 Lakh.*
(ii)	*All value in mg/l except for pH and Fecal Coliform.*
(iii)	*These standards will be applicable for discharge into water bodies as well as for land disposal/applications.*
(iv)	*These Standards shall apply to all new STPs for which construction is yet to be initiated.*
(v)	*The existing/under construction STPs shall achieve these standards within 07 years from the date of notification.*
(vi)	*In case where the marine outfall provides a minimum initial dilution of 150 times at the point of discharge and a minimum dilution of 1500 times at a point 100m away from discharge point, then norms for deep sea marine discharge shall be applied.*
(vii)	*Reuse/Recycling of treated effluent shall be encouraged.*
(viii)	*State Pollution Control Boards/Pollution Control Committees may make these norms more stringent taking into account the local conditions.*

"

10. We have heard Learned Counsel for the parties.

11. Learned Counsel for the applicant submits that while the Expert Committee is fully justified in suggesting parameters as per its report for Mega-Metropolitan Cities, there is no justification for different and diluted standards for Class-I cities, Other cities or Deep Marine Outfall and to that extent the report of the Expert Committee fall short of the required scientific logic and database. While

[1][SCHEDULE – VI]

(See rule 3A)

GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART-A : EFFLUENTS

S. No.	Parameter	Standards			
		Inland surface water	Public Sewers	Land for irrigation	Marine coastal areas
1	2	3			
		(a)	(b)	(c)	(d)
1.	Colour and odour	See 6 of Annexure-I	--	See 6 of Annexure -I	See 6 of Annexure-I
2.	Suspended solids mg/l, Max.	100	600	200	(a) For process waste water- 100 (b) For cooling water effluent 10 percent above total suspended matter of influent.
3.	Particulate size of suspended solids	Shall pass 850 micron IS Sieve	--	--	(a) Floatable solids, max. 3 mm. (b) Settleable solids, max. 850 microns.
[2]4.	***	*	--	***	--
5.	pH Value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	shall not exceed 5°C above the receiving water temperature	--	--	shall not exceed 5°C above the receiving water temperature

1 Schedule VI inserted by Rule 2(d) of the Environment (Protection) Second Amendment Rules, 1993 notified vide G.S.R. 422(E) dated 19.05.1993, published in the Gazette No. 174 dated 19.05.1993.

2 Omitted by Rule 2(d)(i) of the Environment (Protection) Third Amendment Rules, 1993 vide Notification No.G.S.R.801(E), dated 31.12.1993.

S. No.	Parameter	Standards			
		Inland surface water	Public Sewers	Land for irrigation	Marine coastal areas
1	2	3			
		(a)	(b)	(c)	(d)
7.	Oil and grease mg/l Max.	10	20	10	20
8.	Total residual chlorin mg/l Max.	1.0	--	--	1.0
9.	Ammonical nitrogen (as N), mg/l Max.	50	50	--	50
10.	Total Kjeldahl Nitrogen (as NH_3) mg/l, Max.	100	--	--	100
11.	Free ammonia (as NH_3) mg/l, Max.	5.0	--	--	5.0
12.	Biochemical Oxygen demand [1][3 days at 27°C] mg/l max.	30	350	100	100
13.	Chemical Oxygen Demand, mg/l, max.	250	--	--	250
14.	Arsenic (as As), mg/l, max.	0.2	0.2	0.2	0.2
15.	Mercury (as Hg), mg/l, Max.	0.01	0.01	--	0.01
16.	Lead (as Pb) mg/l, Max.	0.1	1.0	--	2.0
17.	Cadmium (as Cd) mg/l, Max.	2.0	1.0	--	2.0
18.	Hexavalent Chromium (as Cr+6), mg/l max.	0.1	2.0	--	1.0

[1] Substituted by Rule2 of the Environment (Protection) Amendment Rules, 1996 notified by G.S.R.176, dated 2.4.1996 may be read as BOD (3 days at 27°C) wherever BOD 5 days 20°C occurred.

S. No.	Parameter	Standards			
		Inland surface water	Public Sewers	Land for irrigation	Marine coastal areas
1	2	3			
		(a)	(b)	(c)	(d)
19.	Total chromium (as Cr.) mg/l, Max.	2.0	2.0	--	2.0
20.	Copper (as Cu) mg/l, Max.	3.0	3.0	--	3.0
21.	Zinc (As Zn.) mg/l, Max.	5.0	15	--	15
22.	Selenium (as Se.) mg/l, Max.	0.05	0.05	--	0.05
23.	Nickel (as Ni) mg/l, Max.	3.0	3.0	--	5.0
[1]24.	* * *	*	*	*	*
[1]25.	* * *	*	*	*	*
[1]26.	* * *	*	*	*	*
27.	Cyanide (as CN) mg/l Max.	0.2	2.0	0.2	0.2
[1]28.	* * *	*	*	*	*
29.	Fluoride (as F) mg/l Max.	2.0	15	--	15
30.	Dissolved Phosphates (as P), mg/l Max.	5.0	--	--	--
[2]31.	* * *	*	*	*	*
32.	Sulphide (as S) mg/l Max.	2.0	--	--	5.0
33.	Phenoile compounds (as C_6H_5OH) mg/l, Max.	1.0	5.0	--	5.0

[1] Omitted by Rule 2(d)(i) of the Environment (Protection) Third Amendment Rules, 1993 vide Notification No.G.S.R.801(E), dated 31.12.1993.

S. No.	Parameter	Standards			
		Inland surface water	Public Sewers	Land for irrigation	Marine coastal areas
1	2	3			
		(a)	(b)	(c)	(d)
34.	Radioactive materials :				
	(a) Alpha emitter micro curie/ml.	10^{-7}	10^{-7}	10^{-8}	10^{-7}
	(b) Beta emitter micro curie/ml.	10^{-6}	10^{-6}	10^{-7}	10^{-6}
35.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
36.	Manganese (as Mn)	2 mg/l	2 mg/l	--	2 mg/l
37.	Iron (as Fe)	3 mg/l	3 mg/l	--	3 mg/l
38.	Vanadium (as V)	0.2 mg/l	0.2 mg/l	--	0.2 mg/l
39.	Nitrate Nitrogen	10 mg/l	--	--	20 mg/l
[1]40.	* * *	*	*	*	*

[1] Omitted by Rule 2(d)(i) of the Environment (Protection) Third Amendment Rules, 1993 vide Notification No. G.S.R. 801(E) dated 31.12.1993

Annexure-VI

Item Nos. 04 to 06 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 21/2023

Ashwani Yadav Applicant

Versus

Govt. of NCT of Delhi Respondent

WITH

Original Application No.562/2022

Ishika Applicant

Versus

Govt. of NCT of Delhi Respondent

WITH

Original Application No. 06/2012

Nizamuddin West Association Applicant

Versus

Union of India & Ors. Respondent(s)

Date of hearing: 16.02.2023

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER

Respondent: Ms. Jyoti Mendiratta, Advocate for GNCTD
Mr. Rahul Khurana, Advocate for the State of Haryana & HSPCB
Mr. Arvind Kumar, Advocate for the State of UP & UPPCB
Mr. Anuj Bhandari, Advocate for CPCB
Ms. Latika Malhotra & Ms. Kritika Gupta, Advocates for DDA

ORDER

1. These matters pertain to remedial action against unabated pollution of River Yamuna and failure of the authorities in tackling the same to the detriment of rule of law, environment and public health inspite of specific orders on the subject passed by the Hon'ble Supreme Court and this Tribunal.

2. It may be mentioned that the issue was dealt with by this Tribunal earlier vide order dated 27.01.2021 in OA No. 06/2012, *Manoj Mishra vs. Union of India & Ors.* The Tribunal, in continuation with earlier orders, issued specific final directions for remedial measures in time bound manner. Vide order dated 21.10.2022 in Civil Appeal No. 3465/2022, *Nizamuddin West Association vs. Union of India & Ors.*, the Hon'ble Supreme Court has directed further monitoring of compliance of the said directions by this Tribunal for which order dated 27.01.2021 to the extent it directed disposal of the application has been set aside and OA No. 06/2012 has been restored. Text of the said order is as follows:

> *"1 This appeal arises from an order dated 27 January 2021 of the National Green Tribunal in OA No 6 of 2012.*
>
> *2 The issue which was considered by the NGT pertained to the rejuvenation of the river Yamuna through the execution of the directions contained in a previous order dated 13 January 2015 and subsequent orders, including those dated 8 May 2015 and 7 December 2017. The NGT also noted that certain directions had been issued by this Court.*
>
> *3 In this backdrop, the NGT directed that the Chief Secretary, NCT of Delhi, in coordination with other authorities such as the Additional Chief Secretary, Urban Development, DDA, IDMC, DPCC and DJB and the Chief Secretaries of Haryana and Uttar Pradesh, may personally monitor the progress by providing an effective administrative mechanism to handle the grim situation of the river caused by years of neglect. The NGT has issued certain ancillary directions for monitoring. However, the NGT has disposed of the OA at that stage.*

4 Pursuant to the issuance of notice by this Court on 25 April 2022, the Union of India has been represented by Ms Aishwarya Bhati, Additional Solicitor General.

5 We have heard Ms Mugdha, counsel appearing on behalf of the appellant and Ms Aishwarya Bhati, Additional Solicitor General.

6 ***In our considered view, having regard to the previous directions which have been issued by the NGT for monitoring the steps to be taken for cleaning of the river Yamuna, the ends of justice require that the matter be monitored by the NGT.***

7 Ms Aishwarya Bhati has stated that the Ministry of Jal Shakti has been filing status reports before the NGT.

8 ***In order to facilitate judicial oversight by an expert adjudicating body, we request the NGT to monitor the matter and compliance of its orders at periodic intervals. To facilitate this process, we set aside the direction contained in the impugned order dated 27 January 2021 for the disposal of the application. OA No 6 of 2012 shall continue to remain on the file of the NGT. The NGT shall list the OA at an early date so that necessary directions can be given so as to enable it to assess the status of compliance with its previous orders and for considering whether any further orders are necessary to meet the exigencies of the situation****."*

3. In view of above, we took the matter on 9.1.2023 in OA 21/2023 which gave the compliance status as follows:

"i. ***There is still huge in generation and treatment of sewage with 35 STPs treating 573.5 MGD, with a gap of 194.5 MGD. The timelines of all STPs (except Coronation Pillar which was commissioned in March, 2022 against the timeline of June, 2020) has been continuously extended and presently stands extended upto June, 23.***

ii. All drains in which untreated sewage is being discharged are not intercepted and diverted so that the untreated sewage is not conveyed to the river. DJB is yet to trap 147 drains out falling into Najafgarh and Shahdara Drains and timelines for each stage of trapping of different segments of the drains is yet to be assigned to specific officers.

iii. DJB is yet to ensure that all the households in the areas where sewerage network has been provided are connected with the sewerage network and environmental compensation is yet to be imposed."

The Tribunal also noted the data of October – December 2022 about water quality of river Yamuna on the website of DPCC. It shows high level of BOD, exceeding 50 mg/l and innumerable numbers of faecal coliform much beyond laid down parameters.[1]

4. It was observed that earlier order dated 27.01.2021 had still not been complied with. The Tribunal noted that amount of Rs. 1500 crores had already been spent on control of Yamuna pollution without much results. In fact, situation had further deteriorated. The Tribunal also referred to orders on overlapping issue passed in O.A. No. 153/2014, *Indian National Trust for Art and Cultural Heritage vs. Govt. of NCT of Delhi & Ors.* which is being dealt with today by a separate order.

5. After due consideration, the Tribunal held that to effectively monitor compliance of order dated 27.01.2021 in light of observation of the Hon'ble Supreme Court, monitoring at highest level in Delhi Administration was necessary. Accordingly, constitution of High Level Committee to be headed by LG, Delhi was directed and further progress report was sought by 31.01.2023. Some of the observations in the said order are reproduced below:-

> *"4.Thus, compliance of directions in order dated 27.1.2021 does not appear to have been ensured. The status of pollution of Yamuna was noted in the said order from report of YMC and it was found that violations were continuing and violators included the State authorities. Chief Secretaries of concerned States were directed to remedy the situation. It will suffice to refer to findings in paras 19 to 21 of the said order which are as follows:*
>
> > *"19. From the report of the Committee, it is clear that major problem of preventing pollution by discharge of sewage, industrial effluents and other pollutants remains unaddressed. This was so observed in para 18 the last order also, as quoted above in the paragraph 14. There is hardly any improvement in evolving meaningful and effective institutional mechanism for monitoring. Though IDMC is reported to have started functioning, tangible results are yet to be shown, as noted in the report of the YMC. The Committee has*

[1] https://www.dpcc.delhigovt.nic.in/home/monthly_analysis_report#gsc.tab=0

particularly found that 147 drains in the catchment of Najafgarh and Shahadra drains have not been tapped, as earlier directed. ***Against heading 6, dealing with repair and maintenance of drains, the Committee has noted huge gap in generation and treatment of sewage. The Committee has rightly recommended that all the drains in which untreated sewage is being discharged need to be intercepted and diverted so that the untreated sewage is not conveyed to the river. Such gaps need to be bridged in UP and Haryana also. The IDMC and DJB have to ensure this for Delhi.*** *The monitoring by Additional Chief Secretary and Chief Secretary Delhi in terms of order of the Hon'ble Supreme Court dated 24.07.2017 has yet to take place. Necessary devices for sewage and effluent treatment have still not been installed to the required extent. Inspite of availability of huge funds, DJB is not working in a professional manner, as observed by the YMC. Water quality remains highly deteriorated as pollutants are still being discharged into the drains. Flood plains are not being made encroachment free, affecting the riverine ecology. Awareness programmes are inadequate. Biodiversity parks and other measures have also been found to be inadequate.* ***Frothing frequently found is in absence of regulating composition of detergents, which find place in the river through sewage, for which action needs to be taken by DPCC/CPCB/Ministry of Consumer Affairs.*** *E-flow needs to be managed by resolving inter state issues administratively. Accountability needs to be enforced against failure of timelines which are being changed at leisure with no adverse consequences against non-performers.* ***Compensation regime needs to be strictly followed on 'polluter pays' principle which was not happening depicting failure of the regulators.*** *The observations in respect of authorities in Delhi equally apply to the States of Haryana and UP.*

20. There is, thus, need for continuous and effective working of the IDMC to plan and oversee prevention of untreated sewage being discharged in the drains or the river. Apart from discharge of sewage, there is need to stop industries from discharging effluents by concerned statutory authorities, including the DPCC. The issue of protection of flood plains by the DDA remains to be satisfactorily addressed even though steps are said to have been taken for constitution of a SPV for the purpose. ***Encroachment is huge and steps taken are miniscule. Meaningful working of SPV by DDA will depend on success to remove encroachment and keeping continuous vigilance****. Thus, on the part of concerned Authorities in the State of Delhi, Haryana and UP further actions in terms of the earlier orders of this Tribunal as well as the current recommendations of the Committee need to be taken, which may be overseen by the Chief Secretaries of concerned States on regular basis by constituting a cell of experts on the subject directly reporting to the Chief Secretary for meaningful monitoring in coordination with authorities like DDA, IDMC, DPCC, DJB etc.(in the context of Delhi).* ***Non-adherence to timelines must result in adequate and stringent action against accountable persons. Timely completion of projects must be ensured, otherwise for generations the problem will remain untackled, as vested interests will like the projects to remain pending and delayed to the detriment of the public interest. Interim measures like phytoremediation need to employed where permanent solution is delayed. Earlier directions of the Tribunal, which by and***

large remain un-complied so far, need to be strictly followed with meaningful coercive measures against the erring officers and the violators.

21. ***As already noted, the matter has been dealt with by the Hon'ble Supreme Court for 23 years, before transfer of the matter to this Tribunal in the year 2017 and by this Tribunal for almost nine years****. Finding inadequate compliance, the Tribunal constituted a Monitoring Committee on 26.07.2018 with the hope that day to day monitoring by an independent Committee may result in some improvement.* ***The Committee has functioned for more than two years and contributed in a big way in steering the authorities with a clear road-map by its exhaustive reports on every aspect but the authorities' action has been every time found to be inadequate and continues to be so****. This requires the authorities to change their attitude and rise to the occasion to discharge their Constitutional obligation to the citizens to provide clean environment by protecting the scarce sources of water by stringent steps against the erring officers and the violators and by effective monitoring at appropriate higher levels, reviewing/modifying the failed models and failed officers.* ***All the issues have been duly identified and categorical directions issued. Recommendations made for future compliance need to be taken up seriously by the concerned statutory and administrative authorities."***

5. The Tribunal disposed of the application with the observation that there has been judicial oversight of the matter for more than 23 years and issues stood identified and categorical directions were issued. It was directed that henceforth further monitoring be undertaken by the Chief Secretary, Delhi in coordination with other authorities in Delhi and similarly, by Chief Secretaries in Haryana and Uttar Pradesh as follows:

"23. Accordingly, we direct that in terms of directions of the Hon'ble Supreme Court and earlier orders of this Tribunal, henceforth ***the Chief Secretary, NCT of Delhi, in coordination with other authorities (such as, Additional Chief Secretary Urban Development, DDA, IDMC, DPCC, DJB) and the Chief Secretaries of Haryana and UP may personally monitor the progress, by evolving effective administrative mechanism to handle grim situation caused by years of neglect.*** *Causes of failure of existing mechanism and remedial measures required be addressed in the light of reports of the Committee. This needs to be further overseen at National level by the Central Monitoring Committee, headed by Secretary Jalshakti, which also includes NMCG and CPCB, in terms of earlier orders of this Tribunal. To give effect to the orders of the Hon'ble Supreme Court, the Tribunal has already directed constitution of River Rejuvenation Committees (RRCs) in all the States/UTs by order passed in OA No. 673 of 2018 in Re: News item published in "The Hindu" authored by Shri Jacob Koshy titled "More river stretches are now critically polluted : CPCB, to be headed by the Environment Secretaries of States/UTs, to prepare and execute action plans for restoration of the polluted river stretches, under the oversight of the Chief Secretaries of the States/UTs. Such action plans are already in place.* ***The RRCs of Delhi, Haryana and UP may accordingly monitor execution of the action plans with***

proper inter-departmental coordination, to remedy the polluted stretches of river Yamuna in their respective jurisdiction, subject to oversight of the Chief Secretaries on quarterly basis, who may thereafter give their quarterly reports to the Central Monitoring Committee (CMC) headed by the Secretary, Jal Shakti in terms of order dated 21.09.2020 in O.A. No. 673/2018, supra."

6&7……xxx……xxx……xxx

8. We may now mention the background of the proceedings which led to passing of order dated 27.1.2021. Cognizance of Yamuna pollution was first taken by the Hon'ble Supreme Court in the year 1994 in WP No. 725/1994, News Item "Hindustan Times" AQFM Yamuna v. Central Pollution Control Board & Anr. From 1994 till 24.04.2017, when the matter was transferred to this Tribunal for further consideration, the Hon'ble Supreme Court passed several orders in 23 years, including orders dated 4.8.2004, 27.2.2012 and 10.10.2012, (2012) 13 SCC 736[2]. By order dated 4.8.2004, a Committee headed by Secretary Urban Development, GoI with other concerned departments being members was constituted to oversee steps for bridging the gap in waste generation and treatment which was necessary for rejuvenation of Yamuna. By order dated 10.10.2012, it was noted that even after monitoring by the Hon'ble Supreme Court for 18 years (till then), there remained high level of fecal coliform (FC) and BOD (which situation continues even now after 11 years of the said order). The Hon'ble Supreme Court directed that 'C' category quality of water be achieved by preventing industrial/domestic pollution and all encroachments atleast upto 300 meters on both sides of the river be removed. There should be action plan covering all relevant issues for rejuvenation of river Yamuna. Finally, the matter was transferred to this Tribunal on 24.04.2017 for further consideration as in the meanwhile, the Tribunal had taken up the issue in petitions filed before it, including OA No. 06/2012, Manoj Mishra vs. Union of India & Ors.

9. Before above order dated 24.4.2017, the Tribunal passed orders including orders dated 13.01.2015 (2015 SCC Online NGT 840), 08.05.2015 (2015 SCC Online NGT 841). Further orders include those dated 07.12.2017 in OA 65 of 2016[3] and OA 76 of 2016[4], final order dated 27.1.2021 in OA6/2012, Manoj Mishra, as already noted. By order dated 13.01.2015, two reports of Expert Committees constituted by the Tribunal dated 19.04.2014 and 13.10.2014 were accepted and on that basis, directions were issued for preventing discharge of pollutants into the river, maintaining environmental flow, protecting flood plain zones by river front development activities and removing encroachments. The work was to be completed by 31.3.2017, including provision for 32 additional STPs for 32 major and minor drains, upgradation and maintenance of existing sewer network. Committee was constituted to oversee compliance comprising MoEF&CC; Ministry of Water Resources; Chief Secretary, Delhi Administration; Vice Chairman, DDA; Commissioner of all the Municipal Corporations; Commissioner, DJB; Secretary, Department of Irrigation, NCT of Delhi and concerned Secretaries of the States of Haryana, Uttar Pradesh, Himachal Pradesh and Uttarakhand to oversee execution of orders of Tribunal. By order dated 24.07.2017,

[2] News Item published in Hindustan Times titled "And Quite Flows the Maily Yamuna"
[3] Manoj Misra v. Delhi Development Authority & Ors.
[4] Pramod Kumar Tyagi Vs. Art of Living International Center & Ors.

constitution of Committee was modified to the effect that it will be headed by Secretary, Ministry of Water Resources (now Jal Shakti). Proceedings for execution continued before the Tribunal. By order dated 26.07.2018, the Tribunal after noting that the progress remained inadequate, constituted Yamuna Monitoring Committee (YMC) to be headed by former Chief Secretary, Ms. Shailja Chandra and also comprising former Expert Member of this Tribunal, Mr. B.S. Sajwan. The Committee took stock of the situation and gave its first report dated 16.01.2019 flagging the issues to be focused and noting that FC count was upto 6,400 times above the prescribed standards. Only 14% of the 1797 colonies had sewage pipelines. DDA had failed to remove the debris and secure the area by erecting barbed wire fencing. It had not undertaken demarcation of flood plains. Next order of the Tribunal is order dated 11.09.2019 dealing with all the micro issues by laying down exhaustive guidelines and directions and timelines as well as action to be taken for violation of the timelines. Timelines extended till 31.12.2020. Steps to be taken included tapping 147 drains not covered by interceptor (ISP) project and diverting them to STPs, connecting unsewered areas to STPs., recovery of sewage charges from all generators of sewage. Further, order dated 05.03.2020 was passed while considering YMC's 3rd report dated 05.02.2020 recommending single agency to deal with control of pollution in all the drains of Delhi and also single coordinating authority by DDA for:

- *Protection of the flood plain;*
- *Creation of wetlands at identified locations:*
- *Demolition plans and action taken to retrieve flood plain land and free it of encroachments,*
- *Enforcement against vehicles dumping debris in and around the flood plain*
- *Progress on financial devolution by the State of Uttar Pradesh on DDA to undertake*
- *Floodplain rejuvenation on the Eastern bank of the river,*
- *Progress of 10 identified projects which DDA had undertaken to complete by specific dates.*
- *Tree plantation drives,*
- *Closure of bore wells and plans for larger use of treated waste water dealt with in Chapter – 10, Use of Treated Waste Water.*

10. The Tribunal directed constitution of Special Purpose Vehicle (SPV) by DDA for management of flood plains and Integrated Drain Management Cell (IDMC) by Delhi Government under the Chief Secretary with representatives from other concerned agencies including the DJB, Delhi Municipal Corporation and Irrigation Department, not below the level of Chief Engineers.

11. Other orders of Hon'ble Supreme Court which have been referred to by the Tribunal in its earlier order dealing with pollution of river Yamuna will include judgment of Hon'ble Supreme Court in Paryavaran Suraksha Samiti & Anr. v. Union of India & Ors. (2017) 5 SCC 326 to the effect that under Article 243 W, 243X and 243 Y read with entry 6 of the 12th Schedule to the Constitution, onus to handle public health sanitation and waste management was on Municipalities, to be coordinated by Urban Developments of the States. Under the Water Act, preventing water pollution is responsibility of Pollution Boards by

enforcing consent conditions against concerned industries and local bodies. Pollution free environment being part of right to life, the States are under constitutional obligation to prevent pollution. It was directed that funding may be arranged by 31.3.2018 and pollution control devices be installed within three years from judgment i.e. 22.2.2017, failing which concerned Secretaries to the Government be prosecuted. NGT was directed to implement the judgment. In pursuance of order of Hon'ble Supreme Court, directing this Tribunal to monitoring compliance, the Tribunal dealt with the matter in OA No. 593/2017, Paryavaran Suraksha Samiti & Anr. v. Union of India & Ors. and several orders have been passed and last order being dated 22.02.2021. In OA No. 673/2018, In re: News item published in "The Hindu" authored by Shri Jacob Koshy titled "More river stretches are now critically polluted: CPCB, the Tribunal considered the issue of pollution of rivers and constituted a Monitoring Committee to be headed by Secretary, Ministry of Jal Shakti, NMCG and CPCB as its members at National level. Last order passed in the said matter is dated 22.02.2021.

12. Vide order dated 02.09.2014 in WP No. 888/1996, Almitra H. Patel Vs. Union of India & Ors., Hon'ble Supreme Court remitted the issue of solid waste management to this Tribunal which is currently being dealt with in OA No. 606/2018. Chief Secretaries of all States/UTs have been required to appear in person before NGT and directed to ensure that no untreated effluent/waste is discharged/dumped in water bodies/rivers. The Tribunal has also levied compensation @ Rs. 2 crore per MLD on States/UTs for gap in generation and treatment of sewage, on polluter pays principle, to be utilised for remedial measures in time bound manner. Some States have appeared while others have yet to appear. It will suffice to refer to order dated 10.11.2022 in OA No. 606/2018 with respect to State of Madhya Pradesh, particularly discussion in paras 38 to 46 on the subject which may need to be considered in the present context also.

13……xxx……xxx……xxx

14. Another significant development which has taken place is issuance of Notification dated 07.10.2016 – River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (Ganga Order, 2016) constituting statutory authorities for superintendence and control of pollution of Ganga and all its tributaries and drains and conferring statutory powers on such authorities. Para 6 of the order prohibits pollution of Ganga and its Tributaries and drains connected thereto. NMCG is main authority empowered to issue any directions and to monitor compliance. Yamuna is principal tributary of Ganga and all drains connected thereto are governed by the said orders. Any violation thereof is offence under the EP Act, 1986, apart from offences under Water Act and IPC. Violation of orders of this Tribunal is by itself offence under section 26 of the NGT Act. Order of this Tribunal is also executable as decree of civil court.

15. In the present application, it is suggested that following actions are critical for control of pollution of river Yamuna:

Sr. No.	***Actions***

1.	*Construction of 03 new Sewage Treatment Plants and 41 Decentralized Sewage Treatment Plants*
2.	*Rehabilitation of 3 existing Sewage Treatment Plants and upgradation of existing 16 Sewage Treatment Plants*
3.	*Trapping of all major drains out falling into river Yamuna*
4.	*Sewerage network in all 1799 unauthorised colonies and 630 JJ Clusters.*
5.	*Regulation of River Yamuna flood plain including removal of all encroachments/Dhobi Ghats*
6.	*Enforcement of Septage Management Regulations*
7.	*Utilisation of treated waste water*
8.	*Upgradation of 13 Common Effluent Treatment Plants*

16. In above background, we have pondered over the question as to how to enforce the order dated 27.1.2021, as directed by the Hon'ble Supreme Court. Substantial works remain unexecuted in terms of identified steps for rejuvenation of Yamuna. There is still huge gap in generation of sewage and available treatment facilities as shown by website of DPCC and as mentioned in the application. Estimated gap is said to be 194.5 MGD of sewage. Interception and diversion of about 147 drains (connected to Najafgarh and Shahdra drains) and other small drains joining bigger drains remains. Waste water from 1799 unauthorized colonies and 630 JJ clusters is reportedly going to Yamuna. Further, work of river front development projects by DDA remains incomplete, besides desilting/desludging of drains.

17. Having multiple authorities in Delhi may be one of the reasons for not achieving success so far. There appears to be lack of ownership and accountability. Huge amount has already spent without desired results. Judicial oversight has continued for almost 29 years. DDA has to take measures for protecting flood plain zones while drain owning agencies – DJB, Irrigation Department, Municipal Corporation etc. have to maintain drains free from pollution. IDMC was directed to be constituted with Chief Secretary as head to coordinate with the concerned departments. In terms of directions of the Hon'ble Supreme Court, 'C' category water quality is to be achieved in Yamuna and all its connected drains. Mandate of Water Act requires preventing any industrial or domestic waste to be discharged or dumped into any stream or water body. Punishable offences are provided not only in Water Act but also under IPC. DPCC does not appear to be taking coercive measures against erring industries or even local authorities who rampantly continue to discharge pollution in Yamuna and the drains. There does not appear to be any meaningful penal action taken against the violators. There is also huge unauthorized dumping of septage and even solid waste at different locations in absence of satisfactory management of sewage from unauthorized colonies which have been set up and later regularised without requisite infrastructure for sewage treatment to the detriment of citizens. There appears to be reluctance in collecting necessary charges

required for remedial measures and adopting effective methodology for prevention of pollution and availability of funds may be an excuse for not preventing pollution. Coercive and penal measures are not being taken against violators and erring officers. There is no meaningful engagement of citizens, who are the victims. While it is for authorities to devise strategies, available options may be business or other models with involvement of stake holders. Beautification of flood plain zones and dense plantations can add great value to the aesthetics of national capital which has international significance. Meaningful remedial action in Delhi can lead way to tackle polluted rivers in the country. One of the sources of funding is the NMCG. The Tribunal in the earlier orders entrusted monitoring to the Secretary, MoJS, DDA and the Chief Secretaries of concerned States. It does appear that the situation to a great extent remains unsatisfactory, in violation of judgment of the Hon'ble Supreme Court and orders of this Tribunal, fixing rigid timelines which are being defied at whims, without accountability and without visible improvement in ground situation. Thus, effective execution regime appears to be necessary with involvement of topmost administrative authorities with flexibility of procedures for award of works for execution of pollution prevention projects. Involvement of stake holders is also required. There may be need for relaxing procedural requirements like statutory clearances, without compromising on compliance of environmental norms. Only agencies with track record of performance in time bound manner instead of mere lowest bidders may have to be considered. DPR/tender processes need to be simplified and shortened. The service provider should be able to produce expected results within stipulated time. Accountability of the officers through whom the work is to be executed has to be ensured. Huge amount of public money has been already spent without much results and without accountability, as noted by Hon'ble Supreme Court in the context of Yamuna. Further expenditure has to be incurred with a sense of responsibility, ensuring tangible results. Comprehensive planning is required for taking suitable measures for reduction of pollution load by in-situ and ex-situ treatment strategies, prevention strategies and utilizing the treated water for non-potable purposes. There may be need to plant trees in coordination with the forest department on the flood plains of the river and buffer zones of the drains. There is need for comprehensive catchment area treatment plan and its execution which may include undertaking engineering, structural as well as biological measures. There is also need to consider utilization of treated sewage water for agriculture or other purposes, discouraging the use of chemical fertilizer and insecticides, to the extent viable. For maintaining and restoring ecological integrity of river Yamuna, eco technology may be used involving Ministry of Fisheries and Animal Husbandry. All other specific points are already mentioned in the order of the Tribunal dated 27.01.2021.

18. In the light of above discussion, we constitute High Level Committee (HLC) of concerned authorities in Delhi where pollution of Yamuna is higher (about 75%), compared to other river basin States. We request the Lieutenant Governor, Delhi, who is Chairman DDA and Administrator of Delhi under Article 239 of the Constitution, to head the Committee. Other members of the Committee will be Chief Secretary, Delhi, who will act as Convener, Secretaries, Irrigation, Forest and Environment, Agriculture, and Finance, Govt. of Delhi, CEO, DJB, Vice Chairman, DDA, Secretary or his nominee (not below the rank of Additional Secretary), Ministry of Agriculture, GoI, D.G. Forest or his nominee (not below the rank of DDG), MoEF&CC, GoI, Secretary, MoJS or

his nominee not below the rank of Additional Secretary, Secretary, MoEF&CC or his nominee not below the rank of Additional Secretary, DG NMCG and Chairman CPCB.

19. The Committee will deal with all issues as set out in order dated 27.1.2021 and other ancilliary matters mentioned above. It may also coordinate with all other departments, to the extent necessary. It may meet physically within one week and take stock of the situation with regard to the directions of the Tribunal, extent of compliance, extent of non-compliance, proposed remedial action for compliance of law, updated plan for compliance of directions, sources of funding, accountability for past failures, methodology for execution of the projects, timelines consistent with the spirit of orders of the Hon'ble Supreme Court and this Tribunal. After its first meeting, the Committee may continue to meet atleast once in every week for next six months so as to achieve tangible results within the said period. The Committee may consider opening separate dedicated account, hire dedicated subject matter experts, coordinate with and take on board existing departments, agencies and stake holders, civil society, including voluntary organisations. It may also set up its website and place its proceedings on the said website for information of all concerned and also to enable public participation.

20. The Committee will also be free to interact with corporates interested in their duty to the society and not merely in commercial interest. The timelines prepared be adhered to with laid down penal consequences against violations. Officers of rank of Chief Engineers, given responsibility, be named for fixing responsibility. The Committee may compile data of pollution as on 1.1.1994, 1.1.2012, 1.1.2017, 1.1.2019, 1.1.2021 and 1.1.2023. Thereafter, pollution graph may be prepared on quarterly basis with goal of substantial reduction by 1.7.2023. As already observed, planning may include all action points as per last report of YMC, incorporated in order of this Tribunal dated 27.1.2021, including plan for using treated water for agriculture, horticulture or industrial purposes, preventing discharge/dumping of any waste, protection of flood plain zones, maintaining e-flow, plantations, de-silting and dredging of drains and the river. MoJS and MoEF&CC may be consulted for norms for dredging and utilising dredged material for developing river front works. The Committee may explore provision for separate channels for carriage of sewage instead of mixing the same with storm water. Treated water may be used for non-potable purposes and not mixed with potable river water. The Committee may ensure that de-silt/de-sludged/dredged material is disposed of as per norms at the earliest, preventing re-entry in the river and damage to the flood plains.

21. Success of the Committee will be viewed by outcome in terms of reduction of pollution load and thus targets of the Committee should be measurable and identifiable. If experiment is successful at Delhi, it may help the country as a whole facing huge problem of water pollution. The Committee will be free to conduct proceedings online/hybrid as found necessary. It will also be free to undertake field visits.

22. The Committee may give its first report by 31.01.2023 by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image/PDF."

6. It may be further mentioned that in the order dated 27.1.2021, the Tribunal referred to earlier orders including order dated 11.09.2019 which dealt with all micro issues. The Hon'ble Supreme Court, referring to the said order in **(2019) 10 SCC 104** directed levy and recovery of sewage charges as per order of this Tribunal dated 11.09.2019 within two months. The Delhi High Court, considering the said order, vacated stay against removal of encroachments form flood plain zones **vide order dated 24.10.2019 in *L.P.A. No. 681/2019, DDA v. Yamuna Khadar Slum Union & Ors***. For ready reference said extract from para 5 of order dated 27.1.20211 is reproduced below:

> *"The second report of the Committee dated 25.07.2019 followed by Supplementary Report dated 13.08.2019 was dealt with vide a detailed order dated 11.09.2019.* ***The said order dealt with all the micro issues by laying down exhaustive guidelines and directions and timelines as well as action to be taken for violation of the timelines. The directions included reiteration of recovery of sewage charges from all generators of sewage****. Since the earlier order of the Tribunal dated 8.5.2015 was under challenge before the Hon'ble Supreme Court to the extent of requiring Electricity Supply Companies to recover the charges, vide order dated 11.09.2019, the Tribunal allowed Delhi Government to evolve any other mechanism for recovery. The Hon'ble Supreme Court vide judgment dated 24.10.2019,* ***(2019) 10 SCC 104***[5]*, directed levy and recovery of sewage charges as per order of this Tribunal dated 11.09.2019 within two months. A Division Bench of the* ***Delhi High Court vide order dated 24.10.2019 in L.P.A. No. 681/2019, DDA v. Yamuna Khadar Slum Union & Ors****., vacated stay against removal of encroachments, after referring to the order of this Tribunal dated 11.09.2019. Further order dated 22.1.2020 was passed by the Tribunal to explore in-situ remediation techniques as supplement to STP systems."*

7. In pursuance of above, reports have been filed by Delhi Government on 31.1.2023 and CPCB on 15.2.2023. Report of the Delhi Government mentions the meeting held by the High Level Committee headed by the LG Delhi and preparation of action plan with assigned responsivities and monitoring mechanism.

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[5] TATA Power Delhi Distribution Limited, NDPL House v. Manoj Mishra & Ors.

8. The Chief Secretary, Delhi is present in person in connected matter being O.A. No. 606/2018 dealing with the issue of solid and liquid waste management in Delhi.

9. Relevant extracts from the compliance report filed by Delhi Government are reproduced below:-

> *"4. That, the aspects of trapping and treatment of all sewage/ industrial effluents generated in Delhi, enforcement of Delhi Water Board Septage Management Regulations 2018, regulation of River Yamuna Flood Plains and usage of treated water was discussed by the High-Level Committee. A detailed Action Plan was deliberated at length and finalized by the High-Level Committee. The I-LL,C finalized the Action Plan, including but not limiting to treatment of all sewage generated in Delhi, trapping of all major drains out falling into river Yamuna, extending sewerage network in all unauthorized colonies and JJ Clusters, regulation of River Yamuna Flood Plain including removal of all encroachments / Dhobi Ghats, enforcement of Delhi Water Board Septage Management Regulations 2018, utilization of treated STP water, upgradation of 13 Common Effluent Treatment Plants treating industrial effluents, etc.*
>
> ***A: 100% Treatment of Sewage generated [Gap in Treatment = 238 MGM***
>
> i. ***Completion of construction of 03 New Sewage Treatment Plants:***
> ii. ***Completion of construction of 40 New Decentralised STPs*** *with total capacity of 92 MGD.*
> iii. ***Completion of rehabilitation of three existing STPs with 70 MGD capacity.***
> iv. ***Upgradation of existing 18 STPs*** *to create Additional Capacity of 93.5 MGD.*
>
> ***B. Trapping of all drains out falling into river Yamuna, including trapping of sub-drains:***
>
> i. ***Desilting of Existing Drains***
> ***Major Drains:***
> ***Sub Drains:***
> ii. ***Performance Audit of completely trapped 11 major drains and all sub-drains***
> iii. ***Extending Sewerage Network in all 1799 Unauthorised Colonies***
> ***and 639 JJ Clusters.***
> ***Unauthorised Colonies (1799 Nos.)***
> ***JJ Clusters (639 Nos.)***
>
> ***C. Upgradation of 13 Common Effluent Treatment Plants (CETPs),***

D. Enforcement of Delhi Water Board Septage Management Regulations 2018

E. Regulation of River Yamuna Flood Plain including removal of all Encroachments / Dhobi Ghats.

i. ***Restorative Projects of DDA in Yamuna Floodplains***
ii. ***Removal of encroachments.***

F. Utilisation of Treated STP Water.

A summary of timelines for next 6 months for works to be carried out as finalized by HLC.

5. In addition to above other decisions were also taken by the High-Level Committee, which are as follows:

A. Meetings of the HLC

The HLC decided that an alternate weekly meeting of the HEX may be chaired by the Chief Secretary / Convener of HLC (physical-cum-virtual meeting). Hon'ble Lt. Governor will take fortnightly meeting (physical meeting only).

B. Monitoring of projects through Delhi's e-Pragati Dashboard

The HLC also decided that IT Department of GNCTD shall add all the above-mentioned actionable points on Delhi's e-Pragati Dashboard for the purpose of monitoring. Such Dash Board shall be operationalised within a fortnight.

C. Company of Territorial Army to be provided by NMCG to DPCC DG *NMCG informed that a company of territorial army would be placed under the DPCC for ensuring ground level enforcement and monitoring for the purpose of identifying (if any left-out) all the drains / sub-drains which are yet to be trapped, enforcement of Delhi Water Board Septage Management Regulations 2018, convincing people not to through their waste in drains, etc. Accordingly, HLC asked DG NMCG to take appropriate action to provide such company of Territorial Army to DPCC at the earliest.*

D. Development of Bio-diversity Park by NMCG

NMCG offered to develop a Bio-Diversity Park in River Yamuna Flood Plains in case DDA allots a land of appropriate area to it for this purpose. Accordingly, HLC decided that the DDA may identify and allot a piece of land at River Yamuna Flood Plains to NMCG latest by 15.02.2023 for development of a bio-diversity park by NUCG.

E. Committee to identify and hand over land to DJB and NMCG

HLC also decided to constitute a Committee under Chairmanship of Divisional Commissioner, Revenue Department of GNCTD with Pr. Secretary (Forest and Environment); VC DDA; and CEO DJB to resolve all land related matters (like identification and handing over land to DJB / NMCG for setting up of STPs / De-centralized STPs, Biodiversity park, etc.) and the Committee shall ensure identification and handing over the requisite land parcels to DJB or NMCG, as the case may be, within a fortnight.

F. Campaign for Awareness and Involvement of Public

The HLC also decided that the DJB, DPCC, I&F Control and DDA shall initiate an IEC campaign for awareness as well as involvement of the public at large in this initiative to restore old glory of river Yamuna. A detailed IEC plan in this regard including an annual calendar of IEC activities shall be submitted by all agencies to the Convenor of this HLC within a fortnight including mechanisms for implementation and monitoring of IEC identifying the key behaviours in conservation and rejuvenation of river Yamuna; messages to be used for these key behaviours; stakeholder groups to be addressed; the medium through which these messages will be conveyed; and influencers who will communicate these messages, employing an appropriate channel mix of mass media, print, outdoor publicity, capacity building/awareness workshops, competitions, and digital media.

G. Responsibilities and Liabilities

To ensure clarity in ownership of work, clear responsibilities, complete adherence to deadlines and the accountability of officers directly dealing with it, the HLC decided that the Nodal officers indicated in annexures 1 to 16 with respect to each project shall be personally responsible for ensuring completion of the project within the abovementioned timelines, and any failure of such nodal officer to ensure execution of the projects / works / responsibilities within the timeline stipulated in the action plan as finalized by the HLC will make such nodal officer liable for disciplinary as well as criminal proceedings for wilful disobedience of the orders passed by the Hon'ble Courts, this HLC and also for criminal disregard towards environmental quality of the river Yamuna as well as their failure to discharge their constitutional obligation to the citizens to provide clean environment by protecting the scarce sources of water.

6. That subsequent to the HLC meeting dated 20.01.2023, the Chief Secretary, Delhi passed an order dated 27.01.2023. Copy of the order dated 27.01.2023 passed by the Chief Secretary, Delhi alongwith department wise action plan, summary of time lines and list of attendees of the High Level Committee dated 20.01.2023 is enclosed herewith as ***Annexure-1."***

10. In the annexed Office Order issued by the Chief Secretary dated 27.01.2023, some extracts from the order are as follows:-

> ***"3.1. 100% Treatment of Sewage generated [Gap in Treatment = 238 MGD]***
>
> ***3.1.1. Completion of construction of 03 New Sewage Treatment Plants at:***
>
> *i. Okhla (Total 124 MGD Capacity, 30 MGD capacity addition) by June 2023*
> *ii. Sonia Vihar (7 MGD capacity) by September, 2023*
> *iii. Delhi Gate (10 MGD capacity) within 12 months and matter of allotment of land shall be resolved by all concerned by 31.01.2023.*
>
> ***3.1.2. Completion of construction of 40 New Decentralised STPs with total capacity of 92 MGD (List of 40 DSTPs as per Annexure-3.)***
>
> *i. 29 Decentralized STPs with total capacity of 57.57 MGD by December. 2023;*
> *ii. For 11 Decentralized STPs having total capacity of 32.43 MGD. land is yet to be allotted by DDA and these STPs to be completed within 12 months, land related issues shall be finalised within a fortnight by DDA/ Revenue Departments.*
>
> ***3.1.3. Completion of rehabilitation of three existing STPs with 70 MGD capacity at:***
>
> *i. Kondli Phase — II: 25 MGD capacity by June, 2023*
> *ii. Rithala Phase — I: 40 MGD capacity by June. 2023 and*
> *iii. Yamuna Vihar Ph-H: 15 MGD capacity by September. 2023*
>
> ***3.1.4. Upgradation of existing 18 STPs*** *to create Additional Capacity of 93.5 MGD be completed (75 MGD capacity by Dec. 2023 and remaining 18.5 MGD capacity by March. 2024).*
>
> ***3.2. Trapping of all drains out falling into river Yamuna, including trapping of sub-drains***
>
> ***Desilting of Existing Drains***
>
> *It has been noted with concern that no desilting of existing drains network has been carried out in the recent past. As a result most of the drains are either completely choked or functioning with 10-15% of their designed flow. Hence a major desilting drive must be undertaken. Out of an approximate 200 km of trunk/peripheral sewerage held with DJB. 90.34 Km of desilting will be completed by June, 2023 from the ongoing contract. In addition, fresh contract*

will be done for remaining 110 km at the earliest. The entire desilting will be completed by September 2023.The status of the drain pre and post-desilting will be video recorded along with the testimony of the concern official monitoring the process. Independent audit of the desilting will be carried out post execution of the work.

3.2.1. Major Drains: *Out of 18 major drains out falling into river Yamuna in Delhi stretch, trapping of 11 drains has been completed which are as follows:*

a) Magazine Road Drain
b) Sweeper Colony Drain
c) Khyber Pass Drain
d) Metcalf House Drain
e) Tonga Stand Drain
f) Moat Drain (Vijay Ghat)
g) Civil Military Drain
h) Drain No 14
i) Tughlaqabad Drain
j) Kalkaji Drain
k) Tehkhand Drain

The following timelines to be followed for trapping of remaining major 7 drains:

i. 02 major Drains (Delhi Gate Drain and Sen Nursing Home Drain) are partially trapped.

(a) DJB shall construct 10 MGD STP to trap the remaining flow in the Delhi Gate Drain within 12 months and matter of allotment of land shall be resolved by all concerned by 31.01.2023.
(b) Sen Nursing Home Drain has been trapped into Sen Nursing Home STP as well as into the Ring Road trunk sewer. However. some marginal flow/ overflow still passes during peak hours. DJB to take measures to stop this marginal flow by desilting the drain and proper operation of Ring Road trapping by March 2023.

ii. 02 major Drains (i.e.. Najafgarh & Shandara) are included in the Interceptor Sewer Project (ISP) where substantial flow of sub-drains under their command areas have already been trapped / intercepted. Both these drains are large drains and cannot be trapped technically, therefore,

(a) 74 Un-trapped sub-drains [44 in Najafgarh Drain and 30 in Supplementary Drain (which is sub drain of Najafgarh drain)] to be intercepted by October 2023.
(b) 2 Un-trapped sub-drains of Shandara Drain to be intercepted by June. 2023,

iii. For remaining 03 major drains. the flow will be trapped as per details below:

(a) *Mori Gate Drain — 9.51 MGD Flow to be trapped by Sep, 2023*
(b) *Barapulla Drain — 31.97 MGD Flow to be trapped by Sep., 2023*
(c) *Maharani Bagh Drain — 6.66 MGD Flow to be trapped by Sep.. 2023*

3.2.2 Sub Drains:

i. *Interceptor Sewer Project* ***(ISP) —*** *Full trapping and treatment of 242 MGD wastewater to be completed by DJB by June. 2023.*
ii. *Details of un-intercepted sub drains out falling into Najafgarh Drain. Supplementary Drain and Shandara Drain are at* ***Annexure-7, Annexure-8*** *and* ***Annexure-9*** *respectively.*
iii. *Action plan for 70 un-trapped sub drains as per schedule below:*

(a) *06 sub-drains by end of January, 2023 (falling in Najafgarh drain);*
(b) *03 sub-drains by end of February, 2023 (1 falling in Najafgarh drain and 2 are falling in Supplementary drain):*
(c) *11 sub-drains by end of March. 2023* ***(4*** *falling in Najafgarh drain and 7 are falling in Supplementary drain);*
(d) *04 sub-drains by end of April, 2023* ***(4*** *are falling in Supplementary drain):*
(e) *02 sub-drains by end of May. 2023 (1 falling in Najafgarh drain and 1 is falling in Supplementary drain);*
(f) *20 sub-drains by end of June, 2023 (4 falling in Najafgarh drain, 02 falling in Shandara Drain and 14 falling in Supplementary drain);*
(g) *1 sub-drain by end of Sep. 2023 (1 falling in Supplementary drain);*
(h) *22 sub-drains by end of Oct, 2023 (falling in Najafgarh drain);*
(i) *01 sub-drain by end of Oct, 2023 (falling in Supplementary drain).*

iv. *Additional non-Recorded Sub Drains*

It has been noticed that there are many illegal sub drains which are not in the official records of the drain owning agencies but are falling into the Main Drain. All drain owning agencies of the 18 main drains out falling into Yamuna will carry out physical inspection of their drains and ascertain these additional non recorded sub drains. The records will be updated by February. 2023 and action plan of trapping/closing these drains will be finalized by March, 2023.

3.2.3. Performance Audit of completely trapped 11 major drains and all sub-drains

DJB to undertake the Performance Audit of completely trapped 11 major drains and all sub-drains through an independent agency by February 2023. Simultaneously a multidisciplinary team of DJB, MCD, Irrigation & Flood Control department may be tasked to undertake internal audit.

3.3. Extending Sewerage Network in all 1799 Unauthorised Colonies and 639 JJ Clusters (List at Annexure-10)

3.3.1. Unauthorised Colonies (1799 Nos.)

i. *Sewer line laid and notified in 747 unauthorised colonies by Dec, 2022*
ii. *Work of sewer network is in Progress in 573 unauthorised colonies to be completed by Dec, 2023.*
iii. *Out of 161 unauthorized colonies. 123 awaiting NOC/Clearance from Forest, ASI and 0 Zone will be completed within 12 months of obtaining clearances but not later than June. 2024.*
iv. *318 unauthorised Colonies where sewerage network is to be laid along with Decentralized STPs to be completed by 08 month after allotment of land/ receipt of NOC.*

3.3.2. JJ Clusters (639 Nos.)

i. *558 JJ Clusters already connected with sewer lines.*
ii. *Other 16 JJ Clusters are feasible to connect with sewer line and will be connected by June, 2023.*
iii. *For remaining 65 JJ Clusters. where it is not feasible to connect them with sewer lines. therefore. decentralized modular/ prefabricated DSTP to be installed by DJB by June. 2023 with the support of NMCG.*
iv. *Details of such un-trapped 81 JJ clusters is at* ***Annexure — 11.***

v. *DUSIB shall reconcile and finalise the list of Unauthorised Colonies and JJ clusters available with DJB. Action Plan for these left out Unauthorised Colonies and JJ Clusters shall be prepared and submitted to convenor within a fortnight*

3.4. Upgradation of 13 Common Effluent Treatment Plants (CETPs), list of which is at Annexure-12.

i. *CETP at Narela (DSIIDC) will be upgraded by December, 2023;*
ii. *CETP at Bawana (DSIIDC) will be upgraded by December. 2023:*
iii. *DSIIDC informed that remaining 11 CETPs are being handed over by Industries Department of GNCTD to DJB. However, it was decided that DSIIDC shall*

discuss this issue with DJB once again to decide finally who (DSIIDC / DJB) is the appropriate authority for upgradation and O&M of these CETPs, especially after considering the fact that sewage to be treated in STPs and CETPs is of different nature and composition. A joint report be submitted by CEO, DJB and MD, DSIIDC recommending `way forward' (including the appropriate authority (i.e. DJB or DSIIDC and timelines) for upgradation of such 11 CETPs to the Convenor of this HLC within a fortnight for taking final decision in this regard.

iv. *DPCC should carry out a thorough inspection of all the Industrial Colonies and take strict action against violating units like sealing/disconnection of power supply of defaulters on regular basis. at least once in a fortnight.*

3.5. Enforcement of Delhi Water Board Septage Management Regulations 2018

It was decided by HLC to constitute a Committee under the Chairmanship of Divisional Commissioner, Revenue Department, GNCTD and consisting of CEO. DJB: Commissioner MCD as members; and Secretary. Urban Development Department, GNCTD as member-cum-convenor of this Committee, to revisit the Delhi Water Board Septage Management Regulations 2018 to make them more effective & enforceable. The Committee will submit its report latest by 15.02.2023 to the Convenor of this HLC.

It was informed that at present there are 196 vehicles that have been given license by DJB for Collection of septage. With the sewage network getting extended to unauthorized colonies and JJ Colonies, gradually these numbers should reduce. Accordingly, it has been directed to reduce these vehicles from existing 196 to 150 by June,2023. The vigil against illegal/unauthorized vehicle dumping the septage in water bodies etc must be enhanced through CCTV coverage and random checking. Strict action against defaulters will be undertaken inclusive of the vehicle carrier as well as the colonies contributing the septage.

3.6. Regulation of River Yamuna Flood Plain including removal of all Encroachments / Dhobi Ghats, List of which is at Annexure-14.

3.6.1. Restorative Projects of DDA in Yamuna Floodplains

i. *Asita East (Part B) to be completed by 31.03.2023;*
ii. *Asita West to be completed by 30.06.2023;*
iii. *Kalindi Biodiversity Park (remaining work) to be completed within 9 months after the completion of on-going NHAI project, by CEMDE:*
iv. *Amrut Bio Diversity Park (90 Ha. on Eastern Bank) to be completed by 31.03.2023 by DDA:*

v. *Amrut Bio Diversity Park (18 Ha. On Western Bank) to be completed by 22.05.2023 by DDA:*
vi. *Amrut Bio Diversity Park (Remaining 8.25 Ha.) to be completed by 31.12.2024 by CPWD:*
vii. *Wazirabad to Old Railway Bridge — Western Bank (Qudsia Ghat -16 Ha.) to be completed by April 2023 by INTACH:*
viii. *Wazirabad to Old Railway Bridge — Western Bank (Sur Ghat —13.6 Ha.) to be completed by July 2023 by INTACH:*
ix. *Wazirabad to Old Railway Bridge — Western Bank (Eco Trail — 33 Ha.) to be completed by 31.12.2023 by INTACH:*
x. *Wazirabad to Old Railway Bridge — Western Bank (Yamuna Bazar Area — 3.4 Ha.) to be completed by 31.12.2023 by INTACH:*
xi. *Yamuna Vanasthali — 236.5 Ha to be completed by 31.05.2023 by DDA;*
xii. *Mayur Nature Park (Part A: 235 Ha.) to be completed by DDA (Case before Hon'ble High Court Case is pending and next date of hearing is 13.02.2023):*
xiii. *Mayur Nature Park (Part B: 162.75 Ha.) to be completed by DDA / UP Irrigation Department (Case before Hon'ble High Court Case is pending and next date of hearing is 30.01.2023);*
xiv. *Eco Tourism Area (30 Ha.) (22.7 Ha with DDA and 7.3 with DTC): Land has been taken back from IPGCL. Case before Hon'ble High Court Case is pending and next date of hearing is 15.03.2023 - Proposal will be taken once the 0-11 is finalised after notification of MPD 2041).*
xv. *Hindan Sarovar (Part A: 15 Ha.) to be completed by 31.12.2023 by DDA;*
xvi. *Hindan Sarovar (Part B: 30 Ha.) to be completed by 31.12.2023 by DDA*

3.6.2. Removal of encroachments, List of which is at Annexure-15.

i. *Asita East (UP) — Out of 107 Ha., 50.24 Ha. has already been repossessed. Further, 21 Ha. has already been transferred by UP Irrigation Department to PWD, GNCTD. The following be submitted to the Convenor of this HLC by PWD latest by 31.01.2023:*
   a. *Action taken by PWD w.r.t. such 21 Ha. area received from UP's Irrigation Department;*
   b. *Action taken w.r.t. remaining 29.24 Ha. land with UP's Irrigation Department;*
   c. *Action taken for repossessing the remaining 56.76 Ha. land by PWD / Irrigation Department.*
ii. *out of 100 Ha. of Kalindi Aviral. 0.81 Ha. area has been repossessed and 'nil' area is to be repossessed. Therefore, status of remaining 99.19 Ha. area be submitted;*

iii. *out of 115 Ha. of Kalindi Biodiversity Park, 2.5 Ha. area has been repossessed. Therefore. status of remaining 112.5 Ha. area be submitted;*
iv. *out of 200 Ha. of Asita West, 176.19 Ha. area has been repossessed and 5 Ha. area is to be repossessed. Therefore, status of remaining 18.81 Ha. area be submitted:*
v. *out of 116.25 Ha. of Amrut Bio Diversity Park. 91.5 Ha. area has been repossessed and 1 Ha area is to be repossessed. Therefore, status of remaining 24.75 Ha. area be submitted;*
vi. *out of 236.5 Ha. of Yamuna Vanasthali. 101.03 Ha. area has been repossessed and 5 Ha. area is to be repossessed. Therefore, status of remaining 130.47 Ha. area be submitted:*
vii. *out of 235 Ha. of Mayur Nature Park, 23.02 Ha. area has been repossessed and 'yet to be assessed' area is to be repossessed. Therefore, status of remaining 211.98 Ha. area be submitted;*

The above-mentioned details be submitted by DDA and PWD, as the case may be, along with action plan (with timelines) for (a) repossessed area and (b) repossessing the remaining area. to the Convenor of this HLC within a fortnight.

DDA shall submit the total floodplain area along with break-up of the same in restorative projects, encroachments. department-wise area allocated and the river surface area with geocoordinates. Action plans for removal of encroachment parcel-wise shall be submitted to convenor within a fortnight.

Mass Plantation Drive: The DDA will undertake a major plantation along these vulnerable stretches of this flood plains. The plan will be submitted by March 2023 and will be implemented by December 2023.

Special Drive to tackle unauthorized/illegal unfailing drains/nallah in to Yamuna:

It was observed that since DDA is the custodian of the Yamuna flood Plain it is its sole responsibility of carrying out a special drive to tackle any unauthorized/illegal out-falling drains in to Yamuna. On record, there are only 18 outfalling drains. Hence any other drain should be considered as illegal/unauthorized and must be traced back to in origin along with the identification of responsible agency. The complete report to be submitted by February 2023. Further. all such identified illegal/unauthorized drains/nallah flowing in river Yamuna must be diverted/closed after taking necessary remedial measures. The time line for the same will be shared by April 2023.

3.7. Utilisation of Treated STP Water, List of which is at Annexure-16.

i. *Quantum of Available Treated STP Water — 530 MGD*
ii. *Mandatory Return Flow in River Yamuna — 267 MGD (As per the orders of Hontle Supreme Court)*
iii. *Present Use of Treated STP Water — About 90 MGD (mainly for horticulture purposes)*
iv. *Proposed Use of Treated STP Water — 70 MGD at Coronation Pillar is to be converted into 'C' Class Inland Surface Water by Ultra Filtration process to be discharged in river Yamuna about 8.60 Kilometre upstream of Wazirabad. This is to be completed by June. 2024.*
v. *Use of remaining 103 MGD Treated STP Water*

(a) For Development / Rejuvenation of Lakes:
- i. *40 MGD for Pappankalan (20 MGD — Commissioned) and Nilothi (20 MGD - Completed and will be commissioned by Feb, 2023:*
- ii. *15 MGD for Smiriti Van / Lake and nearby areas (10 MGD) and Najafgarh (5 MGD) by March. 2023;*
- iii. *15 MGD for Rohini Lake No. 1 by August. 2023:*
- iv. *10 MGD for Sanjay Lake by September. 2023:*
- v. *35 MGD for Okhla (20 MGD) and Rohini Lake No. 2 (15 MGD) by December, 2023*

(b) DJB shall submit the plan to use treated STP Water in other usages, like in Farmhouses, Golf courses, construction activities, etc. and have already made available treated water at its STPs @ Rs 7 / Kilolitres.

And whereas. a summary of timelines for next 6 months for works to be carried out as finalized by HLC, is at ***Annexure - 17.***

4. Other decisions taken by the High-Level Committee:
4.1. Meetings of the HLC
And whereas, the HLC decided that an alternate weekly meeting of the HLC may be chaired by the Chief Secretary / Convener of HLC (physical-cum-virtual meeting). Hon'ble Lt. Governor will take fortnightly meeting (physical meeting only).

4.2. Monitoring of projects through Delhi's e-Pragati Dashboard

And whereas, the HLC also decided that IT Department of GNCTD shall add all the above-mentioned actionable points on Delhi's e-Pragati Dashboard for the purpose of monitoring. Such Dash Board shall be operationalised within a fortnight.

4.3. Company of Territorial Army to be provided by NMCG to DPCC

And whereas, DG NMCG informed that a company of territorial army would be placed under the DPCC for ensuring ground level enforcement and monitoring for the purpose of identifying (if any left-out) all the drains / sub-drains which are yet to be

trapped, enforcement of Delhi Water Board Septage Management Regulations 2018. convincing people not to through their waste in drains, etc. Accordingly. HLC asked DG NMCG to
take appropriate action to provide such company of territorial army to DPCC at the earliest.

4.4.Development of Bio-diversity Park by NMCG

And whereas, NMCG offered to develop a Bio-Diversity Park in River Yamuna Flood Plains in case DDA allots a land of appropriate area to it for this purpose. Accordingly, HLC decided that the DDA may identify and allot a piece of land at River Yamuna Flood Plains to NMCG latest by 15.02.2023 for development of a bio-diversity park by NMCG.

4.5. Committee to identify and hand over land to DJB and NMCG

And whereas. HLC also decided to constitute a Committee under Chairmanship of Divisional Commissioner, Revenue Department of GNCTD with Pr. Secretary (Forest and Environment); VC DDA: and CEO DJB to resolve all land related matters (like identification and handing over land to DJB / NMCG for setting up of STPs / De-centralized STPs, Bio-diversity park. etc.) and the Committee shall ensure identification and handing over the requisite land parcels to DJB or NMCG, as the case may be, within a fortnight.

4.6.Campaign for Awareness and Involvement of Public
*And whereas, the HLC also decided that the DJB, DPCC, **I&F** Control and DDA shall initiate an IEC campaign for awareness as well as involvement of the public at large in this initiative to restore old glory of river Yamuna. A detailed IEC plan in this regard including an annual calendar of IEC activities shall be submitted by all agencies to the Convenor of this HLC within a fortnight including mechanisms for implementation and monitoring of IEC identifying the key behaviours in conservation and rejuvenation of river Yamuna; messages to be used for these key behaviours; stakeholder groups to be addressed: the medium through which these messages will be conveyed: and influencers who will communicate these messages, employing an appropriate channel mix of mass media, print outdoor publicity, capacity building/awareness workshops, competitions, and digital media.*

4.7. Responsibilities and Liabilities

And whereas, to ensure clarity in ownership of work. clear responsibilities. complete adherence to deadlines and the accountability of officers directly dealing with it, the HLC decided that the Nodal officers indicated in Annexures 1 to 16 with respect to each project shall be personally responsible for ensuring completion of the project within the above-mentioned timelines, and any failure of such nodal officer to ensure execution of the projects / works / responsibilities within the timeline stipulated in the action plan as finalized by the HLC

will make such nodal officer liable for disciplinary as well as criminal proceedings for wilful disobedience of the orders passed by the Hon'ble Courts, this HLC and also for criminal disregard towards environmental quality of the river Yamuna as well as their failure to discharge their constitutional obligation to the citizens to provide clean environment by protecting the scarce sources of water."

11. We have noted from the presentation filed in O.A. No. 606/2018 that even after having installed capacity for sewage treatment being 632 MGD, treatment capacity utilization is only 530 and thus there is gap of 238 MGD. This gap may be duly considered and addressed by the Committee.

12. The Committee may also look into the quality of water discharged in Yamuna from the STPs.

13. CPCB was directed to monitor water quality at inter state borders and compile results apart from data about quality of effluents drained into river Yamuna. According to CPCB report, DO at the point of entry of river Yamuna in Delhi is meeting the criteria. BOD water quality criteria is however not being met but concentration of BOD and fecal coliform increases after entering into Delhi. Water quality of data of drains at interstate locations has been given at Palla and Asgarpur and also in 24 drains joining Yamuna. Status of sewage treatment plants is also mentioned. Major findings at the end of the report are reproduced below:-

"5.0 MAJOR FINDINGS

From the analysis and observations of the water quality of river Yamuna at interstate locations, drains and status of compliance of STPs in Delhi, it is concluded that:

1. *Water quality of river Yamuna is meeting the criteria when it enters in Delhi at Palla from Haryana. However, water quality deteriorates as it exits Delhi at Asgarpur. This indicates the contribution of pollution in river Yamuna in Delhi due to discharge of untreated/ partially treated domestic and industrial waste water through 24 drains.*

2. *Compliance status of STPs show that out of 35 STPs, 23 are non-complying consistently w.r.t the prescribed norms of DPCC for all parameters during April-December 2022 namely Coronation Pillar I & II, Ghitorni, Keshopur Phase- II, Keshopur Phase- III, Kondli Phase- I, Kondli Phase-II, Kondli Phase-IV, Mehrauli, Molarband, Najafgarh, Narela, Nilothi Phase-I, Okhla Phase-II, Okhla Phase-III, Okhla Phase- IV, Okhla Phase-V, Pappankalan Phase I, Rohini, Vasant Kunj Phase-I, Vasant Kunj- Phase II, Yamuna Vihar Phase-I, Yamuna Vihar Phase-II, Yamuna Vihar Phase- III."*

14. The above report is taken on record, remedial action for which may now be considered by the Committee headed by LG Delhi. CPCB is directed to monitor performance of STPs in Delhi, Haryana and UP including the drains joining river Yamuna on quarterly basis. First report be filed as on 31.03.2023 by 30.04.2023. The Committee may now deal with all related issues of Yamuna cleaning and sewage management in Delhi.

15. Status report has also been filed by Haryana Government on the issue of status of compliance of earlier order of this Tribunal dated 27.01.2021 relating to pollution of river Yamuna particularly the stretch in Haryana which shows that there is discharged of 540 MLD, untreated effluents in 11 drains connected to Yamuna in Haryana as follows:-

Sr. No.	***Name of Drain***	***Town***	***Qunatum of treated effluent***	***Quantum of untreated effluent***	***Total***
1	*Dhanaura Escape*	*Yamuna Nagar*	*42*	*66*	*108*
2	*Drain No.2*	*Panipat*	*84*	*10*	*94*
		Karnal	*215*	*22*	*237*
3	*Drain no. 6*	*Sonepat*	*64*	*34*	*98*
4	*Entry point of Mungeshpur drain in Delhi Territory,*	*Bahadurgarh*	*20*	*31*	*51*
5	*Entry point of KCB drain in Delhi Territory,*	*Bahadurgarh*	*7*	*27*	*34*
6	*Entry point of Drain No. 8 in Delhi Territory,*	*Bahadurgarh*	*10*	*24*	*34*
		Panipat	*21*	*70*	*91*
7	*Leg **I** Drain*	*Gurugram North*	*0*	*9*	*9*
8	*Leg II Drain*	*Gurugram North*	*0*	*19*	*19*
9	*Leg III (Badshpur) Drain*	*Gurugram South*	*408*	*62*	*470*
10	*Budhiya Nala*	*Faridabad*	*25*	*68*	*93*
11	*Gaunchi Drain*	*Ballabgarh*	*8*	*98*	*106*
		Palwal	*17*	*0*	*17*
Total			***921***	***540***	***1461***

16. Further, estimation of sewage generation in Haryana for Yamuna catchment in 34 towns has been mentioned showing gap of 240 MLD in installed capacity and generation. It is stated that STPs are being constructed to bridge the said gap by 31.12.2023. Conclusion in the report is as follows:-

> *"**14. Conclusion***
>
> *i. The overall water quality has improved in comparison to previous year though lot of work is yet to be done to achieve the objectives.*
> *ii. The 11 drains carry 921 MLD treated and 540 MLD untreated effluent. As per action plan submitted the entire effluent likely to be treated by the year 2027.*
> *iii. During last 01 year, 33 MLD STPs have been constructed and commissioned and 3 STPs of 30 MLD capacity have been upgraded to achieve stringent norms.*
> *iv. 25 STPs of 469 MLD capacity are under upgradation to achieve the latest standards and likely to be completed by Dec, 2)25*
> *v. State has planed construction of infrastructure for reuse of treated sewage at 34 STPs of 47 MLD capacity and work for ST's considered in Phase-1 likely to be completed by 31.10.2025."*

17. We are of the view that huge gap in generation and treatment of sewage depicted in the above report needs to be remedied on war footing instead of proposed plan of achieving the targets in the year 2027 after four years, thereby continuing damage to the environment for the next four years. This needs to be monitored by Chief Secretary, Haryana and further progress report filed by 30.04.2023 on the pattern of report to be filed by Delhi. The issue of compensation to be levied for failure of the State in preventing discharge of untreated sewage in Yamuna will be dealt with separately in O.A. No. 606/2018.

18. We note that no report has been filed by the State of UP which is a matter of serious regret. The Chief Secretary, UP may ensure filing of such report and the issue of levy of compensation for gaps in UP will be likewise dealt with in O.A. No. 606/2018. Further progress report on the pattern of Delhi and Haryana may be filed by UP by 30.04.2023.

19. The Committee headed by the LG Delhi may continue further proceedings and progress indicated in the report to be filed by 30.04.2023.

20. To avoid multiplicity of proceedings on the subject, we dispose of OA No. 21/2023 and OA No. 562/2022 and henceforth the issue will be considered in OA No. 06/2012.

List for further consideration on 16th May, 2023.

A copy of this order be forwarded to GNCTD, CPCB, State of Haryana, State of UP by e-mail for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

Dr. Afroz Ahmad, EM

February 16, 2023
Original Application No. 21/2023
& other connected matters
SN