

745

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
Principal Bench, New Delhi

O.A. No. 490/2019

T. S. Singh

Applicant

Vs.

State of Uttar Pradesh

Respondent

S. No.	Particulars	Page No.
1.	Status Report in compliance of Hon'ble NGT order dated 14.09.2022 In O.A. No. 490/2019, T. S. Singh Vs State of Uttar Pradesh.	
2.	Annexure-I: Copy of the Hon'ble NGT Order dated 14.09.2022.	



(P.K. Mishra)

Scientist E

Central Pollution Control Board

Delhi-110032

Date: 17.10.2023

Place: Delhi

746

Status Report

In compliance of

Hon'ble NGT, Principal Bench, New Delhi's order dated 14.09.2022

In the matter of Original Application No.490/2019

(T.S. Singh Versus State of Uttar Pradesh)

Joint Committee

(CPCB & UPPCB)

Contents

S.N.	Description	Page No.
1.0.	Background	4
2.0.	Introduction to River Sai	4
3.0.	Joint Inspection and Monitoring by CPCB & UPPCB	5
3.1.	Status of commissioning of STP	5
3.1.1.	Inspection and monitoring of 18 MLD STP in Raebareli	5
3.1.2.	Inspection and monitoring of 8.95 MLD STP in Pratapgarh	6
3.2.	Status of house hold connection of Sewer line:	8
3.3.	Status of final connection of Sewer to STP	8
3.4.	Status of Bio-remediation in drains	9
3.5.	Inspection of River Sai	11
4.0.	Concluding remarks	13
	ANNEXURE-2: Photo Gallery	

1.0. Background

It is in compliance of the Hon'ble NGT order dated 14.09.2022 in the matter of O.A. No. 490 of 2019 T.S. Singh Versus State of Uttar Pradesh regarding status of STPs function, house hold connection of sewer line, final connection of sewer to STP, bioremediation and river water quality. Hon'ble tribunal has disposed of the case with direction. The relevant part of the order is as follow:

“....CPCB and UPPCB simultaneously may undertake joint visits to ascertain the status of commissioning of STPs and connections of households and final connectivity of sewers to STPs. Further, CPCB may advise UPPCB about continuation or otherwise for bio-remediation of drains in the light of result on the ground. Water quality of rivers in question be regularly monitored....”

2.0. Introduction of River Sai:

River Sai originates from a pond in village Bijgwan near Pihani in district Hardoi and reaches to Jaunpur via Unnao, Raebareli and Pratapgarh. River Sai meets river Gomti at Rajepur in Jaunpur district and further river Gomti meets river Ganga at Kaithi. Total length of River Sai from its origin point to its confluence with Gomti river at Jaunpur is approximately 750 kms. As per UPPCB, Municipal Council Raebareli and Bela-Pratapgarh are two major urban areas located along the stretch of River Sai and remaining stretch of River Sai is in rural agglomeration. A drain namely Kila Mohamdi carrying sewer of Lucknow meets near Lucknow Raebareli border. 07 Drains carrying sewer of Raebareli city meet in Raebareli. There are 04 drains in Pratapgarh. 03 are tapped and diverted to STP at Pratapgarh. Wetland development for phytoremediation at one drain (Bhuliapur Drain) is under process.

3.0. Joint Inspection and Monitoring by CPCB & UPPCB:

In compliance to said order, Inspection and monitoring of River Sai by the joint team of CPCB & UPPCB at Unnao, Lucknow, Raebareli, Pratapgarh and Jaunpur have been carried out during March to June 2023. As per Hon'ble NGT order, following aspects have been covered during visit:

1. Status of Commissioning of STP
2. Status of house hold connection of Sewer line
3. Status of final connection of Sewer to STP
4. Status of bio-remediation in drains
5. Status of river water quality

3.1. Status of commissioning of STP:

- During visit, it is observed that 18 MLD STP based on SBR (Sequential Batch Reactor) technology located at Raebareli is under trail run. This STP will cover sewer of zones 02, 03 and 04 in Raebareli city.
- Approval for installation of 14.8 MLD STP under AMRUT 2.0 for remaining zone 01 in Raebareli city is still pending.
- As per Jal Nigam, Lucknow, a project comprising of interconnection, diversion and tapping of Kila Mohammadi Drain Lucknow and construction of a STP of capacity 100 MLD is proposed to NMCG.
- 8.95 MLD STP based on FAB (Fluidized Aerobic Reactor) technology located in Pratapgarh is under trail run, which cover sewage generated from Ramleela Drain, Police Line Chakwan Drain and Pratapgarh City Drain.
- During visit, inspection and monitoring of STPs at Raebareli and Pratapgarh was also carried out. Details observations based on inspection and monitoring of STPs are as below:

3.1.1. Inspection and monitoring of 18 MLD STP in Raebareli:

- Joint inspection and monitoring of 18 MLD STP at Raebareli was carried out on 28.03.2023 by the team of UPPCB, RO Raebareli and CPCB.

750

- 18 MLD STP based on SBR (Sequential Batch Reactor) technology is located at Parsadpur Road, PAC Campus, Raebareli- 229001.
- Presently, Plant is being operated by M/s Gharpure Engineering and Construction Pvt. Ltd., Pune.
- Plant has obtained consent to establish on 30.03.2021.
- During visit, STP was found operational with utilization capacity of approx. 2.5 MLD with respect to installed capacity of 18 MLD. It is informed by the plant representative that plant is being operated under trail run condition.
- During visit, the samples from inlet and outlet were collected and analyzed in laboratory of CPCB, RD, Lucknow. The analysis results of samples are tabulated below:

S. No.	Parameters	Unit	Inlet of STP	Final Outlet	Standards for Class-I cities as per NGT Order
1	pH	-	7.71	7.79	5.5 to 9.0
2	TSS	mg/l	110	<2.5	20
3	Total Nitrogen		15.5	13.9	10
4	Total Phosphorus		<1.5	<1.5	1.0
5	BOD		77.0	4.36	10
6	COD		144	13.8	50
7	Faecal Coliform	MPN/100ml	-	<1.8	230

- The analysis results of final outlet of STP shows that STP is complying w.r.t. outlet parameters except Total Nitrogen as per Hon'ble NGT order dated 30.04.2019 in OA No. 1069/2018.

3.1.2. Inspection and monitoring of 8.95 MLD STP in Pratapgarh:

- Joint inspection and monitoring of 8.95 MLD STP at Pratapgarh was carried out on 27.06.2023 by the team of UPPCB, RO, Raebareli and CPCB.
- 8.95 MLD STP based on FAB (Fluidized Aerobic Reactor) technology is located near Shaktivinayak Hospital, Pratapgarh.
- Presently, Plant is being operated by M/s Technocraft & Solution Varanasi.

751

- Plant has not obtained consent to establish & operate from UPPCB.
- During visit, plant was found operational. It is informed that average 5.5 MLD flow is received at inlet of STP with respect to installed capacity 8.95 MLD. However, no log book for inlet and outlet flow is maintained.
- During visit, the samples from inlet and Outlet were collected and analyzed in laboratory of CPCB, RD, Lucknow. The analysis results of samples are tabulated below:

S. N.	Parameters	Unit	Inlet of STP	Aeration Tank	Final Outlet	Standards for other cities as per NGT Order
1	pH	-	7.16	-	7.39	5.5 to 9.0
2	TSS	mg/l	9843	-	15.6	20
3	Total Nitrogen		25	-	21.1	10
4	Total Phosphorus		4.86	-	1.26	1.0
5	BOD		414	-	16.6	10
6	COD		1607	-	111	50
7	Faecal Coliform	MPN/100 ml	-	-	7.0x10⁵	230

- The analysis results of final outlet of STP shows that STP is not complying w.r.t. outlet parameters Total Nitrogen, Total Phosphorus, BOD, COD and Faecal Coliform as per Hon'ble NGT order dated 30.04.2019 in OA No. 1069/2018.

3.2. Status of house hold connection of Sewer line:

Raebareli:

- During visit it is informed by UP Jal Nigam that a sewerage network project for sewerage zones 2, 3 and 4 of total length 208 Km sewerage network in Raebareli is under progress. So far, 75 km network has been laid down, out of which 30 Km is functional. The project has been targeted for completion by October 2023.
- Approval of a proposed project for sewerage zone 1 comprising about 125 km sewerage network and 14.8 MLD STP in Raebareli is pending under AMRUT 2.0.

Pratapgarh:

- 908 meter sewer line has been laid down after interconnection, diversion and tapping of drains in Pratapgarh.

3.3. Status of final connection of Sewer to STP:

Raebareli:

- The Raebareli city has 07 numbers of drains divided into 04 sewerage zones. List of 07 drains is as below:
 1. Kaptan Ka Purwa Drain/ Indranagar Drain
 2. Police Line Drain
 3. Rewati Ram Drain / Lohanipur Drain
 4. Kanpur Road Drain
 5. Surajpur Drain
 6. Mahanandpur Drain
 7. ITI Drain/ Industrial area drain
- Tapping Interconnection & Diversion of these 07 drains has not been done in Raebareli.
- Only 2.5 MLD sewer is being received by STP at Raebareli as against installed capacity of 18 MLD.
- Kila Mohammadi Drain near Lucknow and Raebareli border was found directly discharging sewage into river Sai. However, as per Jal Nigam Lucknow,

interconnection, diversion and tapping of Kila Mohammadi Drain Lucknow and construction of a STP of capacity 100 MLD is proposed to NMCG.

Pratapgarh:

- The Pratapgarh city has 04 drains. List of 04 drains is as below:
 1. Ramleela Maidan Drain
 2. Bhuliapur Drain
 3. Police Line Chakwan Drain
 4. Pratapgarh City Drain
- It is informed by Jal Nigam, that three drains i.e Ramleela Drain, Police Line Chakwan Drain and Pratapgarh City Drain is tapped and STP is receiving sewage from these three drains through gravity.
- Approx 5.5 MLD sewer is received by STP in Paratapgarh from above 03 drains.
- Construction of wetland for phytoremediation in Bhuliapur Drain in Pratapgarh is under process.
- During visit it is observed that Pratapgarh city drain was not completely tapped and sewage is being discharged into River Sai.

3.4. Status of Bio-remediation in drains:

- Bio remediation in 07 drains of Raebareli is being carried out by Municipal Council Raebareli.
- Samples has been collected at 07 drains of Raebareli and analyzed in UPPCB RO, Raebareli Laboratory to assess the efficacy of bioremediation. The analysis result of samples taken in June 2023 the is as below:

Table-1: Sample analysis result Before Bio- remediation

S.N.	Sampling point	Drains Discharging to River Sai at Raebareli					
		Before Bio remediation					
		pH	TSS	BOD	COD	TC	FC
1.	Kanpur Road Drain	7.95	71.0	46.0	182.4	2.0×10 ⁶	7.9×10 ⁵

2.	Surajpur Drain	7.98	82.0	62.0	220.8	1.7×10^7	7.9×10^6
3.	Kaptan ka purwa Drain	7.96	86.0	56.0	188.8	7.0×10^7	3.3×10^7
4.	Police Line Drain	8.02	87.0	52.0	195.2	9.2×10^6	4.6×10^6
5.	Mahanandpur Drain	7.99	61.0	42.0	179.2	1.4×10^6	7.9×10^5
6.	ITI Drain	8.12	40.0	30.0	131.2	9.2×10^4	2.2×10^4
7.	Rewati Ram Drain	8.12	81.0	40.0	176.0	1.3×10^7	4.7×10^6

TSS, BOD, COD are in mg/L & TC, FC are in MPN/100ml

Table-2: Sample analysis result After Bio- remediation

S.N.	Sampling point	Drains Discharging to River Sai at Raebareli					
		After Bio remediation					
		pH	TSS	BOD	COD	TC	FC
1.	Kanpur Road Drain	7.93	56.0	30.0	131.2	1.7×10^6	4.9×10^5
2.	Surajpur Drain	7.96	67.0	34.0	140.8	9.2×10^6	4.9×10^6
3.	Kaptan ka purwa Drain	7.91	82.0	32.0	140.8	4.9×10^7	2.2×10^7
4.	Police Line Drain	8.01	69.0	30.0	134.4	4.9×10^6	3.3×10^6
5.	Mahanandpur Drain	7.89	40.0	32.0	137.6	1.1×10^6	4.7×10^5
6.	ITI Drain	8.05	28.0	26.0	128.0	7.9×10^4	2.4×10^4
7.	Rewati Ram Drain	8.01	72.0	30.0	134.4	1.1×10^7	4.6×10^6
Effluent discharge standard for STP		6.5-9	<100	30	-	-	<1000

TSS, BOD, COD are in mg/L & TC, FC are in MPN/100ml

- It is evident from above table that after bio-remediation, sewage is not achieving Effluent discharge standard for STP as notified by MoEF&CC in terms of BOD & FC.
- In Pratapgarh, three drains i.e Ramleela Drain, Police Line Chakwan Drain and Pratapgarh City Drain has been tapped and connected to STP. Bioremediation in one drain i.e. Bhuliapur drain is being carried out by Municipal Council, Bela Pratapgarh.
- A wetland at Bhuliapur drain in Pratapgarh for phytoremediation is under process.

3.5. Inspection of River Sai:

- Joint inspection of river Sai at Unnao, Lucknow- Raebareli border, Raebareli, Pratapgarh and Jaunpur have been carried out by the team of CPCB & UPPCB during march to June 2023.
- During visit it is observed that Kila Mohamadi Drain was meeting at river Sai near Bhavreshvar Mandir at Lucknow Raebareli border.
- Raebareli and Bela-Pratapgarh are two major urban areas located along the stretch of River Sai which are major source of river contamination due to sewerage discharge.
- During visit total 13 sample have been taken along the stretch at different location from Unnao to Jaunpur to assess the water quality as per Primary notified 'Water Quality Criteria for Bathing Water' notified by MoEFCC.

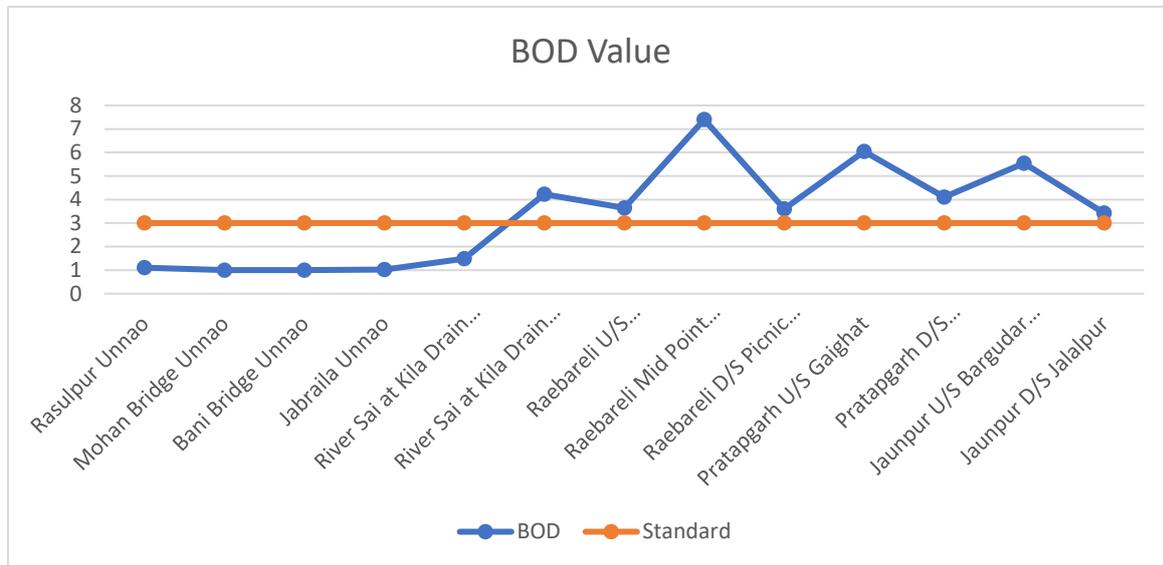
S. N.	Location	Parameter					
		pH	Tem p.	DO	BOD	FC	Meeting Primary Water Quality Criteria for Bathing (Y/N)
1.	Rasulpur Unnao	8.49	23	9	1.1	1.3×10^6	No
2.	Mohan Bridge Unnao	8.31	21.0	8.5	<1	4.6×10^5	No
3.	Bani Bridge Unnao	8.45	23	8.0	<1	1.3×10^5	No
4.	Jabraila Unnao	8.44	24	7.5	1.02	2.0×10^3	Yes
5.	River Sai U/S Lucknow (before Kila Drain)	8.38	24	8.5	1.48	2.0×10^3	Yes
6.	River Sai D/S Lucknow (After	8.02	24	6.0	4.22	4.9×10^5	No

756

S. N.	Location	Parameter					
		pH	Tem p.	DO	BOD	FC	Meeting Primary Water Quality Criteria for Bathing (Y/N)
	confluence of Kila drain)						
7.	Raebareli U/S Sirshaghat	8.62	25	8.20	3.64	7.8 ×10³	No
8.	Raebareli Mid Point Rajghat	8.42	28.0	7.30	7.40	5.4 ×10⁶	No
9.	Raebareli D/S Picnic Spot	8.07	28	6.38	3.60	1.3 ×10⁴	No
10.	Pratapgarh U/S Gaighat	9.64	26	8.3	6.04	<1.8	No
11.	Pratapgarh D/S Railway Bridge	8.72	27	4.7	4.10	2.2 ×10⁴	No
12.	Jaunpur U/S Bargudar Bridge	8.92	25	9.1	5.54	2.0 ×10 ³	No
13.	Jaunpur D/S Jalalpur	9.07	26	8.50	3.42	4.5×10 ³	No
	Primary Water Quality Criteria for Bathing as notified G.S.R. 742(E) on 25.09.2000.	6.5-8.5	-	>5	<3	500-2500	

- It is evident from above table that river is meeting to Water Quality Criteria for Bathing Water' at only two locations out of thirteen sampling location.

- It is also evident from above table that Faecal Coliform is major pollutant throughout the stretch of river Sai which indicate sewage contamination or anthropogenic activities near stretch of river Sai.
- The graph of BOD along the stretch of river Sai from Unnao to Jaunpur is plotted as below:



- It is evident from above graph that BOD value started increasing from the point where Kila Drain is meeting to Sai and maximum at Raebareli and started decreasing at Jaunpur.

4.0. Concluding Remarks:

- High FC value in river Sai indicate sewage contamination in river water therefore no sewerage discharge should be allowed in the river without treatment.
- As 18 MLD STP in Raebareli is receiving only 2.5 MLD sewerage, the project of sewerage network development and its connection to 18 MLD STP should be completed as the earliest for sewerage zones 2, 3 and 4 comprising of 208 Km sewerage network in Raebareli. Also, the project for sewerage zone 1 comprising about 125 km sewerage network and 14.8 MLD STP under AMRUT 2.0 in Raebareli should be approved by state and completed in time bound manner.
- State need to closely follow up the required clearances and expedite the progress of pending projects.

- 8.95 MLD at STP at Pratapgargh should properly optimize its operation to achieve standards at outlet.
- In view of the high FC load in the river water, State needs to ensure proper operation of disinfection unit in the STPs.
- UPPCB should regularly monitor River Sai at different locations and also take necessary action against ULB.
- River Sai was found not complying at 11 out of 13 locations w.r.t. Primary Water Quality Criteria for Bathing indicating discharge of waste water in the river.
- Development of Sewerage network be completed in time bound manner to enable STPs running under-capacity (18 MLD STP in Raebareli, 14.8 MLD STP in Raebareli and 8.95 MLD STP in Pratapgargh) to be operated in full capacity.
- UPPCB to issue directions to Municipal Council, Pratapgargh for non-compliance of 8.95 MLD at STP at Pratapgargh.
- As bioremediation of drains is ineffective, sewage from drains be intercepted to the STPs in Pratapgargh and Raebareli.

Monitoring Team

1. Sh. Arvind Kumar, Scientist 'C', CPCB, RD Lucknow
2. Sh. K. K. Chaudhary, SA, Regional Office, UPPCB, Lucknow
3. Sh. Manish Tripathi, SA, Regional Office, UPPCB, Raebareli

Arvind Kumar
05/10/2023

K.K. Chaudhary
05/10/23

Manish Tripathi

Photo Gallery of joint Inspection carried out by CPCB & UPPCB in the matter of Hon'ble NGT O.A. No. 490 of 2019, T.S. Singh Versus State of Uttar Pradesh.



Photo-1: River Sai at Rasulpur Unnao



Photo-2: Sampling of River Sai near Lucknow



Photo-3: Confluence of Kila Mohammadi Drain in River Sai near Lucknow



Photo-4: River Sai at Sirshaghat Raebareli



Photo-5: 18 MLD STP at Raibareli



Photo-6: 8.95 MLD STP at Pratapgarh



Photo-7: River Sai at Pratapgarh



Photo-8: River Sai at Jaunpur

761

Item No. 02

Court No. 1

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

(By Video Conferencing)

Original Application No. 490/2019

(With reports dated 22.08.2022, 23.08.2022 and 29.08.2022)

T. S. Singh

Applicant

Versus

State of Uttar Pradesh

Respondent

Date of hearing: 14.09.2022

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE PROF. A. SENTHIL VEL, EXPERT MEMBER**

Respondent(s): Ms. Priyanka Swami, Advocate for the State of UP & E.O.,
Pratapgarh
Mr. Vikrant Pachnanda, Advocate for CPCB
Mr. Daleep Dhyani, Advocate for UPPCB

ORDER**The Issue**

1. Issue for consideration is failure of the authorities in the State of UP, particularly those in Districts Pratapgarh, Rai Bareilly and Jaunpur in preventing discharge of untreated sewage into Sai River in violation of law, particularly the directions of the Hon'ble Supreme Court in Paryavaran Suraksha (2017) 5 SCC 326 followed by orders of this Tribunal.

Procedural History

2. The matter has been dealt with by several orders in the last three years, including orders dated 02.01.2020, 09.06.2021 and 29.03.2022. Noticing the continuing violations, directions have been issued for remedial action. It will suffice to refer to the last order dated 29.03.2022.

Last order dated 29.3.2022

3. The Tribunal reviewed the progress with reference to reports of the Oversight Committee dated 08.11.2021, 13.01.2022 and 21.03.2022 mentioning the compliance status and recommending further remedial action for compliance. The Tribunal, after hearing Additional Chief Secretary, Urban Development Department, UP, who was present in person, found that water quality was non-compliant with the laid down norms and pollution was still continuing. This called for acceptance of recommendations of the Oversight Committee. It was directed that proper planning for Sewage Management may be ensured and treated water may be utilized for secondary purposes as per norms. Further action taken report was directed to be filed by the State and independent reports by CPCB and the Oversight Committee (constituted by the Tribunal) giving the compliance status as on 30.06.2022.

4. The operative part of the order is reproduced below:-

“7. The OC has filed reports dated 22.10.2021 and 08.11.2021 followed by latest supplementary reports dated 13.01.2022 and 21.03.2022. The said reports have found continued violations and recommended further action. Recommendations in the report dated 08.11.2021 are as follows:

“4. Recommendations

In view of the above we recommend as follows:

1. *As the funds has been allocated, the work order is about to be issue and a Gantt chart showing the timelines for the*

completion of various activities have been submitted, **the Urban Development Department may be directed to monitor the progress on monthly basis and submit the progress report to the Oversight Committee to ensure that works get completed in time.**

2. *From the list of the erring officials it is visible that the responsibility has been fixed only on those directly responsible for executing the project. **Had the supervisory officers done their job properly, the diversion could have been detected in time and it would have been possible to take departmental action against the erring officials. This would have also prevented the infrastructure created by spending about Rs. 15 crore of public money from remaining idle for such a long time. The Urban Development Department and Jal Nigam need to identify such supervisory officers in one month and take appropriate action against them in another 6 months.***
3. *Actions taken against the erring officers is for the misappropriation of funds only. However, these officers have also violated the Environmental Protection Act 1986. **The UP Government (Home & Urban Department) must ensure that the investigation is completed at the earliest and all culprits are taken to task under the full gamut of law.***
4. ***Monthly water quality reports of 7 months between February 2020 and October 2021 clearly suggest that bioremediation is not being done effectively to control water pollution of the river Sai. EO Pratapgarh need to be directed to ensure that the water quality of the drains discharging into the river Sai is within the permissible limits and the UPPCB needs to be directed to take prompt and effective action in case of non-compliance of environmental laws.***
5. ***The Additional Chief Secretary Urban Development Department may be directed to coordinate the actions taken by various other Departments (such as Home Department and Environment, Forest and Climate Change Department) to ensure complete compliance the order of Hon'ble NGT through monthly monitoring of this case and a copy of the minutes of the meeting be sent to the oversight committee."***
8. *Recommendations in the report dated 13.01.2022 are as follows:*

"3. Recommendations

1. **Urban Development Department, UP Government may be directed to release fund for operation and maintenance of the STP for 15 years.**
2. **UPPCB may be directed to monitor water quality of the drains in which bioremediation is being done to ensure that they deliver only pollution free water in river Sai every month and submit a quarterly report to the oversight committee for onward transmission to the Hon'ble NGT."**

9. The supplementary report dated 21.03.2022 mentions compliance status and recommendations as follows:

"2. Compliance Status of UP Jal Nigam and Urban Development Department:

a. The physical and financial progress of Interception and Diversion (I&D) Works and overhauling of existing STP work:

- i. In para 2 (a) of the report dated 13.01.2022 it was informed that till 04.01.2022 Rs. 1.1228 Cr has been spent completing 9.5% of the work on ground. Now it has been reported that till 15.03.2022 Rs. 2.0872 Cr has been spent completing 28% of the physical work.

b. Compliance status of the UPPCB

In para 3 (1a) of the report dated 08.11.2021 the water quality of the untapped drains was provided till the month of October 2021. Now the water quality report of the untapped drains for the month of January, February and March has been submitted by the UPPCB. From the water quality report it emerges that post bioremediation the water quality has come within the permissible limits for all the parameters except the Total Coliform (TC) and Faecal Coliform (FC).

S. No.	Sampling point (Name of Drain)	Parameters recorded beyond permissible limit even after Bioremediation process						
		15.01.2022	22.01.2022	31.01.2022	09.02.2022	19.02.2022	25.02.2022	07.03.2022
1	Ramlila Maidan Drain	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC
2	Bhuliyapur Drain	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC
3	City Drain	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC
4	Police line drain	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC	TC, FC

- c. Details of water quality analysis at Sai River U/s Gai Ghat (U/S) and D/s Railway Bridge (D/S) are as follows:

		pH	Colour (Hazen)	DO (mg/l)	BOD (mg/l)	Conductivity (mmho/cm)	TC (MPN/100ml)	Remarks- Designated best use
15.01.2022	U/S	7.98	10	6.9	4.4	0.435	7900	D
	D/S	8.17	10	6.3	4.8	0.513	7000	D
22.01.2022	U/S	8.33	10	7	4.5	0.501	4700	D
	D/S	8.46	10	6.4	4.9	0.571	4900	D
31.01.2022	U/S	8.38	10	6.9	4.5	0.553	4800	D
	D/S	8.58	10	6.5	4.8	0.605	4900	D
09.02.2022	U/S	8.21	10	6.8	4.4	0.398	4900	D
	D/S	8.36	10	6.5	4.9	0.419	7000	D
19.02.2022	U/S	8.12	10	7.0	4.2	0.423	7000	D
	D/S	8.29	10	6.4	4.9	0.493	7900	D
25.02.2022	U/S	8.49	10	6.9	4.3	0.412	7900	D
	D/S	8.63	10	6.3	4.9	0.486	9200	D
07.03.2022	U/S	8.01	10	6.8	4.5	0.398	7900	D
	D/S	8.30	10	6.5	4.9	0.419	9200	D

The results of the water quality analysis of the river Sai indicates that the water quality of the river is designated not suitable for consumption without conventional treatment and disinfection. Also, it is not suitable for outdoor bathing. Only propagation of wildlife and fisheries could be done in the Sai River. The water quality parameters such as pH, BOD, Conductivity and TC has increased and DO has decreased post confluence of the four bio-remediated drains. The colour has not changed post confluence of the drains. From the water quality analysis it may be inferred that the confluence of the four bio-remediated drains is slightly deteriorating the water quality of the Sai River. Thus, other sources of the pollution in the U/S of Gai Ghat region should be identified by the UPPCB and actions may be taken to treat all the identified sources of pollution.

3. Recommendations

- 1. Urban Development Department may be directed to monitor the bioremediation works done by the Nagar Palika Parishad Pratapgarh as they are still not able to achieve the desirable results as TC and FC were recorded beyond the permissible limits. On priority, they must ensure that TC and FC should also be within the permissible limits post bio-remediation.**
- 2. UPPCB may be directed to identify other sources of the pollution in the U/S of Gai Ghat region which are resulting in poor quality of the Sai River. UPPCB must ensure all the identified sources of pollution should be tapped and treated to prevent any discharge of pollutants into the river.**
- 3. The Urban Development Department and Nagar Palika Parishad Pratapgarh should also be directed to estimate the future increase in the population and quantify the subsequent sewage generation in the Nagar Palika. Based on these estimates they must work on making provisions to deal with the growing future needs for**

treating the sewage to prevent occurrence of any such situation in the future.

Finding and Direction

10. We have heard the Additional Chief Secretary, Urban Development Department, UP present in person with Counsel and also considered the reports on record. It is seen that water quality is not compliant with the norms and water pollution is still continuing, calling for further remedial action, as recommended by the OC. Mere giving of tender is not enough compliance when timeline fixed by the Hon'ble Supreme Court has expired. Accountability in terms of order of Hon'ble Supreme Court, quoted in para 4 above, is of Secretaries to the Govt. which has not been fixed. PCB under the said orders is to initiate prosecution which has not been done for crossing the timeline as well continuing failure. Let such follow up action in terms of directions Hon'ble Supreme Court be taken at the earliest.

11. There is no objection to the reports filed by the OC which are based on undisputed facts and in line with directions of Hon'ble Supreme Court. Thus, we accept the same and direct further remedial action by the State Authorities. During interaction, we have conveyed to the Additional Chief Secretary, Urban Development Department that similar water pollution mainly due to failure to treat sewage is continuing not only at Pratapgarh but also in other parts of the State which needs to be controlled by a suitable action plan and monitoring by the Urban development Department so as to comply with the directions of the Hon'ble Supreme Court in *Paryavaran Suraksha, supra*. In these circumstances prayer for deleting direction for imposing cut on the salary in terms of order dated 09.06.2021 cannot be accepted at this stage. Since stay granted by the Hon'ble Supreme Court is operating, the said direction will abide by further orders of the Hon'ble Supreme Court.

12. There is need for proper planning for sewage management. Strategies in this regard can differ depending upon availability of space and quantity of sewage to be treated. While in rural areas, the utilization of treated sewage can be explored for agricultural purpose after requisite treatment. In urban areas, the same can be used for industrial purposes in coordination with the industries and other bulk users. Such planning will help in saving drinking water for drinking purposes. This aspect has been considered by the Tribunal vide order dated 09.03.2022 in OA No. 29/2020(WZ), *Suraj Pradip Ajmera vs. Aurangabad Municipal Corporation* as follows:

“10. During the hearing, suggestion has emerged that an interaction be held at the level of Chief Secretary, Maharashtra with inclusion of Secretary, Urban Development, Maharashtra and Technical Experts as may be decided by them including from IIT, Bombay, Regional Officer, CPCB and Member Secretary, State PCB to consider possibility of laying pipeline upto the industrial area for transporting treated sewage to the industrial areas so that the same can be utilized for industrial purpose. Industries Association may be associated in the

project of sewage treatment and can bear a part of the cost out of Corporate Social/Environmental Responsibility, depending upon the financial capacity of the member industries. This may result in a permanent and long-lasting cheaper solution. If successful, this experiment may be tried appropriately at such other locations in the State as found appropriate and also customized different locations. The Committee may also study such models elsewhere in the country which reportedly have been successful. The Committee may also consider any other viable strategies for sewage treatment and interception and diversion of sewage, use of appropriate effective and economical technology, making group housing societies Zero Liquid Discharge (ZLD) by recycling treating sewage, after treatment in decentralized manner and utilizing the treated sewage for horticulture, flushing, cleaning or other non-drinking purposes. This strategy may help in augmenting availability of potable water particularly in drought affected areas of Aurangabad Region in Maharashtra where potable water had to be transported by trains in the past. The Secretary, Urban Development may act as nodal agency who may call for a meeting within one month.”

13. *As already noted, Sai River is one of the identified polluted river stretches for which action plan has been prepared by the River Rejuvenation Committee (RRC) in the State of UP constituted under order of this Tribunal dated 20.09.2018 in OA 673/2018, News Item Published In ‘The Hindu’ Authored By Shri. Jacob Koshy Titled “More river stretches are now critically polluted: CPCB”. Execution thereof needs to be ensured.*

14. *The status report filed by the ACS mentioned that interception of the drain will be completed by October, 2022. However, quantity of sewage generation and capacity of STP ensure 100% household connectivity is not clear. There is also no mention of plan to utilize treated sewage as per action plan for restoration of Sai polluted river stretch from Unnao to Jaunpur, reveals that, 76 villages contribute 17.94 MLD of sewage reaching to the river. In Raebareli, there are 4 drains discharging 9 MLD of sewage. Thus, efforts will be required with the object of maintaining water quality at least of class 'B'. Since, funding proposals are received from NMCG, NMCG and CPCB, alongwith the PCB and Jal Nigam may ascertain factual status while continuing the remedial work. If bioremediation is not giving desired results, NMCG and CPCB may consider viable alternative.*

15. *Let further action taken report giving the compliance and water quality status as on 30.06.2022 be filed by the Additional Chief Secretary, Urban Development Department, UP by 15.07.2022 with a copy to the OC. The OC may give its own report by 30.07.2022 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. The report may specify data of Pratapgarh and also other towns in the area like Raebareli and Jaunpur. CPCB and NMCG with assistance of PCB and Jal Nigam may give factual status report. CPCB will be nodal agency for the purpose.”*

Current status emerging from factual reports

5. In pursuance of above, CPCB has filed factual status report on 29.08.2022. The report has also been filed by the Oversight Committee on 22.08.2022. Urban Development Department, UP has filed its report dated 23.08.2022, with reference to recommendations of the Oversight Committee. Status Report has also been filed by E.O., Nagar Palika Parishad, Pratapgarh on 13.09.2022 giving the compliance status as on 22.08.2022.

Factual report of CPCB

6. We may first refer to CPCB report which undertook visit to the site from 18.07.2022 to 20.07.2022 and undertook inspection as follows:-

- “1. *Inspection and monitoring of Drain and STP in Raebareli.*
2. *Inspection and monitoring of Drain and STP in Bela Pratapgarh Municipal Council.*
3. *Water quality monitoring of River Sai at Raebareli, Pratapgarh and Jaunpur.”*

7. Relevant extracts from the report giving details of above inspection and conclusions are as follows:-

“4.1. Inspection and monitoring of Drain and STP in Raebareli:

- *Raebareli city has total population of 191316 as per census 2011 and there are 34 wards in the city. The city has 7 nos. of drains outfalling into river Sai. The city has been divided into 4 sewerage zones.*
- *The sewage generated from the city is discharged through these 07 drains to river Sai. Bio remediation is being carried out in all 07 drains before discharge in river Sai.*
- *As informed by UP Jal Nigam,*
 - *the sewage from these 7 drains has been estimated as 32.8 MLD.*

- A sewerage network project for sewerage zones 2, 3 and 4 comprising of 208 Km sewerage network and 18 MLD SBR technology based STP is under development. So far 45 km network has been laid, out of which 30 Km is functional and 18 MLD STP has been constructed. The STP is under trial run and receiving about 2 to 3 MLD of sewage. The project has been targeted for completion by March 2023.
- A project for sewerage zone 1 comprising about 125 km of sewerage network and 14.8 MLD STP has been proposed under AMRUT 2.0.
- Monitoring of following 07 drains was carried out during visit.
 1. Kaptan Ka Purwa Drain
 2. Police Line Drain
 3. Rewati Ram Drain
 4. Kanpur Road Drain
 5. Surajpur Drain
 6. Mahanandpur Drain
 7. ITI Drain
- Samples of sewage before and after bioremediation in all 07 drains has been collected on 18.07.2022 and analyzed by CPCB. The drain monitoring results are enclosed at Annexure 1. The summary of BOD results and observations from the monitoring results are as under:

<i>Drain</i>	<i>BOD Before</i>	<i>BOD After</i>
<i>Kaptan Ka Purwa Drain</i>	42.1	60
<i>Police Line Drain</i>	32.1	27.5
<i>Rewati Ram Drain</i>	24.8	48
<i>Kanpur Road Drain</i>	50.9	35.5
<i>Surajpur Drain</i>	100	33.5
<i>Mahanandpur Drain</i>	19.3	21.1
<i>ITI Drain</i>	15	6.49

- The waste water in all the drain was observed to be low strength sewage with raw waste water BOD ranging between 15 to 51 mg/l in 6 Nos. of drains while 100 mg/l in one drain namely Surajpur drain. The significant presence of fecal coliforms indicates sewage contamination in these drains.
- The BOD reduction as a result of bio remediation ranges from 0% to 66.5%. In 5 drains it was observed to be ineffective as the BOD reduction was observed to be less than 30%; in-fact in 3 drains the BOD after bio-remediation was higher than before bioremediation. In two drains the BOD removal efficiency was observed to be satisfactory at 66.5% and 56.7% in Surajpur drain and ITI drain respectively.
- The absolute BOD post bioremediation was found to be more than 30 mg/l in 4 drains while in 2 nos. of drains it was between 20 and 30 mg/l and in one drain less than 10 mg/l.
- The bioremediation is being undertaken by Raebareli Nagar Palika. It has been informed that as part of bio-remediation certain microbial cultures are being dosed in the drains and

allowed to feed on organic pollutants during the course of the drain.

- *The bio-remediation does not appear to be very effective. The possible reasons could be poor monitoring and control on the dosing and retention time, mixing of sub drains during the course of the stretch being bio-remediated.*
- *The monitoring results indicate that apparently there does not appear any significant contamination of industrial effluents.*

4.2. Inspection and monitoring of Drain and STP in Bela Pratapgarh Municipal Council:

- *As per census 2011 total population in Bela Pratapgarh Municipal Council is 76133 having 25 wards.*
- *There are 4 drains in Bela Pratapgarh municipal council discharging sewage / wastewater into river Sai. Bioremediation was observed to be carried out in all 04 drains.*
- *As informed by UP Jal Nigam,*
 - *A Sewerage scheme comprising 12.47 Km sewerage network and 8.95 MLD STP was taken up in 2009-10 under State Sector Programme.*
 - *Substantial works on the project were completed by 2013 but could not be commissioned causing silting of sewerage network*
 - *In the year 2020-21 additional funds sanctioned under State Sector Programme for operationalization of the STP. This scheme comprised of I&D of the drains and completing the STP work and operationalizing the same. The works on the same are in progress and expected to be completed by October 2022.*
 - *Another STP of 13 MLD is proposed under AMRUT 2.0. The DPR for the same is under preparation.*
- *During visit, STP of capacity 8.95 MLD based on Fluidize Aerobic Bed reactor was found non-operational. Renovation and construction work of STP was still under process. Work on Admin block and boundary wall was in progress. The Disc Filter and Media for the Fluidize Aerobic Bed reactor are yet to be received at the site.*
- *Tapping of drains and laying of sewage line for connectivity to STP was not completed. It has been observed that approx. 600 m of the 900 m I&D network has been laid and laying of balance line will require NHAI clearance. UPJN informed the application for the permission has been made and is being followed up.*
- *During visit it is found that Bioremediation as well as Chlorination at these 04 drains were being carried out by Municipal Council Bela Pratapgarh.*
- *Monitoring of following 04 drains was carried out during visit.*
 1. *Ramleela Maidan Drain*

2. *Bhuliapur Drain*
3. *Police Line Chakwan Drain*
4. *Pratapgarh City Drain*

- *Samples of sewage before and after bioremediation in all 04 drains have been collected on 19.07.2022 and analyzed by CPCB. The drain monitoring results are enclosed at Annexure 2. The summary of BOD results and observations from the monitoring results are as under:*

<i>Drain</i>	<i>BOD Before Bioremediation</i>	<i>BOD After Bioremediation</i>
<i>Ramleela Maidan Drain</i>	<i>21.4</i>	<i>15.6</i>
<i>Bhuliapur Drain</i>	<i>20.6</i>	<i>14.9</i>
<i>Police Line Chakwan Drain</i>	<i>25.8</i>	<i>12</i>
<i>Pratapgarh City Drain</i>	<i>21.5</i>	<i>23.6</i>

- *The waste water in all the drain was observed to be low strength sewage with raw waste water BOD ranging between 21 to 26 mg/l. The significant presence of fecal coliforms indicates sewage contamination in these drains.*
- *The BOD reduction as a result of bio remediation ranges from 0% to 53%. In 3 drains it was observed to be ineffective as the BOD reduction was observed to be less than 30%; in-fact in 1 drain the BOD after bio-remediation was higher than before bioremediation. In Police Line Drain the BOD removal efficiency was observed to be satisfactory at 53%.*
- *The absolute BOD post bioremediation was found to be in the range of 12 to 23.6 mg/l.*
- *The bioremediation is being undertaken by Bela Pratapgarh Municipal Council. It has been informed that as part of bio-remediation certain microbial cultures are being dosed in the drains and allowed to feed on organic pollutants during the course of the drain.*
- *The bio-remediation does not appear to be very effective. The possible reasons could be poor monitoring and control on the dosing and retention time.*
- *The monitoring results indicate that apparently there does not appear any significant contamination of industrial effluents*

4.3. Water quality monitoring of River Sai at Raebareli, Pratapgarh and Jaunpur

- *River Sai originates from Hardoi and reaches to Jaunpur via Unnao, Raebareli and Pratapgarh. River Sai meets to river Gomati at Jaunpur and further river Gomati meets to river Ganaga.*
- *Samples have been taken at Raebareli, Pratapgarh and Jaunpur to assess the river Sai water quality. Analysis report of river water sample is as below.*

Parameter	Location of Sample
------------------	---------------------------

	Raebareli (Picnic Spot) 18.07.2022 2	Pratapgarh (Gai Ghat) 19.07.2022	Jaunpur (Lalabajar) 20.07.2022	Jaunpur (Rajepur Tirmohani) 20.07.2022
pH	7.18	7.89	8.23	8.39
Temperature	24.5	28.0	28	28
Conductivity	570	2703	518	597
<i>Nitrate</i>	<2.2	15.7	12	15.7
DO	6.5	6.7	7.8	7.6
COD	10	59.3	13.1	27.6
BOD	2.14	16.6	4.54	7.24
TC	7.8x10³	4.9x10 ⁴	4.5x10 ⁴	2.0x10 ³
FC	2.0x10 ³	3.3x10 ⁴	2.0x10 ⁴	<1.8
Designated Best Use category	<i>D</i>	<i>D</i>	<i>D</i>	<i>D</i>

- *River water quality at Raebareli, Pratapgarh and Jaunpur is not meeting class B (pH:6.5-8.5, TC≤500 MPN/100ml, DO≥5mg/l, BOD<3mg/l) criteria of the Designated Best Use Standards due to high levels of TC at all locations and BOD > 3 mg/l at Pratapgarh and Jaunpur (Rajepur Tirmohani) caused by sewage discharge from Raebareli and Pratapgarh.*

5.0. Concluding remarks:

- **Low strength sewage (BOD <100 mg/l) was also observed at all 11 drains.**
- **River water quality was observed class D of the Designated Best Use standards at all location.**
- **High value of TC & FC at 11 drains and exceeding value of BOD at some drains may be the reason of Class D water quality of river Sai.**
- **For the rejuvenation of river Sai, it is necessary to complete the ongoing projects at Raebareli and Pratapgarh at the earliest. In order to ensure completion of the projects by their current expected date of completion i.e. March 2023 (Raebareli) and Oct'2022 (Pratapgarh), State need to closely follow up the required clearances and expedite the progress.**
- **The raebareli SW is receiving just 2 MLD waste water as against the designed 18 MLD STP due to poor progress on network laying and house service connections. The State need to lay greater emphasis on expediting the same to ensure that SW capacity is fully utilized and no untreated sewage is discharged to the river.**

- **State need to get the Zone 1 (Raebareli) project approved and grounded at the earliest to ensure that no waste water is discharged from zone 1 to the river Sai.**
- **In view of the high TC and FC load in the river water, State need to ensure disinfection unit in the STPs.**
- **Bioremediation of the drains need to be continued however the performance need to be improved through process optimization, close monitoring and control.”**

8. The report also annexes the individual inspection reports of the drains at Pratapgarh. Inspection report of one of the drains is given below:-

4. Pratapgarh City Drain

Name of the Regional Office of SPCB :		UPPCB Raebareli	
Type of drain wastewater (Sewage/ Industrial/ Mixed) :		Sewage	
Instantaneous flow rate of drain :		348.92 m ³ /hr.	
Discharge (River Ganga/ Tributary) :		River Sai	
Analysis report related to parameters of Bioremediation efficacy			
Parameters for bioremediation	Before Bioremediation	After Bioremediation	% Reduction
pH	7.64	7.97	--
TSS (mg/l)	52.8	156	No reduction
BOD (mg/l)	21.5	23.6	No reduction
COD (mg/l)	82.7	93.4	No reduction
Analysis report related to general parameters and trace metal			
Parameters	Before Bioremediation	After Bioremediation	
TDS (mg/l)	1554	1417	
Chloride (mg/l)	529	543	
Sulphate (mg/l)	118	102	
Phosphate (mg/l)	<1.5	<1.5	
Nitrate (mg/l)	<2.2	<2.2	
Ammoniacal Nitrogen(mg/l)	<0.5	1.24	
TC (MPN/ 100 ml)	--	2.4x10 ⁷	
FC (MPN/ 100 ml)	--	1.3x10 ⁷	
Cobalt (mg/l)	<0.2	<0.2	
Chromium (mg/l)	<0.2	<0.2	

Copper (mg/l)	<0.2	<0.2
Iron (mg/l)	3.06	5.81
Manganese (mg/l)	0.10	0.14
Lead (mg/l)	<0.5	<0.5
Zink (mg/l)	0.68	1.19

Factual report by OC (based on official inputs)

9. Report of the Oversight Committee based on reports received from UP Jal Nigam is as follows:-

“The Status of Compliance: The Urban Development Department was to forward the progress report of 30.06.2022 to the Oversight Committee by 15.07.2022 for onward submission to the Hon’ble NGT but this report has not been received till date i.e 21.08.2022 in spite of multiple reminders and a review meeting taken on 13.07.2022 by the Oversight Committee. This report is being prepared on the basis of the reports received directly from The UP Jal Nigam. The status of the compliance vis-a vis the directions are as follows:

S.No	Directions	Status of Compliance
1.	The Urban Development Department was directed to monitor the progress of I&D works and repairing of the STP on monthly basis and submit progress report to the Oversight Committee to ensure works get completed in time.	No monitoring/progress report has been received from the Urban Development Department. However, The progress till 29.06.2022, as reported by the UP Jal Nigam, shows that 41% of the proposed work has been completed with the expenditure of Rs. 2.305 Cr. It is as per the Gant chart submitted on 08.10.2021. It has been assured that the work will be completed on scheduled date i.e. 31.10.2022.
2.	The Urban Development Department and Jal Nigam were directed to identify the supervisory officers in one month and take appropriate action against them in another 6 months. It was also directed to fix the accountability of Secretaries to the Government and UPPCB has to initiate prosecution for	The UP Jal Nigam has provided a list of 12 retired chief engineers who worked as the controlling officers during the period of expenditure. But no action has been initiated against them so far. Accountability of the Secretaries to the Government has not been fixed yet. UPPCB has not initiated prosecution of officers responsible for the prevailing situation.

	<i>crossing the timeline as well as continuing failure.</i>	
3.	<i>UP Government (Home & Urban Department) was directed to take action against all the erring officers for the misappropriation of funds under the full gamut of law.</i>	<p>a. <i>An FIR was lodged against 3 erring officials and the contractor firm on 30.08.2020 under section 409, 419 and 420 of the IPC. Charge sheet has been filed in the competent court against Sh. Rajesh Khare (Executive Engineer) and Sh. Rakesh Kumar Srivastava (Divisional Accountant) under section 420 of the IPC. Both the accused have been arrested. Sanction has been granted by the competent authority for their prosecution. Sh. Rampal Ram (Head Clerk) named in the FIR was not found guilty in the investigation. It was reported in March 2022 that the investigation in respect of the contractor firm is on but no further progress has been reported even after the passage of about 5 months.</i></p> <p>b. <i>M/s Thermax Ltd., Chinchwad, Pune was black listed by the Chief Engineer for a period of 2 years vide letter dated 30.10.2021. The High Court has quashed this order on technical grounds and given liberty to the Jal Nigam to pass appropriate order after hearing the contractor. Contractor has replied to the show cause notice issued by the Jal Nigam on 05.07.2022 which is under process.</i></p> <p><i>No action has been taken against the erring officials/firm for violation of Environmental Protection Act 1986.</i></p>
4.	<i>The UPPCB and EO, Pratapgarh, were directed to monitor water quality of the drains in which bioremediation is being done and ensure that the water quality of the drains discharging into the river Sai should be within the permissible limits respectively. Also, Urban Development Department and UP Jal Nigam was directed to monitor the bioremediation works done by the Nagar Palika Parishad</i>	<i>At Pratapgarh: The bioremediation is being done since 01.10.2021. On 07.05.2022, 13.05.2022, 20.05.2022, 30.05.2022, 06.06.2022, 13.06.2022 and 20.06.2022 water quality of the four drains Ramlila Maidan, Bhuliyapur drain, City drain, Police line drain were analysed and all other parameters except for FC and TC were found within the permissible limits. It is also informed that to treat TC and FC chlorination/disinfection is being done since 14.01.2022 by the Nagar Palika Parishad, Pratapgarh in all the drains.</i>

<p><i>Pratapgarh to ensure that TC and FC should also be within the permissible limits post bio-remediation.</i></p> <p><i>The UPPCB was also directed to take prompt and effective action in case of non-compliance of environmental laws.</i></p>	<p><i>As a result, the TC and FC has decreased by approximately 50-60%. The water quality of the Sai River is in category 'D' in D/s Railway Bridge as well as in the U/s Gai Ghat which indicates that the river water is only fit for propagation of wild life and fisheries.</i></p> <p><i>At Raibareli: Bioremediation work is being done since 20.11.2021 on all the 7 drains. The water quality of the drains namely Kanpur Road Drain, Surjupur Banda Drain, Indira Nagar Drain, Police line Drain, Mahanandpur Drain, Industrial Area Drain, Rewati Ram ka Talab Drain was analyzed on 15.06.2022 post bioremediation. The pH, TSS, BOD and COD were found within the permissible limits, however, the FC and TC were recorded beyond the permissible limits. The water quality of the Sai River is in category 'D' in D/s picnic spot as well as in the U/s Sirsa Ghat.</i></p> <p><i>At Lucknow: One drain named mohammadi drain originating from Aurangabad Ashiyana with a total discharge of approximately 20 MLD is falling into river Sai. This drain is untapped and no bioremediation work as an interim measure has begun so far to treat the water of the drain. The water quality of the river Sai was analysed in the U/s and D/s of the confluence point of the drain on 27 May 2022. It is found that its water was in Category 'C' prior to the confluence of the Mohammadi Drain and after its confluence it deteriorated to Category 'D'.</i></p> <p><i>Environmental Compensation: It was informed that after following the due procedure an environmental compensation of Rs 36.50 crores has been imposed against the Municipal Corporation, Pratapgarh for noncompliance of the directions of Hon'ble NGT. However, till date no payment has been made by the</i></p>
---	--

		<p>Municipal Corporation, Pratapgarh.</p> <p><i>Disciplinary action: Action has been taken against Mr. Mudit Singh, Health and Education Officer, Family Welfare, who was on deputation as Executive Officer, Nagar Palika Parishad, Belha Pratapgarh, for delaying the bioremediation of the concerned drains in Pratapgarh.</i></p> <p><i>There was a delay in the tendering process for which the concerned Executive Engineer Mr. Umesh Gupta was held responsible. Vide letter dated 19.10.2021, a charge sheet has been issued to him for not performing the duties assigned to him properly. However no further progress has been reported.</i></p>
5.	<p><i>The Additional Chief Secretary Urban Development Department was directed to coordinate the actions taken by various other Departments (such as Home Department and Environment, Forest and Climate Change Department) to ensure complete compliance of the order of Hon'ble NGT through monthly monitoring. Also, a copy of the minutes of the meeting be sent to the oversight committee.</i></p>	<p><i>No action taken report or the minutes of the monthly review meeting has been received from the Urban Development Department in this regard till date 20.08.2022.</i></p>
6.	<p><i>Urban Development Department, UP Government was directed to release funds for operation and maintenance of the STP for 15 years</i></p>	<p><i>No Compliance/information received from the Urban Development Department. However, UP Jal Nigam has informed that the funds required for operation and maintenance of sewerage treatment plant are released continuously from time to time as per demand.</i></p>
7.	<p><i>UPPCB and UP Jal Nigam were directed to identify other sources of the pollution in the U/S of Gai Ghat region which are resulting in poor quality of water. UPPCB was also directed to ensure that all the identified sources of pollution should be tapped and treated</i></p>	<p><i>Hardoi: No drain is falling in the river Sai.</i></p> <p><i>Unnao: No drain is falling in the river Sai.</i></p> <p><i>Lucknow: 1 drain having discharge of approximately 20 MLD is falling in river Sai. The drain is untapped and no</i></p>

	<p><i>to prevent any discharge of pollutants into the river.</i></p>	<p><i>bio/phyto remediation work is being done on the drain.</i></p> <p><i>Raebareli: In Raebareli there are 7 drains, having discharge of 33 MLD, which are falling in the river Sai and all of them are untapped.</i></p> <p><i>For the tapping of these 7 drains, discharge of 3 drains will be diverted to the 18 MLD existing STP after the completion of sewer laying and sewer house connections under AMRUT programme. The timeline to complete this work is March, 2023. For remaining 4 drains, a PFR under AMRUT 2.0 programme has been prepared, wherein STP of 15 MLD capacity is proposed.</i></p> <p><i>Pratapgarh: In Pratapgarh there are 4 drains, having discharge of 7.1 MLD, which are falling in the river Sai. Work of interception and diversion of these drains to the 8.06 MLD STP is in progress.</i></p> <p><i>It has been informed that officials of UPPCB have conducted an inspection of the 8.06MLD STP at the Pratapgarh on 29.06.2022 to check the progress of repairing work of the STP by the contractor i.e. M/s Technocraft and Solution, Varanasi. During the inspection it was noted that most of the repairing works has been done. At present the work of laying of sewer network pipelines is in process.</i></p> <p><i>Jaunpur: No drain is falling in the river Sai.</i></p>
8.	<p><i>Urban Development Department and UP Jal Nigam were directed to do proper planning for sewage management. Strategies should be made to use the treated sewage for agricultural purpose after requisite treatment in Rural areas and for industrial purposes in urban areas.</i></p>	<p><i>For reuse of the treated water there is no industry in Belha, Pratapgarh as well as the land area around the STP has mostly been converted into residential land. So to reuse the treated water the areas on the other side of the River Sai has been explored such as a park in chilbila and canal in Mahull (approximately 5 KM from STP). However, to take the treated water to the identified locations one pumping station will be required to lift the sewage along with laying of Rising</i></p>

		<p>main and other related works to take the treated water to park and canal. The laying of rising main has to be done on road bridge over Sai river for which NOC will be required from concerned department. The construction of Sewage Pumping Station (SPS) they have to purchase land as no land is available in nearby areas of the STP. The estimated cost of these works will be Rs. 18.00 Crores.</p> <p>The committee is of the view that if the construction of Sewage Pumping Station (SPS) is not feasible then the treated water can be discharged in to the Sai river.</p>
9.	It was directed to prevent the Sai River from getting polluted by executing the action plan prepared by the River Rejuvenation Committee (RRC) in the State of UP.	No Compliance/information received from the Department of Urban Development.

Direction 10: The Urban Development Department and Nagar Palika Parishads were directed to estimate the future increase in the population and quantify the subsequent sewage generation in the Nagar Palika Pratapgarh, Raebareli, and Jaunpur. The departments were also directed to work on making provisions to deal with the growing future needs for treating the sewage to prevent occurrence of any such situation in the future.

		Population as Per 2011 census and Sewage Generation	2022	2035	Status of bio-remediation	Status of STP and sewage works (by UP Jal Nigam, Urban)
Pratapgarh	Population	120049	144059	201681 (for the year)	Nagar Palika Parishad Pratapgarh is Performing the bioremediation of all the drains.	<ol style="list-style-type: none"> An 8.09 MLD STP will be ready for use by 31.10.2022. For catering to the needs of the future, under SBM 2.0 program, City Sanitation Action Plan has been prepared in which it is proposed to have a STP of 13.05MLD capacity cum a FSTP of 50 KLD capacity.
	Sewage generation	Data not provided	6.12 MLD	22 MLD		
Raebareli	Population	191316	229579	291054	Nagar Palika Parishad Raibareli is Performing the bioremediation	<ol style="list-style-type: none"> An 18 MLD STP has been constructed in Raebareli. The STP is in trial and run phase. The total project cost was Rs. 299.05 Cr and work proposed was to construct the 18 MLD STP, laying of 206.89 Km of

					n of all the drains.	sewer line connecting 17910 houses. It has been assured that the work will be completed on scheduled timeline i.e. Oct 2022.
	Sewage generation	23.61 MLD	24.79 MLD	31.43 MLD		2. Also, a FSTP has been constructed and a solar panel has been installed using an amount of Rs. 4.72 Crore. The work of buying three Cesspool vehicles is in process.
						3. For catering the future needs, a PFR has been prepared proposing a 15 MLD STP under AMRUT 2.0 programme.
Jaunpur	Population	180362	232350	264320	Nagar Palika Parishad Jaunpur is performing the bioremediation of all the drains.	1. A STP of 30 MLD has been installed. The work of I&D of the drains to bring the used water to this STP is in progress under the Namami Gange Scheme, which will be completed by December 2022
	Sewage generation	24.72 MLD	25.08 MLD	28.98 MLD		2. Under the Amrut Scheme a fund of Rs. 264.7688 crore has been approved. Using this fund laying of 179.00 Km of sewer line connecting 34616 houses and construction of one IPS will be done. The timeline to complete this work is 30.06.2023. 3. At present, 42 Km of sewer network connecting 1240 houses and 40% of IPS work has been completed.

2. Recommendations:

1. **The order dated 02.01.2020 of the Hon'ble NGT to take action against all the erring officials/firms including the Senior Officers of the UP Jal Nigam as well as the State Government under the extant provisions of law including Environmental laws still remains to be complied with. The Urban Development Department and the UP PCB may be directed to explain the reasons for not taking action till now.**
2. **In spite of the stringent directions of the Hon'ble NGT emphasizing on 100% treatment of sewage/effluent and not discharging a single drop of untreated water to the**

river Ganga and its tributaries, even now the Mohammedi drain in Lucknow is discharging 20 MLD untreated water in the river Sai. Till date, no bio/phytoremediation work has begun on this drain. The Urban Development Department may be directed to take immediate steps to tap these drains. Meanwhile bio/phytoremediation may be started as interim measure to treat the sewerage/waste water, actions against those who have failed to take appropriate action for the tapping of the drains in time. The UPPCB may also be directed to impose EC on the Nagar Nigam, Lucknow for continued pollution of the river Sai.

- 3. Researches have shown that chlorine itself does not persist for a long period in water but is very reactive and its by-products (chlorination byproducts (CBPs)/disinfection byproducts (DBPs)) persist for a longer period of time. They have adverse effects on the humans, animals and fishes as reported in the scientific reports¹ ². The CPCB and UPPCB may be directed to analyse the water quality samples of the drains, where chlorination is being done, to check the presence or absence of the chlorination byproducts (CBPs)/disinfection byproducts (DBPs).***
- 4. The Municipal Corporation, Pratapgarh has not paid the EC imposed as well as they have not received any stay on the imposed EC. The MS, UPPCB may be directed to take other stringent method, permission under law for recovery of the imposed EC.”***

Compliance report filed by the State

10. The compliance status report filed by the State is that treatment of sewage at Pratapgarh and Raebareli is being done by bio-remediation and water quality in respect of pH, TSS and BOD is as per prescribed standards. In respect of other non complying parameters as emerging from report of CPCB, no comment has been made. Water quality of Sai river in Raebareli and Pratapgarh Districts is of category-D which is suitable for wildlife and fisheries. However, drain is meant to carry storm water and not contaminants degrading water quality to D with high level of faecal coliform showing continuous discharge of untreated sewage. Accordingly to State PCB, there is 50-60% reduction in Fecal Coliform after chlorination

which is disputed by CPCB report and chlorination has also been objected to in the OC report as harmful.

11. The status report of the Nagar Palika Parishad, Pratapgarh is that STP is to be operationalized by 31.10.2022 but the progress as on 22.08.2022 is 52% and progress of the entire work is 31.10%.

Consideration, finding and directions

12. We have considered the matter and find that the report filed by the State does not give complete picture of compliance status. The report of CPCB and Oversight Committee shows the factual position that bio-remediation is not resulting in reduction of pollution load. Fecal Coliform indicates sewage contamination in the drains. Water quality is of D-category which is below the level of drain water quality if it is to be free from discharge of untreated sewage. The CPCB report shows that as against 18 MLD capacity, STP at Raebareli is receiving only 2 MLD waste water. There is high value of TC and FC at 11 drains and BOD values are also beyond norms. As per report of the Nagar Palika Parishad, Pratapgarh, the work completed as on 22.08.2022 is only 31.10%. The Oversight Committee report shows that the State PCB levied compensation of Rs. 36.50 crores against Municipal Corporation, Pratapgarh for non-compliances which has not been paid. There is high level of pollution but there is no adequate monitoring or action has been taken against erring officers. No compensation has been levied against discharge in Rae Bareilly and Jaunpur though they stand on same footing as shown by CPCB report.

13. While funds appear to have been allocated for future remediation and it is stated that in due course pollution may be controlled, question is the accountability for past violations, particularly in the light of directions in

the judgement of the Hon'ble Supreme Court in *Paryavaran Suraksha Samiti Vs. Union of India*¹ fixing outer limit of three years from 22.2.2017 for preventing pollution and 31.3.2018 for finalizing and enforcing funding arrangement. For the said past violations, the State of UP has to be held in violation of directions and also the mandate of Constitution requiring providing clean environment and preventing pollution. Even if it is to be accepted that work of installing STPs may be completed by 31.10.2022, in absence of connectivity of the STPs to the sewage and drains, it is difficult to accept that pollution will be brought under control. The authorities are depending upon bio-remediation and claiming reduction of load to the extent of 50% but on verification, CPCB has reported that bio-remediation is not resulting in reduction of pollution load. Effectiveness, utilization and performance of STPs are yet to be seen. There is thus, need for intervention of the Tribunal for levy of compensation for past violations and constituting effective monitoring mechanism for remedial action. It is further seen from the report of the Oversight Committee that at Jaunpur, 179 Km sewer line is to be laid connecting 34616 houses and construction of one Intermediate Pumping Station (IPS) is to be done by 30.06.2023. Similarly, at Raebareli the work of laying of 206.89 Km of sewer line connecting 17910 houses is yet to be executed. Though it is assured that the work will be completed in October, 2022, in absence of extent of progress achieved, the expectation to complete the work within next one month does not appear to be realistic. In Pratapgarh, even though it is stated that STP will be ready by 30.10.2022, there is no mention about connectivity.

14. Compensation on 'Polluter Pays' principle has to be determined for restoration of harm done to the environment. As already noted in the order dated 29.03.2022, timeline fixed by the Hon'ble Supreme Court for having

¹(2017) 5 SCC 326

in place funding arrangements till 31.03.2018 and setting up of requisite equipment till February, 2020 has long expired. Remedial action in terms of judgement of Hon'ble Supreme Court has not been taken. It is patent that such default is to the detriment and public health. Water pollution results in water borne diseases which are detrimental to health and at times fatal. This has added to the pollution of rivers, including River Ganga. For ready reference it will be worthwhile to reproduce the extracts from earlier order dated 09.06.2021 as follows:-

“8. Contamination of water sources is a punishable offence under the Water (Prevention and Control of Pollution) Act, 1974 for the last 49 years. The stand of the State atleast since 30.8.2019 (when first report was filed by the PCB as noted earlier) is that the STP was started in 2009 and completed in 2010 to the extent of 95%. The same is not been made operational for the last 11 years. Earlier funds have been illegally misappropriated but no meaningful action is being taken against the violators. Action plan in terms of order of this Tribunal dated 20.9.2018 in OA 673/2018 was prepared which included requisite STP being operated within the timeline mentioned therein even though more than two years have passed. Repeatedly, plea is that unless NMCG funds are available from Central Government, the Municipal Council concerned and the Urban Development Department will not comply with the constitutional obligation of preventing discharge of pollution is being reiterated against the mandate of law laid down by the Hon'ble Supreme Court in Municipal Council, Ratlam v. Shri Virdhichand & Ors.² as well as Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors., supra. This plea is being raised again inspite of its rejection by the Tribunal earlier. Non-availability of NMCG funds cannot be a justification for not stopping pollution. If funds are available from any source, the Tribunal has no objection to the same but in any case, the concerned authorities cannot avoid their responsibility under the public trust doctrine, if necessary, by raising funds, as per directions in the Supreme Court judgement.

9. We may refer to the specific directions of the Hon'ble Supreme Court and this Tribunal on the subject:

² (1980) 4 SCC 162

Extracts from the judgement of the Hon'ble Supreme Court in Paryavaran Suraksha Samiti Vs. Union of India, supra

“7. Having effectuated the directions recorded in the foregoing paragraphs, the next step would be, to set up common effluent treatment plants. We are informed, that for the aforesaid purpose, the financial contribution of the Central Government is to the extent of 50%, that of the State Government concerned (including the Union Territory concerned) is 25%. The balance 25%, is to be arranged by way of loans from banks. The above loans, are to be repaid, by the industrial areas, and/or industrial clusters. We are also informed that the setting up of a common effluent treatment plant, would ordinarily take approximately two years (in cases where the process has yet to be commenced). The reason for the above prolonged period, for setting up “common effluent treatment plants”, according to the learned counsel, is not only financial, but also, the requirement of land acquisition, for the same.

X.....X.....X.....

10. Given the responsibility vested in municipalities under Article 243-W of the Constitution, as also, in Item 6 of Schedule XII, wherein the aforesaid obligation, pointedly extends to “public health, sanitation conservancy and solid waste management”, we are of the view that the onus to operate the existing common effluent treatment plants, rests on municipalities (and/or local bodies). Given the aforesaid responsibility, the municipalities (and/or local bodies) concerned, cannot be permitted to shy away from discharging this onerous duty. In case there are further financial constraints, the remedy lies in Articles 243-X and 243-Y of the Constitution. It will be open to the municipalities (and/or local bodies) concerned, to evolve norms to recover funds, for the purpose of generating finances to install and run all the “common effluent treatment plants”, within the purview of the provisions referred to hereinabove. Needless to mention that such norms as may be evolved for generating financial resources, may include all or any of the commercial, industrial and domestic beneficiaries, of the facility. The process of evolving the above norms, shall be supervised by the State Government (Union Territory) concerned, through the Secretaries, Urban Development and Local Bodies, respectively (depending on the location of the respective common effluent treatment plant). The norms for generating funds for setting up and/or operating the “common effluent treatment plant”

shall be finalised, on or before 31-3-2017, so as to be implemented with effect from the next financial year. In case, such norms are not in place, before the commencement of the next financial year, the State Governments (or the Union Territories) concerned, shall cater to the financial requirements, of running the “common effluent treatment plants”, which are presently dysfunctional, from their own financial resources.

11. *Just in the manner suggested hereinabove, for the purpose of setting up of “common effluent treatment plants”, the State Governments concerned (including, the Union Territories concerned) will prioritise such cities, towns and villages, which discharge **industrial pollutants and sewer, directly into rivers and water bodies.***
12. *We are of the view that in the manner suggested above, **the malady of sewer treatment, should also be dealt with simultaneously.** We, therefore, hereby direct that “sewage treatment plants” shall also be set up and made functional, within the timelines and the format, expressed hereinabove.*
13. ***We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down.** We, therefore, hereby provide that the directions pertaining to continuation of industrial activity only when there is in place a functional “primary effluent treatment plants”, and the setting up of functional “common effluent treatment plants” within the timelines, expressed above, shall be of the Member Secretaries of the Pollution Control Boards concerned. **The Secretary of the Department of Environment, of the State Government concerned (and the Union Territory concerned), shall be answerable in case of default. The Secretaries to the Government concerned shall be responsible for monitoring the progress and issuing necessary directions to the Pollution Control Board concerned, as may be required, for the implementation of the above directions.** They shall be also responsible for collecting and maintaining records of data, in respect of the directions contained in this order. The said data shall be furnished to the Central Ground Water Authority, which shall evaluate the data and shall furnish the same to the Bench of the jurisdictional **National Green Tribunal.***
14. *To supervise complaints of non-implementation of the instant directions, the Benches concerned of the National Green Tribunal, will maintain running and numbered case files, by dividing the jurisdictional area into units. The abovementioned case files will be listed periodically. **The Pollution Control Board concerned is also hereby directed to initiate such civil or criminal***

action, as may be permissible in law, against all or any of the defaulters.

X.....X.....X.....

16. *It however needs to be clarified, that the instant directions and time lines, shall not in any way dilute any time lines and directions issued by Courts or Benches of the National Green Tribunal, hitherto before, wherein the postulated time lines would expire before the ones expressed through the directions recorded above. **It is clarified, that the time lines, expressed hereinabove will be relevant, only in situations where there are no prevalent time line(s), and also, where a longer period, has been provided for.***

(emphasis supplied)

**Extracts from orders of this Tribunal in OA 593/2017 :
Order dated 21.05.2020**

26. *Summary of directions:*

- i. *All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.*

CPCB may further continue efforts on compilation of River Basin-wise data. Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB may consolidate all action plans and file a report accordingly.

Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.

As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution. PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this

Tribunal failing which the erring State PCBs/PCCs will be accountable.”

Order dated 21.09.2020

“11. The Tribunal has already issued directions vide orders dated 28.08.2019 and 21.05.2020 for ensuring that no untreated sewage/effluent is discharged into any water body and for any violation compensation is to be assessed and recovered by the CPCB so that the same can be utilized for restoration of the environment, complying with the principle of ‘Polluter Pays’ which has been held to be part of ‘Sustainable Development’ and part of right to life. Control of such pollution is crucial for environment, aquatic life, food safety and also human health. ..”

From OA 673/2018:

Order dated 06.12.2019:

6. The Hon’ble Supreme Court noticed the level of degradation of rivers in India and apathy of the authorities as follows:

“58. Rivers in India are drying up, groundwater is being rapidly depleted, and canals are polluted. Yamuna in Delhi looks like a black drain. Several perennial rivers like Ganga and Brahmaputra are rapidly becoming seasonal. Rivers are dying or declining, and aquifers are getting over pumped. Industries, hotels, etc. are pumping out groundwater at an alarming rate, causing sharp decline in the groundwater levels. Farmers are having a hard time finding groundwater for their crops e.g. in Punjab. In many places there are serpentine queues of exhausted housewives waiting for hours to fill their buckets of water. In this connection John Briscoe has authored a detailed World Bank Report, in which he has mentioned that despite this alarming situation there is widespread complacency on the part of the authorities in India.³

“4. We see Yamuna river virtually turned into a sullage. We take judicial notice of this situation. Similar is the position with Ganges. As it proceeds, industrial effluents are being poured in rivers. Sewage is also being directly put in rivers contributing to the river water pollution. We direct the Pollution Control Boards of the various States as well as the Central Pollution Control Board and various Governments to place before us the data and material with respect to various rivers in the concerned States, and what steps they are taking to curb the pollution in such rivers and to management as to industrial effluents, sewage, garbage, waste and air

³ State of Orissa v. Govt. of India, (2009) 5 SCC 492

pollution, including the water management. We club the ending case of water management with this matter.⁴

xxx.....xxx.....xxx

11. *In spite of above, in flagrant violation of law of the land, polluted water in the form of sewage, industrial effluents or otherwise has continued to be discharged in the water bodies including the rivers or the canals meeting the rivers. Violation of law is not only by private citizens but also statutory bodies including the local bodies and also failure of the regulatory authorities in taking adequate steps. There is no corresponding coercive action posing danger to rule of law when large scale violation of law is not being remedied. This leads to lawlessness.*

12. *It will be appropriate to note the crisis situation in the country on the subject of availability of potable water. The matter has been considered in the report of Niti Aayog on Composite Water Management Index (CWMI).⁵ Following further information also needs to be noted:*

- (i) *India is suffering from the worst water crisis in its history and millions of lives and livelihoods are under threat. Currently, 600 million Indians face high to extreme water stress and about two lakh people die every year due to inadequate access to safe water⁶. The crisis is only going to get worse. By 2030, the country's water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions of people and an eventual ~6% loss in the country's GDP⁷. As per the report of National Commission for Integrated Water Resource Development of MoWR, the water requirement by 2050 in high use scenario is likely to be a milder 1,180 BCM, whereas the present-day availability is 695BCM. The total availability of water possible in country is still lower than this projected demand, at 1,137BCM. Thus, there is an imminent need to deepen our understanding of our water resources and usage and put in place interventions that make our water use efficient and sustainable.*
- (ii) *India is undergoing the worst water crisis in its history. Already, more than 600 million people⁸ are facing acute water shortages. Critical groundwater resources – which account for 40% of our water supply – are being depleted at unsustainable rates.⁹*
- (iii) *Most states have achieved less than 50% of the total score in the augmentation of groundwater resources, highlighting the growing national crisis—54% of India's groundwater wells are declining, and 21 major cities are*

⁴ M.C. Mehta Vs Union of India- W.P. (Civil) No. 13029/1985 dated 25.11.2019

⁵ Niti Ayog on "Composite Water Management Index", June 2018, https://niti.gov.in/writereaddata/files/document_publication/2018-05-18-Water-Index-Report_vS8-compressed.pdf.

⁶ Source: WRI Aqueduct; WHO Global Health Observatory

⁷Source: McKinsey & WRG, 'Charting our water future', 2009; World Bank; Times of India

⁸ Source: World Resource Institute

⁹ Source: World Resource Institute

expected to run out of groundwater as soon as 2020, affecting ~100 million people¹⁰.

(iv) With nearly 70% of water being contaminated, India is placed at 120th amongst 122 countries in the water quality index.

13. *As per statistics mentioned before the Lok Sabha on April 6, 2018, waterborne diseases such as cholera, acute diarrhoeal diseases, typhoid and viral hepatitis continue to be prevalent in India and have caused 10,738 deaths, over the last five years since 2017. Of this, acute diarrhoeal diseases caused maximum deaths followed by viral hepatitis, typhoid and cholera¹¹*

14. *As per 'National Health Profile' published by Central Bureau of Health Investigation, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, a total of 1535 Deaths due to Acute Diarrhoeal Diseases was reported during the year 2013.¹²*

Main Causes of Pollution of Rivers

15. *As already noted, well known causes of pollution of rivers are dumping of untreated sewage and industrial waste, garbage, plastic waste, e-waste, bio-medical waste, municipal solid waste, diversion of river waters for various purposes affecting e-flow, encroachment of catchment areas and floodplains, over drawl of groundwater, river bank erosion on account of illegal sand mining. In spite of directions to install Effluent Treatment Plants (ETPs), Common Effluent Treatment Plants (CETPs), Sewage Treatment Plants (STPs), and adopting other anti-pollution measures, satisfactory situation has not been achieved. As per CPCB's report 2016¹³, it has been estimated that 61,948 million liters per day (mld) sewage is generated from the urban areas of which treatment capacity of 23,277 mld is currently existent in India. Thereby the deficit in capacity of waste treatment is of 62%. There is no data available with regard to generation of sewage in the rural areas.*

xxx.....xxx.....xxx

33. *We may note the observations of the Hon'ble Supreme Court:*

"26. Enactment of a law, but tolerating its infringement, is worse than not enacting a law at all. The continued infringement of law, over a period of time, is made possible by adoption of such means which are best known to the violators of law. Continued tolerance of such violations of law not only

¹⁰ Source: UN Water, 'Managing water under uncertainty and risk', 2010; World Bank (Hindustan Times, The Hindu).

¹¹ <https://www.indiaspend.com/diarrhoea-took-more-lives-than-any-other-water-borne-disease-in-india-58143/>

¹² <http://pib.nic.in/newsite/PrintRelease.aspx?relid=106612>

¹³ http://www.sulabhenvi.nic.in/Database/STST_wastewater_2090.aspx July 16, updated on December 6, 2016

renders legal provisions nugatory but such tolerance by the enforcement authorities encourages lawlessness and adoption of means which cannot, or ought not to, be tolerated in any civilized society. Law should not only be meant for the law-abiding but is meant to be obeyed by all for whom it has been enacted. A law is usually enacted because the legislature feels that it is necessary. It is with a view to protect and preserve the environment and save it for the future generations and to ensure good quality of life that Parliament enacted the anti-pollution laws, namely, the Water Act, Air Act and the Environment (Protection) Act, 1986. These Acts and Rules framed and notification issued thereunder contain provisions which prohibit and/or regulate certain activities with a view to protect and preserve the environment. When a law is enacted containing some provisions which prohibit certain types of activities, then, it is of utmost importance that such legal provisions are effectively enforced. If a law is enacted but is not being voluntarily obeyed, then, it has to be enforced. Otherwise, infringement of law, which is actively or passively condoned for personal gain, will be encouraged which will in turn lead to a lawless society. Violation of anti-pollution laws not only adversely affects the existing quality of life but the non-enforcement of the legal provisions often results in ecological imbalance and degradation of environment, the adverse effect of which will have to be borne by the future generations.¹⁴

xxx.....xxx.....xxx

“61. If the laws are not enforced and the orders of the courts to enforce and implement the laws are ignored, the result can only be total lawlessness. It is, therefore, necessary to also identify and take appropriate action against officers responsible for this state of affairs. Such blatant misuse of properties at large-scale cannot take place without connivance of the officers concerned. It is also a source of corruption. Therefore, action is also necessary to check corruption, nepotism and total apathy towards the rights of the citizens.”¹⁵

xxx.....xxx.....xxx

35. *Vide order dated 22.08.2019 in Original Application 200/2014, dealing with the pollution of river Ganga, the Tribunal issued directions and laid down coercive measures to be taken for discharge of untreated sewage in river Ganga:-*

“16. xxx.....xxx.....xxx

17. **Wherever the work has not commenced, it is necessary that no untreated sewage is discharged into the River Ganga. Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.11.2019, failing which the**

¹⁴ INDIAN COUNCIL FOR ENVIRO-LEGAL ACTION Vs. UNION OF INDIA AND OTHERS (1996) 5 SCC 281

¹⁵ M.C. Mehta v. Union of India, (2006) 3 SCC 399 – Public functionaries

State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs. For delay of the work, the Chief Secretary must identify the officers responsible and assign specific responsibilities. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers. For delay in setting up of STPs and sewerage network beyond prescribed timelines, State may be liable to pay Rs. 10 Lakhs per month per STP and its network. It will be open to the State to recover the said amount from the erring officers/contractors.

36. *Vide order dated 28.08.2019, the Tribunal held:-*

“15. xxx.....xxx.....xxx

“16. xxx.....xxx.....xxx

17. As already noted, prevention of pollution of water is directly linked to access to potable water as well as food safety. Restoration of pristine glory of rivers is also of cultural and ecological significance. This necessitates effective steps to ensure that no pollution is discharged in water bodies. Doing so is a criminal offence under the Water Act and is harmful to the environment and public health. ‘Precautionary’ principle of environmental law is to be enforced. Thus, the mandate of law is that there must be 100% treatment of sewage as well as trade effluents. This Tribunal has already directed in the case of river Ganga that timelines laid down therein be adhered to for setting up of STPs and till then, interim measures be taken for treatment of sewage. There is no reason why this direction be not followed, so as to control pollution of all the river stretches in the country. The issue of ETPs/CETPs is being dealt with by an appropriate action against polluting industries. Setting up of STPs and MSW facilities is the responsibility of Local Bodies and in case of their default, of the States. Their failure on the subject has to be adequately monitored. Recovery of compensation on ‘Polluter Pays’ principle is a part of enforcement strategy but not a substitute for compliance. It is thus necessary to issue directions to all the States/UTs to enforce the compensation regime, latest with effect from 01.04.2020. We may not be taken to be condoning any past violations. The States/UTs have to enforce recovery of compensation from 01.04.2020 from the defaulting local bodies. On failure of the States/UTs, the States/UTs themselves have to pay the requisite amount of compensation to be deposited with the CPCB for restoration of environment. The Chief Secretaries of all the States may furnish their

respective compliance reports as per directions already issued in O.A. No. 606/2018.”

Recent orders of the Tribunal about State’s liability for unchecked discharge of untreated sewage in drains/rivers/waterbodies and for unprocessed solid waste.

15. We note that in recent cases the Tribunal has fixed financial liability of the State under ‘Polluter Pays’ principle for discharge of untreated sewage in water bodies at the rate of Rs. 2 Crores per MLD. Such orders have been passed inter alia in respect of West Bengal on 01.09.2022, in respect of NOIDA and DJB dated 03.08.2022, in respect of Ghaziabad dated 06.09.2022, in respect of Maharashtra dated 08.09.2022 and dated 14.9.2022 in respect of Gorakhpur. It will suffice to refer to the order dated 08.09.2022 in O.A No. 606/2018, *Compliance of MSW Rules, 2016* in respect of Maharashtra as follows:-

“xxxxxx.....xxx

45. *In our recent order dated 01.09.2022 in O.A No. 606/2018 (in respect of State of West Bengal), considering scale of compensation adopted in earlier cases including in OA No. 1002/2018, Abhisht Kusum Gupta vs. State of Uttar Pradesh & Ors., compensation was determined @ Rs. 2 Crore per MLD for untreated liquid waste and in OA No. 286/2022 for unprocessed legacy waste compensation was fixed @ Rs. 300 per MT to be utilized for restoration measures, including preventing discharge of untreated sewage and solid waste treatment/processing facilities, as per appropriate mechanism for planning and execution that may be evolved, within three months. Operative part of the said order is reproduced below:-*

“Conclusion about quantum of compensation

49. *In the light of above and considering damage to the recipient environment, we hold that apart from ensuring compliance at the earliest, compensation has to be paid by the State for past violations. The amount of compensation is fixed @ Rs. 2 crore per MLD (at which rate compensation has been levied against Noida and DJB in OA No. 1002/2018, Abhisht Kusum Gupta vs. State of Uttar Pradesh & Ors, referred to in para 48 above for detailed reasons mentioned therein). As noted earlier, **gap in generation and treatment in West Bengal, as per data furnished is 1490 MLD. Thus, under this head, liability of the State of West Bengal is to pay compensation of Rs. 2980 crores, rounded off to Rs. 3000 crore in view of continuing damage. For failure to process solid waste, unprocessed legacy waste being***

1.20 crore MT, compensation is assessed @ Rs. 300 per MT (at which approximate rate compensation has been awarded in OA No. 286/2022 against Municipal Corporation, Ludhiana, for the reasons given therein). This works out to Rs. 366 crore but adding 134 crore for continuing addition of unprocessed waste @ 13469.19 TPD, the total amount is rounded off to Rs. 500 crore. Thus, final amount of compensation under the two heads (solid and liquid waste) is assessed at Rs. 3500 crores which may be deposited by the State of West Bengal in a separate ring-fenced account within two months, to be operated as per directions of the Chief Secretary and utilised for restoration measures, including preventing discharge of untreated sewage and solid waste treatment/processing facilities, as per appropriate mechanism for planning and execution that may be evolved, within three months. If violations continue, liability to pay additional compensation may have to be considered. Compliance will be the responsibility of the Chief Secretary.”

46. Following the above pattern, we determine compensation payable by the State of Maharashtra. In respect of **gap in treatment of liquid waste/ sewage i.e. 5420.33 MLD, compensation works out to Rs. 10840.66 crores and compensation for un-remediated legacy waste to the extent of 3,94,19,287 works out roughly to about Rs. 1200 crores. We round off the compensation amount @ Rs. 12,000/- crores which may be deposited by the State of Maharashtra in a separate ring-fenced account within two months, to be operated as per directions of the Chief Secretary and utilised for restoration measures. The restoration measures with respect to sewage management would include setting up of sewage treatment and utilization systems, upgrading systems/operations to ensure utilization of their full capacities, ensuring compliance of standards, including those of fecal coliform and setting up of proper fecal sewage and sludge management in rural areas. With regard to solid waste management, the action plan would include setting up of required waste processing plants and remediation of left out 84 sites. Bio-remediation/bio-mining process need to be executed as per CPCB guidelines and the stabilized organic waste from biomining as well as from compost plants need to comply with laid down specifications. Other material recovered during such processes are to be put to use through authorized dealers/handlers/users. This restoration plan needs to be planned and executed in a time bound manner without further delay. If violations continue, liability to pay additional compensation may have to be considered. Compliance will be the responsibility of the Chief Secretary.**

47. Award of above compensation has become necessary under section 15 of the NGT Act to remedy the continuing damage to the environment and to comply with directions of the Hon'ble Supreme Court requiring this Tribunal to monitor enforcement of norms for solid and liquid waste management. Moreover, without fixing quantified liability necessary for restoration, mere passing of orders has not shown any tangible results in the last eight years (for solid waste management) and five years (for liquid waste management), even

after expiry of statutory/laid down timelines. Continuing damage is required to be prevented in future and past damage is to be restored.”

Liability in the present matter

16. Since as per independent CPCB report, referred to above, which remains undisputed, untreated sewage to the extent of more than 50 MLD is being discharged into the drains, the compensation works out to at least Rs. 100 crores, which will include the amount of Rs. 36.5 crores levied by the State PCB which has not yet been paid. The amount is to be paid by the State of UP (to be ensured by the Chief Secretary) and deposited with the Commissioner, Lucknow in a ring-fenced account to be utilized as per directions of the Monitoring Committee which we are presently constituting to plan and execute remedial measures so as to achieve norms preferably within six months, failing which further compensation may have to be levied.

17. We constitute a nine-member Monitoring Committee to be headed by ACS, UD, UP with the District Magistrates, Raebareli, Jaunpur and Pratapgarh, Commissioners, Municipal Corporations Raebareli, Jaunpur and Pratapgarh, Member Secretary, State PCB and Regional Officer, CPCB as Members. The Committee may meet within one month and update action plan for prevention and remediation of pollution so as to achieve tangible results within six months. Steps will include operationalization of STPs, interception and diversion of drains to the respective STPs, to be set up and commissioned and maintaining Floodplain zones of rivers, preventing encroachment, ensuring plantation and desilting of the rivers and other associated activities. Work may not be held up on account of avoidable procedures and timelines should not change. The proceedings of the Committee may be held online or offline as may be found viable except for site visits. Proceedings may be uploaded on the website to enable public

participation. The Committee will be free to coordinate and interact with other departments/experts/institutions/other stakeholders. CPCB and UP PCB simultaneously may undertake joint visits to ascertain the status of commissioning of STPs and connections of households and final connectivity of sewers to STPs. Further, CPCB may advise UPPCB about continuation or otherwise for bio-remediation of drains in the light of result on the ground. Water quality of rivers in question be regularly monitored.

18. An action taken report may be filed with the Registrar General of this Tribunal within six months 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. If necessary, the Registrar General may place the matter for further direction before the Tribunal.

Subject to above, the application is disposed of.

A copy of this order be forwarded to the ACS, U.D., UP, District Magistrates, Raebareli, Jaunpur and Pratapgarh, Commissioner, Municipal Corporation, Raebareli, Jaunpur and Pratapgarh, Member Secretary, State PCB and Regional Officer, CPCB by email for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Prof. A. Senthil Vel, EM

September 14, 2022
Original Application No. 490/2019
SN