

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
O.A. No. 200/2014**

In the matter of: -

M.C. Mehta

...Applicant

Versus

Union of India & Ors.

...Respondent(s)

**INDEX**

S. No.	Particulars	Page No.
1.	<b>Joint Committee Report</b> in compliance to Hon'ble NGT (PB) order dated 23.11.2021 in O.A. No. 200 of 2014, MC Mehta Vs Union of India & Ors.	
2.	<b>Annexure I:</b> A copy of order dated 23.11.2021 passed by Hon'ble NGT (PB) in O.A. No. 200 of 2014.	
3.	<b>Annexure II:</b> A copy of CPCB letter dated 16.09.2021 issued to States seeking update on inventory of drains confluencing with River Ganga and its tributaries.	
4.	<b>Annexure III:</b> A copy of state wise details of Environmental compensation imposed for untapped drains, under construction & non-operational STPs.	
5.	<b>Annexure IV:</b> A copy of CPCB letter dated 16.03.2022 issued to State agencies of five Ganga Front States.	
6.	<b>Annexure V:</b> A copy of letter dated 30.03.2022 from Urban Development & Housing Department, Government of Jharkhand to CPCB.	
7.	<b>Annexure VI:</b> A copy of letter dated 31.03.2022 from Urban Development & Housing Department, Government of Bihar to CPCB.	
8.	<b>Annexure VII:</b> A copy of letter dated 01.04.2022 from Department of Urban Development & Municipal Affairs, Government of West Bengal to CPCB.	
9.	<b>Annexure VIII:</b> A copy of letter dated 01.04.2022 from U.P. Jal Nigam to CPCB.	

10.	<b>Annexure IX:</b> A copy of letter dated 04.04.2022 from West Bengal State Program Management Group (SPMG) to CPCB.	
11.	<b>Annexure X:</b> A copy of CPCB letter dated 27.04.2022 issued to West Bengal SPMG.	
12.	<b>Annexure XI:</b> A copy of letter dated 18.04.2022 from Uttarakhand SPMG to CPCB.	
13.	<b>Annexure XII:</b> A copy of letter dated 22.02.2022 from Uttarakhand SPMG to Hon'ble National Green Tribunal, Principal Bench.	
14.	<b>Annexure XIII:</b> A copy of letter dated 22.04.2022 from Public Health Engineering Department, Government of West Bengal to CPCB.	
15.	<b>Annexure XIV:</b> A copy of Primary Water Quality criteria notified for outdoor bathing.	
16.	<b>Annexure XV:</b> A copy of water quality of River Ganga for year 2020-21.	

*Ajit Kumar Vidyarthi*

(Dr. A.K. Vidyarthi)

Scientist-F

Central Pollution Control Board

Parivesh Bhawan, East Arjun Nagar, Delhi- 110032

Place: Delhi

Date: 06.05.2022



**Compliance Report on behalf of CPCB in compliance to Hon'ble NGT Order dated 23.11.2021 in the matter of M.C. Mehta Vs Union of India & Ors., O.A. No. 200/2014**

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This report is in compliance to Hon'ble NGT order dated 23.11.2021 (**Annexure-I**) in OA No. 200/2014 titled M.C. Mehta Vs Union of India & Ors. The concerned matter is related to remedying of pollution in River Ganga. In compliance to the above mentioned NGT order, environmental compensation (hereinafter referred as EC) calculations for untapped drains discharging untreated effluent into the river Ganga & under construction/non-operational Sewage Treatment Plant (STP) projects along with the water quality of River Ganga during year 2020 & 2021 and status of drains & STPs in Ganga front towns (as on December, 2021) have been highlighted in the report.

**A. Environmental Compensation Calculations for untapped drains and under construction/non-operational STPs**

Hon'ble NGT in the matter of M.C. Mehta vs Union of India & Ors., vide order dated 7/22.08.2019, 12/18.12.2019 and 13.08.2020 directed CPCB to calculate *environmental compensation* for untapped drains discharging untreated water into river Ganga and under construction/ non-operational STP projects.

*Verbatim of the Hon'ble NGT order dated 7/22.08.2019 is as follows:*

*"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 State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. 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.*

*18. With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further, with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019."*

Hon'ble NGT vide its subsequent order dated 13.08.2020 further directed:

*"34. Other aspect dealt with in the report of the CPCB is the calculation of compensation per drain for failure of the States to prevent discharge of untreated pollutants by providing treatment plants or taking interim treatment measures. In this regard, further verification of status of failure may be necessary. On account of lockdown, some more time may be required to be given. Thus, this aspect is deferred till the next date...."*

In compliance to above mentioned orders passed by the Hon'ble Tribunal, CPCB prepared an inventory of drains and STPs and accordingly calculated EC for untapped drains and incomplete STP projects in the five Ganga front states. CPCB filed a compliance report dated 04.02.2021 before the Hon'ble NGT. Hon'ble NGT considered the report and directed the following vide order dated 08.02.2021,

*“With regard to the recovery of laid down compensation, it is made clear that the compensation must be faithfully paid by the concerned States by way of deposit to the CPCB which can thereafter be spent for restoration in the same State, as per action plan prepared for the purpose by the State and approved by the NMCG, after due evaluation on the pattern of orders earlier passed by this Tribunal.”*

Pursuant to the above, CPCB sent letters dated 16.09.2021 to concerned five states (**Annexure-II**) to reconfirm/update the inventory and accordingly deposit the EC to CPCB.

Regional Directorate Kolkata, CPCB informed that the Govt. of West Bengal in its Action taken report filed before Hon'ble NGT in OA No. 606/2018, mentioned that 402 drains were identified in Ganga front towns of West Bengal. In this regard, CPCB sent a letter dated 24.09.2021 to WBPCB to reconfirm the number of drains discharging into R. Ganga & its tributaries in the state of West Bengal and also send the updated inventory to CPCB to avoid discrepancies.

Hon'ble NGT further considered the matter on 23.11.2021 and directed the following,

*“Compensations in the last order may now be positively collected by the CPCB and the NMCG within two months. In case of non-compliance, coercive measures be taken including initiating prosecution against the defaulters under Section 26 of the NGT Act, 2010. NMCG and CPCB may file their report of further progress as on 31.3.2022 by 15.4.2022 which may also be simultaneously uploaded on their respective websites”*

Pursuant to the above mentioned Hon'ble NGT orders, CPCB has calculated EC based on information collected through monitoring/inspections and state agencies for untapped drains and incomplete/under construction STP projects. EC has been calculated for the period from 01.11.2019 to 30.06.2020 @ Rs. 5.0 Lakhs per month for each untapped drain where no interim measures were taken and from 01.07.2020 to 31.01.2022 @ Rs. 10.0 Lakhs per month for each untapped drain and under construction/ non-operational STP projects.

The state wise summary of drains inventory and amount of EC imposed on drains (for the period 1.11.2019-31.01.2022) and STP projects (for the period: 01.7.2020-31.01.2022) is as follows:

**Table 1: State wise summary of drains inventory and amount of EC imposed on drains and STP**

States	Inventory of drains	Drains Monitored by CPCB-2021	Drains Tapped	Information of additional drains provided by concerned State agencies	EC imposed for drains (Rs. in Lakhs)	STP projects considered for EC	EC imposed for STPs (Rs. in Lakhs)	Total EC imposed (Rs. in Lakhs)
	A (B+D)	B	C (of B)	D	E (of A)	F	G (of F)	H (E+G)
Uttarakhand	166	166	120	-	7690	25	4750	12440
Uttar Pradesh	333	333	66	-	50600	68	12920	63520
Bihar	262	69	-	193	57420	26	9310	66730
Jharkhand	6	6	6	-	nil	06	1140	1140
West Bengal	402	101	-	301	91540	45	8550	100090
<b>Total</b>	<b>1169</b>	<b>675</b>	<b>195</b>	<b>494</b>	<b>207250</b>	<b>170</b>	<b>36670</b>	<b>243920</b>

**Note:** State wise details of Environmental Compensation imposed for untapped drains and under construction & non-operational STPs is enclosed at **Annexure-III**.

Accordingly, CPCB issued letters on 16.03.2022 to concerned state agencies of five Ganga front states (**SPMG/SMCG, Jal Nigam/Jal Sansthan and Urban development & housing department of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal**) and NMCG to reconfirm the status of drains and STP projects considered for levying EC and accordingly deposit the EC levied in CPCB account. Copy of letter is placed at **Annexure-IV**.

In reply to CPCB letter dated 16.03.2022, Urban Development & Housing Department (UD&HD) Jharkhand has sent a letter dated 30.03.2022 to CPCB informing about the status of under construction/ incomplete STP projects in the State of Jharkhand. Copy of the letter received from UD&HD Jharkhand is annexed at **Annexure-V**.

UD&HD Bihar vide letter dated 31.03.2022 informed CPCB that State of Bihar has preferred an I.A. bearing no. 290/2020 in OA 200/2014 before the Hon'ble NGT seeking extension of time for completing STP projects up to the year 2022 which was dismissed by Hon'ble NGT vide order dated 16.09.2020. It is also informed that State of Bihar then preferred a Civil Appeal bearing no. 534 of 2021 before Hon'ble Supreme Court under challenging the order dated 16.09.2020 passed by the Hon'ble NGT in I.A. No. 290/2020. The Hon'ble Supreme Court considered the matter on 24.02.2021 and directed the following,

*“No Coercive steps shall be taken in the meantime.”*

Vide the said letter, UD&HD Bihar has requested CPCB to apprise the Hon'ble NGT of the order dated 24.02.2021 passed by the Hon'ble Supreme Court. UD&HD Bihar has also requested CPCB to withdraw letter dated 16.03.2022 issued by CPCB to the State of Bihar. Copy of the letter received from UD&HD Bihar is annexed at **Annexure-VI**.

CPCB has received a letter dated 01.04.2022 from Kolkata Municipal Corporation (KMC) in reply to CPCB letter dated 16.03.2022. Copy of the letter received from KMC is annexed at **Annexure-VII**.

CPCB has also received letter dated 01.04.2022 from UP Jal Nigam regarding 2 STPs located at Loni and Modinagar. Copy of the letter is annexed at **Annexure-VIII**.

West Bengal State NGRBA Program Management Group (WBSPMG) also sent a letter dated 04.04.2022 to CPCB in reply to CPCB letters dated 24.09.2021 and 16.03.2022 wherein it has been informed that State of West Bengal has constituted a Task Force Committee to identify the total number of drains discharging into river Ganga. Vide the said letter, WBSPMG has asked CPCB to highlight the criteria for selection of drains and to ascertain volume of discharge and quality of discharge of drains on which EC has been levied. Copy of the letter received from WBSPMG is annexed at **Annexure-IX**.

In reply to the same, CPCB sent a letter dated 27.04.2022 stating that EC has been levied for untapped drains and incomplete/under construction STPs in pursuance of Hon'ble NGT order dated 07/22.08.2019, 12/18.12.2019, 13.08.2020 and 23.11.2021 in the matter of M.C. Mehta Vs Union of India & Ors, O.A. No. 200/2014, wherein no criteria for selection of major drains and to determine their flow and quality of discharge for levying EC is mentioned and also, only first order drains of river Ganga and its tributaries/sub-tributaries are considered for EC calculations. Copy of CPCB letter dated 27.04.2022 is annexed at **Annexure-X**.

CPCB also received a letter dated 18.04.2022 in reply to CPCB letter dated 16.03.2022 from SPMG Uttarakhand. Copy of the said letter is annexed at **Annexure-XI**. Another letter dated 22.02.2022 received from SPMG Uttarakhand is annexed at **Annexure-XII**.

West Bengal Public Health Engineering Department (WBPHEd) has also sent a letter dated 22.04.2022 to CPCB. Copy of the said letter is annexed at **Annexure-XIII**.

### **B. Water quality of river Ganga during year 2020 and 2021**

CPCB is carrying out monitoring for assessment of water quality of River Ganga at 97 locations in 5 Ganga main stem states through the respective SPCBs. River water quality is mainly assessed for primary water quality criteria notified for outdoor bathing (**Annexure-XIV**) w.r.t parameters pH (6.5-8.5), Dissolved Oxygen ( $\geq 5$  mg/l), Biochemical Oxygen Demand ( $\leq 3$  mg/l), Faecal Coliforms ( $\leq 2500$  MPN/100 ml) and Faecal Streptococci ( $\leq 500$  MPN/100 ml). Monitoring in upper Ganga reaches *i.e.* from Gangotri to Devprayag is carried out on annually/quarterly basis whereas 09 locations in Uttarakhand from Swarg Ashram to d/s Roorkee and all the locations in Uttar Pradesh, Bihar, Jharkhand & West Bengal are monitored on fortnightly basis. Status of water quality of River Ganga w.r.t. parameters, from origin in Uttarakhand to confluence at Bay of Bengal in West Bengal for the year 2020 and 2021 (**Annexure-XV**) is as follows:

1. **pH:** The water quality w.r.t. pH is meeting with the primary water quality criteria for bathing at all the monitoring locations along the entire stretch of River Ganga for both the years.



2. **Dissolved Oxygen (DO):** The water quality of River Ganga w.r.t. DO is mostly meeting with the primary water quality criteria for bathing at all the monitoring locations in the stretch of Uttarakhand, Uttar Pradesh, Bihar and Jharkhand for both the years except a sub-stretch in West Bengal from **Tribeni, near Burning ghat to Uluberia** during months of April - October'2020 and from **Tribeni, near Burning ghat to Diamond Harbour** during months of June - November'2021, where DO values were mostly not meeting with bathing water quality criteria. The range of DO values that were not meeting bathing water quality criteria (<5 mg/l) in these sub-stretches was from 3.2-4.9 mg/l.
  
3. **Bio-chemical Oxygen Demand (BOD):** The water quality of River Ganga w.r.t. BOD is mostly meeting with the primary water quality criteria for bathing at all the monitoring locations in the stretch of Uttarakhand, Bihar and Uttar Pradesh for both the years. However, polluted stretches have been identified in the states of Uttar Pradesh and West Bengal where values of BOD have not met primary water quality criteria for bathing at multiple occasions. In Uttar Pradesh, the first polluted stretch has been identified from **Bithoor, Kanpur to Kala Kankar, Rai Bareilly** that include 9 locations. This stretch was consistently having BOD values exceeding 3 mg/L most of the times at most of the locations. The locations in this stretch were monitored 227 times and were found to have BOD values exceeding 3 mg/L, 193 times in the range from 3.1- 6.3 mg/L. Another polluted stretch identified is from **d/s Mirzapur to Tarighat, Ghazipur** that includes 6 locations. This stretch was consistently having BOD values exceeding 3 mg/l most of the times at most of the locations. However, the u/s Varanasi location in this sub-stretch is mostly meeting bathing water quality criteria w.r.t. BOD. The locations in this stretch were monitored 180 times and were found to have BOD values exceeding 3 mg/L, 133 times in the range from 3.1- 14.4 mg/L. Further, a sub-stretch has been identified in West Bengal from **Khagra, Beharampore to Patikali, near Durga chak** that has multiple times exceedance of BOD values. The BOD values exceeding 3 mg/L were in the range from 3.1-7.75 mg/L.
  
4. **Faecal Coliforms (FC):** Except for locations monitored in Uttarakhand, the water quality w.r.t. FC is not meeting with the primary water quality criteria for bathing mostly at all monitoring locations along the entire stretch of River Ganga for both the years. However, specific stretches that have exceptionally and consistently high values of FC are **Kannauj D/s to Kanpur D/s, Jajmau Pumping Station and D/s Mirzapur to Tarighat, Ghazipur in Uttar Pradesh as well as all locations/stretch in Bihar and West Bengal.**
  
5. **Faecal Streptococci (FS):** FS have been monitored only from September 2020 onwards and thereafter, in the present year 2021. Data from September 2020 to December 2021 is considered. The water quality w.r.t. FS is meeting with the primary water quality criteria for bathing mostly at all monitoring locations in Uttarakhand for both the years. However, in Uttar Pradesh, water quality is not meeting FS criteria from **U/s Vindhyaachal, Mirzapur to Tarighat, Ghazipur stretch** in both the years. In Bihar, water quality is not meeting FS criteria, occasionally, at almost all monitoring locations in both the years. In West Bengal, water quality is not meeting FS criteria from **Khagra, Beharampore to Serampore stretch** and meeting FS criteria from Dakshineswar to Patikali, Near Durga Chak stretch of West Bengal during both the years.

To conclude, the polluted stretches along the entire length of River Ganga can be identified typically on the basis of BOD. They are from **Bithoor, Kanpur to Kala Kankar, Rai Bareilly and D/s Mirzapur to Tarighat, Ghazipur** in Uttar Pradesh as well as **Khagra, Beharampore to Patikali, near Durga chak** in West Bengal.

### C. Compliance status of Drains & STPs

**Table 2: Status of Sewage Treatment Plants in Ganga front towns (Status as on December, 2021)**

State	Approx. Sewage Generation in Ganga front towns (MLD)	Towns covered by 110 STPs	Total STPs monitored	Installed capacity of monitored STP (MLD)	Operational	Complying	Non-complying	Operational Capacity (MLD)	Utilized Capacity (MLD)	Non-operational	Non-operational Capacity (MLD)
			(A) (A=B+C)	(of A)	(B) (B=D+E)	(D)	(E)	(of B)	(of B)	(C)	(of C)
Uttarakhand	239.8	18	53	341.3	49	14	35	339.9	235.5	4	1.4
Uttar Pradesh	1255.2	13	34	1187.90	32	1	31	1187.89	1048.15	2	0.042
Bihar	480.0	1	3	140.0	3	0	3	140.0	36.0	0	0.0
Jharkhand	12.0	1	2	12.0	2	0	2	12.0	8.3	0	0.0
West Bengal	1571.5	9	18	331.4	17	2	15	286.4	175.5	1	45.0
<b>TOTAL</b>	<b>3558.5</b>	<b>42</b>	<b>110</b>	<b>2012.6</b>	<b>103</b>	<b>17</b>	<b>86</b>	<b>1966.2</b>	<b>1503.4</b>	<b>7</b>	<b>46.4</b>

**Note:** Status based on latest reports received and compliance status of STPs based on standards prescribed by Hon'ble NGT vide order dated 30.04.2019 (pH: 5.5- 9.0; BOD: 10 mg/l; TSS: 20 mg/L; COD: 50 mg/L; Total Nitrogen: 10 mg/L; Total Phosphorus: 01 mg/l (for discharge into ponds and lakes); Faecal Coliform: Desirable limit 100 MPN/100 ml, Permissible limit 230 MPN/100ml)

- Operational STPs- 103
- Operational capacity – 1966.2 MLD

- Utilized Capacity (of operational) – 1503.4 MLD
  - Complying – 17 (Uttarakhand – 14, Uttar Pradesh – 1, West Bengal – 2)
  - Non-Complying – 86 (Uttarakhand – 35, Uttar Pradesh – 31, Bihar – 3, Jharkhand – 2, West Bengal – 15)
- Non-operational STPs – 7 (Uttarakhand- 04, Uttar Pradesh- 02, West Bengal – 1) having non-operational capacity of 46.4 MLD.
- Defunct STPs – 25 [23 in West Bengal (capacity- 327.7 MLD) and 02 in Bihar (capacity- 80 MLD)], out of these, 17 STPs in West Bengal Under rejuvenation, designed capacity – 304.16 MLD.



✓ **Table 3: Disinfection system and compliance status for 110 STPs w.r.t. FC**  
(Status as on December, 2021)

Sl. No.	State	No. of STPs	Chlorination	Ozonation	UV radiation	No disinfection system/non-operational STP	Total Compliance for FC (<230MPN/100ml)	Total Non-compliance for FC
			No. of STP	No. of STP	No. of STP			
1	Uttarakhand	53	32	17	2	2	16	33
2	Uttar Pradesh	34	25	0	1	8	7	25
3	Bihar	3	3	0	0	0	3	0
4	Jharkhand	2	2	0	0	0	1	1
5	West Bengal	18	10	0	0	8	4	13
	<b>Total</b>	<b>110</b>	<b>72</b>	<b>17</b>	<b>3</b>	<b>18</b>	<b>31</b>	<b>72</b>

- ✓ Only 31 STPs (Uttarakhand – 16, Uttar Pradesh- 7, Bihar – 3, Jharkhand – 1, West Bengal – 4) were found complying for Faecal Coliform (FC) norms (FC count <230MPN/100ml) and 72 STPs (Uttarakhand – 33, Uttar Pradesh - 25, Bihar – 0, Jharkhand – 1, West Bengal – 13) were non-complying to the FC norms.

**Table 4: State-wise inventory and status of drains monitored by CPCB during post-monsoon, 2021**

<b>S. No</b>	<b>States</b>	<b>Inventory of drains</b>	<b>Drains Monitored by CPCB-2021</b>
		<b>A</b>	<b>B</b>
1.	Uttarakhand	166	166
2.	Uttar Pradesh	333	333
3.	Bihar	262	69
4.	Jharkhand	6	6
5.	West Bengal	402	101
	<b>Total</b>	<b>1169</b>	<b>675</b>

**Annexure-I**

Item No. 01

(Court No. 1)

**BEFORE THE NATIONAL GREEN TRIBUNAL**

(By Video Conferencing)

Original Application No. 200/2014

**(arising out of W.P. No. 3727/1985 on the file of Hon'ble Supreme Court)**

(With report dated 26.07.2021, 30.07.2021, 12.11.2021)

M.C. Mehta

Applicant

Versus

Union of India &amp; Ors.

Respondent(s)

Date of completion of hearing and reserving of order: 16.11.2021

Date of uploading of order on the website: 23.11.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

<b>SYNOPSIS</b>	
<b>A</b>	<b>Background of judicial intervention in remedying pollution of Ganga first by Hon'ble Supreme Court and then by this Tribunal</b>
<b>B</b>	<b>Proceedings in Supreme Court</b>
<b>C</b>	<b>Proceedings before the Tribunal - orders dated 10.12.2015, 13.7.2017, 19.7.2018, 29.7.2018, 6.8.2018 and 29.11.2018</b>
<b>D</b>	<b>Further review by orders dated 29.5.2019, 22.8.2019, 18.12.2019, 13.8.2020 and 8.2.2021</b>
<b>E</b>	<b>Observations in the last order</b>
<b>F</b>	<b>Separate consideration of connected issues</b>
<b>G</b>	<b>Today's consideration and discussion of progress with reference to earlier orders</b>
<b>H</b>	<b>Report of Comptroller and Auditor General (CAG) 2017</b>
<b>I</b>	<b>Final Report on Environmental and Social Audit (December, 2020) of NMCG</b>
<b>J</b>	<b>Analysis and further directions</b>
<b>K</b>	<b>Conclusion</b>
<b>L</b>	<b>Directions</b>

**ORDER****Background of judicial intervention in remedying pollution of Ganga first by Hon'ble Supreme Court and then by this Tribunal:**

1. This matter is being dealt with by this Tribunal in pursuance of directions of the Hon'ble Supreme Court vide order dated 29.10.2014, reported in (2015) 12 SCC 764 and a subsequent order in 2017, requiring this Tribunal to look into the issues of control of pollution of River Ganga and pass appropriate orders for remedial action. The Tribunal was also directed to give progress report about the orders passed every six months so that if necessary, further orders could be passed by the Hon'ble Supreme Court. While passing the said directions, the Hon'ble Supreme Court referred to atleast six earlier orders in thirty years and continuance of unsatisfactory state of affairs due to apathy of the statutory authorities.

**Proceedings in Supreme Court:**

2. The matter was first taken up on 9.9.1985 in view of reports of pollution being discharged by BHEL at Haridwar. On 22.9.1987, orders against discharge of pollution by 20 tanneries on the bank of Ganga was passed. On 12.1.1988, orders to stop of discharge of sewage was passed and direction was also issued for all educational institutions to impart education relating to all aspects of environment<sup>1</sup>. On 17.9.1993, 68 grossly polluting industries were identified and action was directed to be taken by the States of UP, Bihar and WB (which then included present States of Uttarakhand and Jharkhand as part of UP and Bihar). On 1.11.1995, it was observed that the responsibility of monitoring ought to be given to National River Conservation Directorate (NCRD), in view of continued failure to control pollution inspite of huge expenditure, as per NEERI report dated 11.8.1984. Vide order dated 10.10.2006, report of

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<sup>1</sup> (1988) 1 SCC 471 MC Mehta vs. UOI pr 24, Similar direction also issued in (2005) 5 SCC 733. The Tribunal vide order 16.1.2019 in OA 606/2018 requested legal services authorities to create awareness on the subject, subject to directions of NALSA and NALSA vide circular dated 7.5.2019 directed all State legal Services authority to do the needful



Comptroller and General of India for the year 2000 was noted showing that water quality of Ganga had deteriorated in all parameters instead of improving. NCRD had no mechanism to see that the installed plants functioned properly. Vide order dated 5.2.2014, 17 more grossly polluting industries were identified. The Hon'ble Supreme Court noted that audit shows many instances of financial mismanagement out of 587.63 crore spent on pollution control. Monitoring at Central as well as State level was inadequate and water quality was not improving inspite of incurring huge expenditure. It was concluded that the matter may be monitored by the NGT. Concluding part of the order is reproduced below:

***“15. We regret to say that the intervention and sustained efforts made by us over the past 30 years notwithstanding no fruitful result has been achieved so far except the shutting down of some of the polluting units. This is largely because while orders have been passed by us their implementation remains in the hands of statutory authorities including the CPCB and the State PCBs which have done practically nothing to effectuate those orders or to take independent steps that would prevent pollution in the river. A total lack of monitoring by the statutory bodies has also contributed to the current state of affairs. The report of the Comptroller and Auditor General to the effect is a clear indictment of the statutory authorities and those at the helm of their affairs.***

***16. There is no gainsaying that River Ganga has for the people of this country great significance not only in the spiritual or mythological sense but also in material terms for it sustains millions who are settled on its bank or eke out their living by tilling lands that are fertilised by its water. Despite the experience of the past we have not lost hope, for the Central Government appears to be resolute in its efforts to ensure that the mission of cleaning the holy river is carried forward and accomplished. How far will the Government's renewed zeal make any difference on the ground is for anyone to guess.***

***17. What is, however, clear is that if the mission has to succeed, all those concerned will have to rededicate themselves to the accomplishment of the cause that will not only cleanse the holy river but comfort millions of souls that are distressed by the fetid in what is believed to be so holy and pure that a dip in its water cleanses all***

*sins. Statutory authorities that are charged with the duty to prevent pollution need to monitor and take action where they find any breach of the law. Failure of the authority to do so may also have to be noted for such action as may be required under law. This may call for a closer monitoring of the performance of all concerned. Time constraints unfortunately do not allow us to do that on a continuing basis no matter we have over the past thirty years devoted enough time and energy in that direction.*

*18. We are comforted by the thought that the National Green Tribunal has been established under the National Green Tribunal Act, 2010. The Tribunal, it is evident from the provisions of the Act, has the power to take stock of the situation and pass necessary orders on the subject. It has the legislative mandate to undertake effective and speedy adjudication and disposal of issues touching preservation of environment by prevention of pollution. It is in the above backdrop that we consider it more appropriate to refer the issue relating to enforcement of the provisions of the statutes touching environment and its preservation arising out of discharge of industrial effluents into River Ganga to the National Green Tribunal.*

*19. We are confident that the Tribunal which has several experts as its members and the advantage of assistance from agencies from outside will spare no efforts to effectively address all the questions arising out of industrial effluents being discharged into the river. This will include discharge not only from the grossly polluting industries referred to in the earlier part of this order but also discharge from “highly polluting units” also. As regards the remainder of the matter concerning discharge of domestic sewage and other sources of pollution we will for the present retain the same with us.*

*20. We accordingly request the Tribunal to look into all relevant aspects and to pass appropriate directions against all those found to be violating the law. We will highly appreciate if the Tribunal submits an interim report to us every six months only to give us an idea as to the progress made and the difficulties, if any, besetting the exercise to enable us to remove such of the difficulties as can be removed within judicially manageable dimensions. The Registry shall forward a copy of the order to the National Green Tribunal along with a copy of the writ petition and the affidavits filed in reply from time to time.”*

3. Vide subsequent order dated 24.1.2017, all the remaining issues which were earlier kept pending with the Hon'ble Supreme Court were also transferred to this Tribunal.

**Proceedings before the Tribunal – orders dated 10.12.2015, 13.7.2017, 19.7.2018, 29.7.2018, 6.8.2018 and 29.11.2018:**

4. Accordingly, the Tribunal dealt with the matter exhaustively and issued directions inter alia vide orders dated 10.12.2015, 13.07.2017, 19.7.2018, 29.7.2018, 6.8.2018 and 29.11.2018, on all aspects of preventing and remedying the pollution of river Ganga. The Tribunal dealt with the issue of main causes of pollution of river Ganga being discharge of untreated sewage and effluents either directly into the River Ganga or its tributaries and connected drains, besides dumping of solid waste, bio-medical waste, hazardous waste, plastic waste, muck and other waste, illegal sand mining, illegal encroachment of the floodplains, extraction of ground water, restoration of water bodies and maintenance of e-flow. The matter was dealt with by dividing the river basin area into phases and segments. Order dated 10.12.2015 dealt with **Phase-I – Segment-A:** Gaumukh to Haridwar. Order dated 13.07.2017 dealt with **Phase-I – Segment B:** Haridwar to Kanpur. Further order dated 06.08.2018 deals with **Phase-II:** Kanpur to Uttar Pradesh Border, **Phase-III:** UP Border to Jharkhand Border (via Bihar), and **Phase-IV:** Jharkhand Border to Bay of Bengal (West Bengal).

5. Progress of compliance of orders of this Tribunal dated 10.12.2015 and 13.7.2017 was reviewed vide orders dated 19.07.2018 and 27.07.2018 and thereafter with regard to **Phase-I – Segment-A** and **-B** respectively. The review was in relation to progress in preventing pollution by installing equipments like STPs, ETPs and CETPs, tapping of drains with reference

to the laid down timelines compliance of MSW Rules, setting up of bio-digesters, sewerage network, consequent improvement in water quality, control of ground water extraction, maintaining e-flow, public involvement, decentralized waste processing facilities close to the sources of generation of waste, protection of floodplains and control of illegal mining. The Tribunal observed that there was need to prepare a model DPR and standard terms and conditions for tenders, to save time and cost. Further directions for public awareness programmes in the light of observations of the Hon'ble Supreme Court were also issued. Finding the progress to be inadequate, Monitoring Committees were constituted, headed by former Judge of the Uttarakhand and the Allahabad High Court for the two different Segments, vide orders dated 29.11.2018 and 06.08.2018 respectively. The Committees were to take stock of the actions taken with clear measurable indicators of progress and success and to oversee the action plans to remedy the situation. With regard to **Phase-II to IV**, directions were issued that the NMCG, in co-ordination with State Governments of Uttarakhand, Bihar, Jharkhand, West Bengal and Uttar Pradesh, may file Action Plans with firm timelines on the subjects of interception and diversion of drains, utilization of treated sewage, compliances by industries in the catchment area, ground water regulation, flood plain regulation, rain water harvesting and good irrigation practices for water conservation in the light of order of this Tribunal dated 13.07.2017. **Further, the NMCG was to give information about status of projects planned and executed between Kanpur to Ganga Sagar. Status of water quality in Uttarakhand, Bihar, Jharkhand, West Bengal and Uttar Pradesh was directed to be displayed on the respective websites. CPCB was also to indicate such status on its website. Flood plains were to be demarcated, encroachments**



**removed, afforestation works undertaken, guidelines for bio-diversity parks prepared by the CPCB and the MoEF&CC, bio-diversity parks were to be set up, flood plains were to be handed over to the State Forest Departments.**

**Further review by orders dated 29.5.2019, 22.8.2019, 18.12.2019, 13.8.2020 and 8.2.2021:**

6. Thereafter, the Tribunal has reviewed the matter on 29.5.2019, 22.8.2019, 18.12.2019, 13.8.2020 and 8.2.2021. Brief reference to the said orders is necessary before considering the matter today for further directions.

**Order dated 29.5.2019**

7. Vide order dated 29.05.2019, **it was directed that Ganga pollution be monitored directly by the Chief Secretaries** in view of such monitoring having already been directed in respect of 351 polluted river stretches in different States by the Chief Secretaries, vide order dated 16.01.2019 in O.A. No. 606/2018<sup>2</sup> dealing with solid waste management and orders in O.A. No. 673/2018 dealing with polluted river stretches, which include Ganga in the States of Uttarakhand, U.P., Jharkhand, Bihar and W.B. **No construction zone distance on flood plains was to be measured from the Highest Flood Line (HFL) in the last 25 years** and flood plains were to be identified on longitude and latitude. **Responsibility for plantations and administrative control of areas beyond HFL were to be handed over to the Forest Departments.** UPSPCB was directed to prohibit industrial polluting activities and to revise compensation regime so as to recover the actual cost of restoration. State of UP was to provide funds for remediation of Chromium dumps. E-flow was to be maintained

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<sup>2</sup>Compliance of Municipal Solid Waste Management Rules, 2016

as earlier directed in order dated 29.11.2018. Encroachments were to be removed. Tapping of remaining drains and prevention of pollution was to be expeditiously ensured. After noting the status of progress on sewage infrastructure projects in the Ganga Basin, **the Chief Secretaries of Bihar, Jharkhand and West Bengal were directed to effectively monitor the progress.** Timelines were directed to be reviewed and prepared. **NMCG was to undertake progress on reduction of pollution load and improvement of water quality.** Further road map, including identification of accountable persons and taking actions for the lapses was to be prepared.

#### **Order dated 22.8.2019**

8. Status of compliance was further reviewed vide order dated 22.08.2019. The Tribunal laid down compensation regime for continued delay, beyond already laid down timelines, in executing the projects. Operative part of the order is:-

#### **“State of Uttarakhand (Phase-I, Segment-A)**

15. xxx.....xxx.....xxxx

16. *During the interaction, we have considered the remedial measures for expediting execution of the orders of this Tribunal having regard to long delay caused and importance of preventing and remedying the pollution of River Ganga. Since it has been stated that many industries were found operating without consent to operate under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, action in accordance with the provision of law may be undertaken within three months after identifying such units. **As already observed by this Tribunal including in the order dated 14.05.2019 that River Ganga being National River with distinct significance for the country, even a drop of pollution therein is a matter of concern.** All the authorities have to be stringent and depict zero tolerance to the pollution of River Ganga. Wherever STPs are not operating, immediate bioremediation and/or phyto-remediation may be undertaken if feasible. **To avoid procedural delay of tender processes, etc. specifications and norms for undertaking such activities may be specified in consultation with the CPCB as was earlier directed in our order dated 29.11.2018.** Performance guarantees may be required to be*

furnished for ensuring timely performance. It needs to be ensured that setting up of STPs and sewerage network to be completed and carried out so as to avoid any idle capacities being created. Performance guarantees may be taken for preventing such defaults.

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 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.

18. With regard to works under construction, **after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply.** Further with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. **The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid.** Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019.

19. to 26    xxx.....xxx.....xxxx

**State of Uttar Pradesh (Phase -II), State of Bihar, Jharkhand and West Bengal**

27. With regard to **Phase-II to IV**, it is pointed out that no specific timelines have been laid down in the order dated 13.07.2017. **Needless to say that if no specific timelines have been laid down, the compliance has to be ensured within reasonable time.** A period of two years has gone by which can be treated as a reasonable time. Even if further allowance is to be made with regard to works under construction, **after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply with regard to States of Uttar Pradesh, Jharkhand, Bihar and West Bengal falling in Phase II to IV.** Further with regard to the sectors where STP and sewerage network works have not yet started, the States of UP, Jharkhand, Bihar and West Bengal have to pay an

**Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019. Directions for compensation for default in this regard will be on the same pattern as in the case of Uttarakhand and Uttar Pradesh as above.**

28. As observed above, we do not consider it necessary to consider point-wise progress in the present order in view of pre-existing directions on each of the points. The States of Uttar Pradesh, Bihar, Jharkhand and West Bengal may take action under each head for Phases-II, III and IV accordingly.

29. xxx .....xxx.....xxx

30. The two Monitoring Committees for **Segment-A Phase-I** and **Segment-B Phase-I** may submit their final reports by 31.10.2019. Thereafter the Chief Secretaries of States of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal Director General, Namami Gange and Secretary, Water Resources, Jal Shakti, Government of India may personally monitor the progress and report compliance to the Tribunal in terms of progress at every quarter in a tabular form as follows:

<b>Sr. No.</b>	<b>Targets to be achieved as per orders dated 10.12.2015, 13.07.2017 and 22.08.2019 the timelines</b>	<b>Targets achieved and the reasons for delay in compliance</b>	<b>Targets not achieved and the revised timelines proposed*</b>	<b>Action taken or suggested for violation of timelines or non-achieving of targets</b>

*\*subject to payment of compensation as mentioned above"*

#### **Order dated 18.12.2019**

9. The matter was then considered on 18.12.2019 in light of earlier proceedings and report of the Monitoring Committee for the State of UP dated 23.10.2019 filed on 31.10.2019 for Segment 'B' and consolidated report filed by the NMCG on 11.12.2019. The progress was found to be inadequate with reference to the timely completion of the projects. While noting inadequacy on various parameters, it was directed that steps be taken and progress indicated under relevant heads. The salient observations are:-

“17. We may now refer to the consolidated report filed by the NMCG on 11.12.2019. On the most significant of sewerage infrastructure projects, the chart filed is as on 30.07.2019 which has already been quoted in order dated 22.08.2019. During the hearing, the representative of NMCG stated that there is marginal progress but the timeline will be adhered to. **On the subject of preventing pollution, installing Continuous Emission Monitoring System (CEMS), use of treated water, sludge, bio digesters and septage management, preventing dumping of waste and management thereof, flood plain identification, maintenance of e-flow and displaying water quality data, development of biodiversity parks, prohibiting river bed mining, recovery of compensation, involvement of civil society, status has not been clearly spelt out though a voluminous chart has been filed.**

18. The Executive Director, NMCG, when asked about the latest status with regard to Sewage Infrastructure Projects in Ganga Basin (Downstream of Unano to Gangasagar), stated that **out of the total 75 projects, 16 have been completed, 36 are ongoing and 2 are in the category “tender to be floated”.** This amply demonstrates that there is hardly any progress, in terms of achievement of setting up of STPs, after 30.04.2019 which was stated in a tabulated form in our order dated 22.08.2019. **The NMCG needs to take action against the erring officers and file a report before the next date.”**

“21. It is seen that **except the State of Uttarakhand, no other report has been given in a tabular form as directed in terms of para 30 in the order dated 22.08.2019.** With regard to State of Uttarakhand, progress has been indicated on the following subjects:

- i. Setting up of STPs, Interception and Division (I&D) of drains and preventing untreated sewage and effluents in the River Ganga
- ii. Use of treated water
- iii. Use of sludge manure
- iv. Status of septage management
- v. Compliance in relation to industries
- vi. Installation of STPs/treatment facilities in Hotels/Ashrams and Dharmshalas.
- vii. Water quality monitoring of river Ganga and its tributaries.
- viii. Maintenance of environmental flow in river Ganga.
- ix. Disposal of Bio-medical waste.
- x. Compliance of Solid Waste Management (SWM) Rules, 2016.
- xi. Preparation of maps and zoning of flood plains.
- xii. Mining activity under supervision of the concerned authorities.
- xiii. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring.

22. xxx.....xxx.....xxx

23. **The States of Uttarakhand, UP, Bihar, Jharkhand and West Bengal need to take further action in terms of orders of**

**this Tribunal for preventing pollution and rejuvenation of Ganga and its tributaries as per timelines already given.** The report filed by UPPCB shows that as of now lot of untreated sewage is entering into the River Ganga and its tributaries. Similar is the position in the States of Jharkhand, Bihar and West Bengal. Despite directions of this Tribunal, in-situ Sewage Treatment is not shown to have commenced for any of the drains except in the State of Uttarakhand. There is no information on water quality of river Ganga in the stretch falling in UP, Jharkhand, Bihar and West Bengal and information of regulation of Flood Plain Zone. The reports from the States other than Uttarakhand do not describe the number of drains and a plan for their interception and diversion to the Sewage Treatment Plants.

As regards solid waste management, including legacy waste sites, this Tribunal has already issued directions in O.A. No. 606/2018 as noted in para 10 of the order dated 22.08.2019 and in O.A. No. 519/2019 as already observed in para 19 in the order dated 22.08.2019 to the effect that tender process can be avoided if other successful models and rates involved therein such as Indore model are to be followed. Directions have also been issued for installing CCTV cameras and undertaking surveillance in para 25 of the said order. Further directions are for ensuring that not even a drop of raw sewage should be discharged in river Ganga and where STPs are not operative, immediate bio-remediation and/or phytoremediation need to be undertaken and to avoid procedural delay of tender process etc., specifications and norms should be adopted in consultation with the CPCB. We may also note that vide order dated 18.10.2019 this Tribunal in O.A. No. 606/2018 directed that rates for all such services and particulars of service providers should be standardized and specified on GeM portal. NMCG is a part of the Committee constituted by this Tribunal. Further, for setting up of STPs standard cost involved is said to be around Rs. 2 crore per MLD as per works allotted by NMCG. Cost of establishing sewerage networks, including setting up of pumping stations is said to be around Rs. 5 crores per MLD. Further direction on the subject may be issued by the NMCG/CPCB pending report of the Committee constituted by this Tribunal. **All that this Tribunal can observe is that clearance of legacy waste and sewage treatment being high priority areas, the authority should find ways and means to shorten the delays by avoiding DPRs/tender process which can be done if specifications and rates are standardized which may be explored by the concerned authorities.**

24. The Tribunal has also directed that **atleast interim measures of treatment of sewage by way of bio-remediation and/or phytoremediation or any other measures may start positively from 01.11.2019**, failing which the defaulting States may be liable to pay compensation of Rs. 5 lakhs per month per drain and for such violations, adverse entries must be made in the ACRs of the identified officers.

We reiterate the said direction and since 01.11.2019 has already gone, wherever interim treatment of untreated sewage has not started in the manner earlier directed, the compensation be deposited with the CPCB which will be personal responsibility of the

*Chief Secretaries of the concerned States. **The Chief Secretaries of concerned States are put to notice that in case of any default in compliance their salaries may be liable to be stopped and for enforcing the directions, further coercive measures including order of civil imprisonment may be liable to be passed personally against the Chief Secretaries.***

25. We may also refer to the order of this Tribunal dated 03.12.2019 in O.A. No. 425/2019, Vijay Kumar Vs. State of Himachal Pradesh, to the effect that Hydropower projects in hill States including Uttarakhand must ensure minimum specified e-flow.

We may also add that replenishment study of mining areas needs to be carried out, if not already done. This may be mentioned in the next report of the States.

26. As already mentioned, **with regard to States of Uttar Pradesh, Bihar and Jharkhand, the status report is not in a tabular form as required. It is not clear whether the STPs are functional and meet the norms. Bio-remediation, phytoremediation or any other measures for treatment of sewage have not started where STPs are not functional, except that in respect of 14 drains in Kanpur interception and diversion works are said to have been undertaken/completed. Directions in para 23 above will also apply to the Chief Secretaries of the all concerned States. CPCB may monitor and give its report to this Tribunal.**

27. As noted earlier in para 5 above, this Tribunal constituted Monitoring Committees headed by former High Court Judges in the States of Uttarakhand and UP. The Committees were meant to monitor the progress till further orders and vide order dated 22.08.2019, the said Committees were to furnish final reports which have since been furnished. **There is thus need for further directions for effective monitoring mechanism. While the Chief Secretaries of the States are expected to monitor rejuvenation of Ganga on the pattern of monitoring of rejuvenation of 351 polluted river stretches, which include Ganga and its tributaries, in terms of orders of this Tribunal in O.A. No. 673/2018 and O.A. No. 606/2018, on suggestion of State of UP, this Tribunal set up a Monitoring Committee for environmental issues in the State of UP vide order dated 21.10.2019 in O.A. No. 670/2018. The said Committee may henceforth monitor steps for prevention and control of pollution of Ganga also in the same manner as other issues are being monitored. In State of Uttarakhand Justice U.C. Dhyani is heading Monitoring Committee for solid waste management and certain other issues. Such Committee may also monitor prevention and control of pollution of Ganga in the State of Uttarkhand. It is not necessary to continue other members in terms of earlier orders in the present matter, unless the State so directs. **It is open to the States of Jharkhand, Bihar and West Bengal to evolve or suggest any additional monitoring mechanism on the pattern of State of UP or otherwise.** These directions will not affect in any manner working of any Committees or authorities under the provisions of NMCG or otherwise.**

28. We may now sum up our directions as follows:

- i. **As already directed vide order dated 22.08.2019, timely completion of all projects relating to sewage treatment be ensured i.e. by 31.06.2020 in respect of ongoing projects and by 31.12.2020 in respect of others failing which compensation has to be paid in terms of the said order, apart from action against the erring officers. Till then, to avoid untreated sewage being discharged directly into Ganga, interim remedial measures have to be adopted and for the default after 01.11.2019 compensation has to be deposited in terms of order dated 22.08.2019. CPCB may make necessary calculation within one month from today and raise demands with the Chief Secretaries of the concerned States which may be complied within one month from the date of such demand failing which accountability will be of the Chief Secretaries personally.**
- ii. NMCG and concerned States – Uttarakhand, UP, Jharkhand, Bihar and West Bengal may take further steps as per directions already issued for
  - a) Preventing discharge of industrial effluents in Ganga and its tributaries/drains by ensuring installation of proper functioning of ETPs/CETPs.
  - b) Utilization of treated sewage, use of sludge as a manure and septage management.
  - c) Demarcation of flood plain zones and preventing encroachments thereof.
  - d) Maintenance of e-flow.
  - e) Preventing dumping of solid and other waste in and around Ganga.
  - f) Clearing old legacy waste dump sites.
  - g) Preventing and regulating illegal sand mining.
  - h) Steps for conservation of groundwater particularly with reference to critical, semi-critical or over-exploited areas.
  - i) Restoration of water bodies.
  - j) Monitoring and displaying of water quality.
  - k) Taking action against polluters by way of recovering compensation for restoration of the damage to the environment.
  - l) Closing, till compliance, all establishments near river banks being run without necessary STPs and compliance of environmental norms.
  - m) Public awareness and involvement for prevention and control of pollution of Ganga.
  - n) Regulating activities on and around river Ganga including ghats and other establishments.
  - o) Afforestation and setting up of biodiversity parks.
  - p) CPCB and SPCBs may periodically undertake biological assessment of Ganga. NMCG and States concerned may depict biological diversity of Ganga in public domain.
  - q) Any other directions covered by earlier orders of this Tribunal.



- iii. *The State of UP may take steps for remediating Chromium dump at Rania and Khanchanpur Village near Kanpur, as directed earlier vide orders dated 22.08.2019 and 15.11.2019.*
- iv. *CPCB may take further action to finalise and circulate Guidelines for Biodiversity parks expeditiously which may be complied with by the concerned States and status of compliance included in the reports to be filed before this Tribunal.*
- v. *Apart from the Chief Secretaries, the progress may be monitored by the Monitoring Committee constituted in the State of UP vide order dated 21.10.2019 in O.A. No. 670/2018, by Justice U.C. Dhyani in the State of Uttarakhand and in such manner as may be laid down by the Chief Secretaries in the States of Jharkhand, Bihar and West Bengal in the light of discussion in para 27 above.*

29. *Let further quarterly progress report be filed by 31.03.2020 by e-mail at judicial-ngt@gov.in.”*

#### **Order dated 13.8.2020**

10. The matter was then **considered on 13.08.2020** in the light of reports filed by the CPCB (dated 24.06.2020 and 13.08.2020), NMCG (dated 26.06.2020 and 11.08.2020), State of Uttarakhand (dated 16.06.2020), State of Uttar Pradesh (dated 11.06.2020), Oversight Committee headed by Justice S.V.S Rathore, (dated 21.07.2020), State of Jharkhand (dated 29.06.2020), State of Bihar (dated 26.06.2020) and State of West Bengal (dated 30.06.2020). While noting inadequate progress and giving consequential directions, it was specifically directed that the CPCB and study comparative reduction of pollution load in different sections. Direction for monitoring at the level of the Chief Secretaries was reiterated in view of the report that the earlier direction to that effect was not being complied. Further direction was for interaction by the Secretary Jalshakti, Central Government, NMCG and CPCB with the Chief Secretaries to facilitate further steps by better coordination and by adopting best practices for focused success in improving water quality was also mentioned. The key observations are:

*“12. ... Before proceeding to consider the reports, we may note that the reports filed do not cover all the aspects on which action was to be taken in terms of para 28 (ii) of the last order dated 18.12.2019. We note that in pursuance of order of the Hon’ble Supreme Court in the case of Paryavaran Suraksha (2017) 5 SCC 326, requiring prevention of discharge of any untreated effluent in any water body after 31.03.2018 and in default liability of the local bodies and the States to prosecution, the Tribunal has passed several orders in O.A. 593/2017, Paryavaran Suraksha Samiti & Anr. v. Union of India & Ors. The last order was passed on 21.05.2020. Reference may only be made to the summary of directions in Para 26 as follows:*

**“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.*

- ii. The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and*

**rivers and other water bodies and submit its detailed report to the Tribunal.**

- iii. **During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.**
- iv. **Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. The CPCB may compile further information on the subject accordingly.**
- v. **Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court."**

13. The other matter which overlaps with the present matter is O.A. 673/2018, News item published in "The Hindu" authored by Shri Jacob Koshy titled "More river stretches are now critically polluted: CPCB" dealing with the remedial action for control of pollution in 351 polluted river stretches in the Country. In the said matter, direction was issued for constitution of River Rejuvenation Committees (RRCs) in all the States. Rivers are polluted mainly on account of failure to enforce provisions of the Water (Prevention and Control of Pollution) Act, 1974 and allowing untreated sewage/effluent to be discharged into the rivers. The Tribunal required preparation of action plans to control the discharge of untreated effluents and to take other measures including preventing dumping of waste, maintaining flood plain zones, maintaining e-flow and restoring water quality to bathing standards. The direction issued in the said order has been monitored periodically and the last order was passed on 29.06.2020. Reference may only be made to the directions in the said order in Para 45 as follows:-

"45. We reiterate our directions in order dated 6.12.2019 in the present matter, reproduced in Para 38 above, read with those in order dated 21.5.2020 in OA 873/2017 and direct CPCB and Secretary, Jal Shakti to further monitor steps for enforcement of law meaningfully in accordance with the directions of the Hon'ble Supreme Court and this Tribunal. **The monitoring is expected with reference to ensuring that no pollution is discharged in water bodies and any violation by local bodies or private persons are dealt with as per mandate of law as laid down in orders of the Hon'ble Supreme Court and this Tribunal without any deviation from timelines. The higher**

**authorities must record failures in ACRs as already directed and recover compensation as per laid down scale. Every State/UT in the first instance must ensure that at least one polluted river stretch in each category is restored so as to meet all water quality standards upto bathing level. This may serve as a model for restoring the remaining stretches.**

*Further reports be filed by the CPCB and Secretary Jal Shakti by 15.9.2020 by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) (preferably in the form of searchable/OCR PDF and not image PDF).*

**As already noted, the constant difficulty faced by this Tribunal in monitoring abatement of pollution in river Ganga (as well other polluted rivers) remains failure of States and PCBs/PCCs to enforce its orders, despite repeated directions and close monitoring, even in physical presence of Chief Secretaries who have appeared before this Tribunal.**

*A copy of this order be sent to the Chief Secretaries of all States/UTs, Secretaries of MoHUA and Ministry of Jal Shakti, Govt. of India, CPCB and all the State PCBs/PCCs by e-mail.”*

14. While dealing with the issue of compliance of rules for Solid Waste Management and other environmental issues, in O.A. No. 606/2018, the Tribunal had interaction with the Chief Secretaries of all the States/UTs with reference to significant environmental issues, including the issue of preventing discharge of untreated effluents in water bodies and rejuvenation of polluted river stretches. All the States/UTs, NMCG and the CPCB are conversant with the above orders as copies thereof have been sent to them and Chief Secretaries of all States have appeared in person before this Tribunal and interacted with the Tribunal. It is not necessary to repeat the above directions except to say that such directions are required to be followed in the context of river Ganga in the States of Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal and status of compliance included in the progress report on the subject of preventing and remedying the pollution of river Ganga. **It is a pity that even after constant monitoring by the Hon'ble Supreme Court for 34 years (1985-2014) and by this Tribunal for the last six years and, 46 years after enactment of Water Act making discharge of pollutants in water bodies a criminal offence, pollutants continue to be discharged in the most holy river. The States are still held up in the process of giving tenders or preparing DPRs for setting up STPs. Pollution free environment is the constitutional right of every citizen and constitutional obligation of the States. To this extent the States are certainly failing in discharging their constitutional obligation.**

15. We may now take up the reports filed by the CPCB, NMCG, States of Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal serially.

**Report of the CPCB dated 23.06.2020 (filed on 24.06.2020)**

16. The report deals with the guidelines for setting up of biodiversity parks and calculation of Environmental Compensation in terms of earlier orders of this Tribunal. It is stated that the draft guidelines were prepared and uploaded on the website of CPCB on 15.05.2020. The same were sent to various Experts and after considering their comments and suggestions, final guidelines were approved on 08.06.2020. **The said guidelines lay down the details of planning, designing, development and schematic layout of a typical biodiversity park in riverscapes showing different structural components with schematic layout of a typical constructed wetland system for in-situ remediation of sewage/ industrial effluent of the drain passing through upland Elevated Floodplain of the riverscape. Other aspect dealt with in the report of the CPCB is the calculation of compensation per drain for failure of the States to prevent discharge of untreated pollutants by providing treatment plants or taking interim treatment measures. In this regard, further verification of status of failure may be necessary.** On account of lockdown, some more time may be required to be given. Thus, this aspect is deferred till the next date. Second report filed by CPCB dated 13.08.2020 does not give any additional information except that EC has been deposited by the State of West Bengal.

**Report of NMCG dated 26.06.2020**

17. The report annexes a tabular statement with regard to status of compliance in respect of different thematic areas. The information is not in summarized form. While we take on record the information furnished, we expected the same to be filed in a summarized form so that it can be comprehended at a glance. Anyway, from the information furnished, we find that while some progress has been made, **there is continued failure of the States in preventing discharge of untreated effluents by permanent or interim arrangement in violation of provisions of the Water (Prevention and Control of Pollution) Act, 1974, judgments of the Hon'ble Supreme Court and this Tribunal.** This unsatisfactory state of affairs calls for rigorous planning action at the highest level monitoring for meaningful enforcement of the Rule of Law for protection of environment and public health and also for the rejuvenation of river Ganga.

18. Apart from the issues already highlighted, the State of Bihar has stated that there cannot be demarcation of flood plains of river Ganga in the Bihar as the State is over populated. **Learned Senior Counsel for the NMCG submits that Bihar is not exempt from the statutory mandate requiring maintenance of minimum flow for which identification and protection of flood plains cannot be wished away. We find it difficult to accept the stand of State of Bihar. Demarcation of flood plains is absolutely necessary to maintain e-flow to which Bihar can be no exception. Moreover, the State of Bihar is frequently faced with floods, affecting lives and safety of the citizens. One of the remedies for handling floods is identification of the flood plains and their protection. Protection of flood plains may require control of unregulated construction activities, encroachments and unregulated mining.**

**Report of State of Uttarakhand filed on 16.06.2020**

19. According to the report, out of 19 projects under Namami Gange Programme, 13 have been completed and the remaining six (06) are under execution. It is also mentioned that steps are being taken for use of treated water, use of sludge manure and septage management. Steps are also being taken to control industrial pollution and requiring treatment facilities in Hotels/Ashrams and Dharamshalas. Water quality is being monitored, steps have been taken for joining of the flood plains, for plantation and setting up biodiversity parks. Action has been taken against the violators of environmental norms and for illegal mining.

**Report of the State of U.P. dated 11.06.2020**

20. We have perused the report of State of UP dated 11.06.2020 and the report of the Oversight Committee dated 21.07.2020. It will be suffice to refer to the later. The report mentions the earlier proceedings before the Tribunal, meetings held by the Monitoring Committee, steps so far taken for preventing and remedying the pollution and connected issues. The recommendations of the Committee for further action include taking of steps by better coordination amongst various Departments. Recommendations highlight that **regular monthly meetings at the level of Chief Secretaries were essential** but were not happening.

**Report of State of Jharkhand dated 29.06.2020**

21. From the report dated 29.6.2020, we find it difficult to decipher the exact status of compliance under different heads in terms of the order of this Tribunal.

**Reports of the State of Bihar dated 22.05.2020 & 26.06.2020**

22. Report of the State of Bihar is that there are 30 sewerage infrastructure projects. One (01) has been completed. 19 are under implementation. Seven (07) are under tendering process. For three (03) more projects, tender is yet to be floated. We have already noted the stand of the State with regard to protection and management of flood plain zones. It is stated that buffer zones of 100 meters, 200 meters and 500 meters have been demarcated. The report gives the status of STPs at various locations and other pollution abatement work.

**Observations and Directions**

23. In view of the above, further steps in the light of earlier orders of the Tribunal, including the order dated 18.12.2019 need to be taken and monitored at the level of Chief Secretaries of the States. In terms of order of this Tribunal in OA 673/2018, River Rejuvenation Committees (RRCs) have been constituted in all States having polluted river stretches. Their working is to be monitored by the Chief Secretaries periodically. There is also monitoring by the Ministry of Jal Shakti. As reported by the Oversight Committee constituted by this

Tribunal for U.P., **such monitoring is essential but is not taking place.** The position is not clear for the States of Jharkhand, Bihar and W.B. **It is difficult to say that the monitoring at level of Chief Secretaries is taking place in the said States.** This needs to be ensured. There is no appearance before this Tribunal for the said States which obstructs this Tribunal from verifying important information. **We wish the States had taken the matter with more seriousness instead of neglecting it in this manner.** We also feel that there should be periodic joint meetings of the Chief Secretaries of the concerned States to consider vital issues like pooling of human resources and sharing best practices for rejuvenation of Ganga, particularly preventing discharge of sewage and other pollutants therein directly or in its tributaries or drains connected thereto. There is need to take a holistic approach of treating river Ganga as a single entity and eco-system which requires pooling of fiscal resources by different stakeholders. Project of making Ganga pollution free needs serious attention of all States at highest levels. Joint meetings of concerned Chief Secretaries can be convened by the NMCG and Secretary Jal Shakti. Already, this Tribunal has directed interaction by the Ministry of Jal Shakti (MoJS) and CPCB with all States on the subject of pollution of rivers and ensuring that no pollutants are discharged in river bodies. NMCG also can join such monitoring. There are operative action plans prepared by RRCs. The action plans supposedly aim at **achieving norms of water quality upto bathing standards by suitably reducing the levels of BOD and Faecal Coliform and taking other steps.** The RRCs may consider availing of CSR schemes by involving the willing corporate entities and entrusting particular stretches to particular entities to the extent viable. As already directed, the specified flood plain zones need to be handed over to the Forest Department for plantations for which CAMPA funds can also be utilised. The Forest Department may also explore community involvement in restoration and development projects, including raising of plantations, developing bio-diversity parks and artificial wetlands. Utilisation of MGNREGA funds also need to be considered, apart from other sources of funding. We direct the NMCG and Secretary Jal Shakti to convene a meeting of concerned Chief Secretaries after clearly identifying action points needing focus under relevant heads and notifying to the Chief Secretaries within two weeks. NMCG can be the nodal agency and CPCB may also join. The Chief Secretaries may compile their respective feedback and have an effective interaction and joint discussion. **First meeting may be held within one month preferably by 25.09.2020 on such date as MoJS, NMCG and CPCB may fix. Thereafter such meetings may be held atleast once in three months with specific targets.** This Tribunal has involved four former Chief Secretaries in monitoring of river cleaning projects in Delhi, Punjab, Haryana and U.P. DDA has adopted certain measures in Yamuna cleaning which may be found worth consideration in dealing with Ganga cleaning. It will be open to the NMCG/Secretary Jal Shakti/CPCB to invite the said four retired Chief Secretaries and the Vice Chairman DDA as special invitees for inputs which may be of relevance for Ganga cleaning. Meetings can be virtual so long as physical meetings are not viable or necessary. A Joint Committee of NMCG, MoJS and CPCB may look into the issue of flood plains demarcation and protection in the State of Bihar and interact with the State of Bihar.

24. *The States of Uttarakhand, UP, Jharkhand, Bihar and West Bengal may give their respective reports to the NMCG and also before the Tribunal 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). Consolidated report of the status as on 31.12.2020 may be filed covering all the issues as directed in the earlier order dated 18.12.2019 before the next date in a summarized form by the NMCG at same e-mail before the next date. **As the work in Jharkhand, Bihar and West Bengal till now has not picked up so far, the Chief Secretaries of the said States may remain personally present by way of video conference so that the Tribunal may be able to interact with them.***

#### **Last Order dated 8.2.2021**

11. The matter was last considered on 08.02.2021 in light of reports filed by the NMCG, CPCB, States of UP and Uttarakhand and the Oversight Committee<sup>3</sup> for UP dated 05.02.2021, 04.02.2021, 05.02.2021, 29.12.2020 and 05.02.2021 respectively.

12. The status as per report of NMCG dated 05.02.2021 was noted as follows: -

#### **“11.1 Status of bio-remediation/phyto-remediation of drains as interim remedial measures for treatment:**

*The bioremediation related interventions are best decided at local levels and State may take up the projects as per need at their level. This would be more appropriate and would also be quick. This view has been conveyed to all the States in a meeting held under chairmanship of Director General, NMCG on 12.09.2019 and also in meeting of Supervisory Committee of NGT held on 11.10.2019. The decision was once again reaffirmed that the State government may take up the projects from their own funds in a meeting chaired by Secretary, DoWR, RD & GR held on 08.01.2020. Further, in 3rd meeting of Central Monitoring Committee meeting in NGT matter OA No. 673/2018 held under Chairmanship of Secretary, DoWR, RD & GR on 23.06.2020, many of States have apprised that they have initiated bio-remediation and phyto-remediation measures under their own funding towards compliance of NGT directions in the matter. The views as above have been communicated to States to take necessary steps to comply with extant directions of Hon'ble NGT. The Action undertaken*

<sup>3</sup> Constituted by this Tribunal vide order dated 16.03.2020 for overseeing environmental norms in the State of UP headed by Justice SVS Rathore, former Judge of the Allahabad High Court at Lucknow



by various State Governments after order of Hon'ble NGT dated 13.08.2020 for bio-remediation/phyto-remediation of drains as interim remedial measures for treatment are as following:

- **Uttarakhand:** Uttarakhand State Govt. earlier submitted (vide letter No. 23/SPMG/ Namami Gange/Bio-Remediation Tech) that a total of 13 untapped drains required treatment through bioremediation/ phytoremediation. Further, it has been informed that the nodal agency i.e. Uttarakhand Jal Nigam has been directed to initiate tendering process for in-situ treatment of un-tapped drains identified in the 09 polluted rivers stretches in State through bio-remediation under Namami Gange Programme. The work would start one month prior to Kumbh Mela - 2021 and will continue one month post Kumbh Mela - 2021. The project would be funded under NGT Component — New Initiatives of Namami Gange Programme.

As regards the remaining 04 drains it has been informed that 01 drain at Swargashram is intercepted for treatment and with respect to other 03 drains at Joshimath, their water quality is being monitored regularly and their BOD level is reported to be less than 30 mg/L, hence, bioremediation is not required in these 03 drains.

- **Uttar Pradesh:** UP State Government earlier submitted (vide letter No. 4559/No-5-19-234/19 dated 04.11.2019) that a total of 459 drains in the State needed treatment through bioremediation/ phytoremediation. It has been informed that Bio-remediation is being done in 42 drains of Prayagraj. Bio-remediation in other drains is proposed through ULBs who had been directed to carry out this work. The work in these balance drains is yet to commence.
- **Bihar:** Bihar State Government had earlier submitted (vide letter No. BGCMS/2019/Gaya-22250 **UD&HD**) that total 110 drains in Bihar are untapped and needed alternative treatment. Also, it is informed that work has been started for in-situ treatment through bioremediation for 89 drains joining River Ganga and other polluted rivers. Bio-mining/ bioremediation work has been initiated at Barahiya, Patna and Muzaffarpur for disposal of legacy waste.
- **Jharkhand:** The State of Jharkhand in its report has submitted that DPR for in-situ treatment through bioremediation of drains in identified ULBs viz. Chas, Ranchi, Mango and Adityapur, involving CSIR—NEERI has been prepared and tendering is under process. The State Govt. has projected to treat approx. 120 MLD of waste water by adopting in-situ treatment through bioremediation/ phytoremediation.

*As an interim measure at 4 nos. of drains at Rajmahal, that are considered as dry / stagnant drains in which flow occurs only during monsoon season at Rajmahal, the screens at drains have been installed on dated 25.03.2019 i.e. well before the court order in this matter, to prevent the discharge of floating matter into the river and due to very less flow at these drains, as an interim measure natural and biological treatment with in-situ manual chemical method has been put in place well before 01.11.2019, and the same has been communicated to the CPCB during meeting on dated 07.01.2020 at CPCB, New Delhi and vide UD&HD letter No. 236 & 1391 dated 20.01.2020 & 22.05.2020 respectively to CPCB.*

- **West Bengal:** *The State Government of West Bengal has submitted that work for in-situ treatment of drains through bioremediation has been started as pilot project for drains discharging in Ganga and Churni river stretches. Besides State is implementing primary treatment of drains identified on rivers in Priority V by adopting techniques such as providing screens sedimentation tank followed by disinfection. 82.58 MLD is proposed to be treated using such primary treatment techniques.*

**11.2 Monitoring & updated status of STPs/ Sewerage Infrastructure projects [since the status report dated 26.07.2020]:** *status of various projects related to setting up of STPs/ sewerage infrastructure in majors cities along the main stem of River Ganga in State of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal, it is submitted that these Projects are being regularly monitored by NMCG at the highest level to ensure their completion within the timelines and shortfalls, if any, are duly reported. NMCG ensures that technical hand-holding, assistance prior to grounding of project and during implementation is also provided by field monitoring and supervision visits of PMCs. Since, August, 2020, 14 monitoring/ review meetings have been held at the level of the Hon'ble Minister (Jal Shakti), Secretary, Dept. of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti and Director General, National Mission for Clean Ganga. Earlier, 1<sup>st</sup> meeting of National Ganga Council was held under Chairmanship of Hon'ble Prime Minister of India on 14.12.2019. 5<sup>th</sup> and 6<sup>th</sup> meeting of Empowered Task Force under Chairmanship of Hon'ble Minister for Jal Shakti was held on 10.02.2020 and 25.09.2020 respectively. In addition to above, three meetings were taken by Hon'ble Minister for Jal Shakti, six at level of Secretary (Department of Water Resources, River Development & Ganga Rejuvenation) and five at level of Director General, National Mission for Clean Ganga.*

*Besides regular review meeting are also taken at level of Executive Directors of NMCG to ensure completion of project works in accordance to prescribed timelines.*

The updated status of STPs/ sewerage infrastructure (as on **31.12.2020**) is enclosed as **Annexure — IV**.

Following emerges from the above status:

- Since submission second quarterly report to this Tribunal, 01 new projects (faecal sludge management for Bijnore town) of have been sanctioned in the reach from Haridwar d/s to Unnao d/s.
- 02 projects in UP have been completed in reach downstream of Unnao.
- 07 project will be completed by March-2021 in UP, 07 projects will be completed by December-2021 in UP.
- 01 project under AMRUT (Bulandshar sewerage and STP) will be completed by March-2021 and another 01 project by December-2021.
- 09 new projects have also been included for Yamuna river and its tributaries which are under various stages of implementation.

Amongst others, major issues related to control and management of sewage pollution besides synopsis of sewerage infrastructure in Ganga basin area are as following:-

**Uttarakhand:**

- State has made timely progress in completion of sewerage infrastructure projects. Out of 19 projects sanctioned (for towns situated on main stem of River Ganga) under Namami Gange programme, 18 projects have been completed. Thus 5 more sewerage infrastructure projects have been completed since last quarterly report submitted to this tribunal.
- Hon'ble Prime Minister of India inaugurated all the major sewerage infrastructure projects in the State on 29<sup>th</sup> September 2020. These projects are:
  - \* 68 MLD STP at Jagjeetpur, Haridwar;
  - \* Upgradation of 27 MLD STP at Jagjeetpur & 18 MLD STP at Sarai;
  - \* 26 MLD STP at Lakkarghat, Rishikesh;
  - \* 7.5 MLD STP at Chandeshwarnagar and 5 MLD STP at Chorpani, Muni-ki-Reti;
  - \* 1 MLD STP and 0.01 MLD STP at Badrinath;
  - \* Ganga Avlokan — a museum on Ganga at Chandighat, Haridwar.
- 1 STP project at Joshimath was delayed because of landslide at original STP location necessitating change of STP location. The STP is expected to be completed by end of March'2021.

- *Towards monitoring of functioning of STPs, 16 STPs have online monitoring system which are connected to Ganga Tarang web portal. A dashboard is also being developed for monitoring the functioning of STPs.*

#### **Uttar Pradesh:**

- *10 STPs (50 MLD Ramanna, Varanasi/ 10 MLD Ramnagar/ 21 MLD Etawah/ 0.01 MLD Chunar/ 24 MLD Etah/ 20 MLD Modinagar/ 67 MLD Firozabad/ 120 MLD Luckhnow/ 26 MLD Jhansi/ 15 MLD Kanpur) out of 32 STPs were expected to be completed by March 2021. Out of them, 09 projects were to be completed by December 2020. However, construction for only 01 STP at Firozabad has been completed and is under trial run. The State of U.P. should make effort to complete remaining 08 STPs at the earliest and other 23 STPs as per the timelines.*
- *No progress since September 2020 for 04 projects at Balia, Pratapgarh, Jhansi and Kanpur (Baniyapurwa). Efforts should be made to expedite the progress and complete the projects as per the timelines.*
- *LoA for project at Lucknow was issued in September 2020 but the same has run into legal issues. Land issue for Moradabad project is pending for long. The issue for these projects need to be resolved at the earliest.*
- *Similarly, for Farrukhabad STP project, in spite of NOC being given by NMCG, the LoA has not yet been issued to the successful concessionaire by State. The LoA may be issued at the earliest.*
- *In addition to sub-optimal capacity utilization, poor operation and maintenance of the created sewage and industrial effluent treatment infrastructure also appears to be a critical issue of concern evident from the fact that 19 (03 and 67 MLD STP Firozabad/ 1.6 MLD Saifai/ 23 MLD STP at Mauja Odenya, Mainpuri/ 9.8 MLD Bhagwanpur Varanasi/ 12 MLD DLW Varanasi/ 14 MLD Pakka Pokhra, Mirzapur/ 4 MLD Vindhyaachal, Mirzapur/ 56 MLD Trans Hindon, Indirapuram, Ghaziabad/ 70 MLD Dudahaida Vijay Nagar, Ghaziabad/ 2.25 MLD, Budi ka Nagla, Agra/ 10 MLD, Peelakhar, Agra/ 4.50 MLD, Kalindi Vihar, Agra/ 13.59 MLD, Masani, Mathura/ 14.5 MLD, Trans Yamuna, Mathura/ 08 MLD Near 100 Bed Hospital Vrindavan, Mathura/ 04 MLD, Vrindavan Near Pagal Baba Mandir, Mathura/ 16 MLD, Trans Yamuna, Laxmi Nagar, Mathura/ 2.76 MLD Goverdhan STP/ 5 MLD Hathia Nala Sultanpur) of the 101 STPs are non-complying with prescribed standards apart from 5 non-operational (20 MLD Moradabad/ 56 MLD Bapudham, Ghaziabad/ 30 MLD, Sadullabad Loni, Ghaziabad/ Jajmau 5 MLD, Kanpur/ Kanwara Road Banda) STPs. Action plan for making these STPs compliant needs to be drawn along with timelines. Officials responsible for maintenance of these infrastructures need to be made accountable.*
- *It has been learnt that Garhmukteshwar STPs (3 + 6 MLD) constructed under Namami Gange Programme are not*

operational from last 3 months due to settlement of trunk sewers and choking of network. The issue need to be examined and resolved as soon as possible to ensure no untreated wastewater is discharged into river Ganga.

**Bihar:**

- Following STP and **I&D** schemes/projects in Bihar have been delayed inordinately and pending because of inter departmental issues related to land NOC to be granted by State Deptt./agencies:
  - \* Land for two no Intermediate Pumping Station (IPS) for the Maner **I&D** and STP scheme;
  - \* Land for 2 number IPS in Bakhtiyarpur STP project. Land NOC for STP itself was received very late on 02.12.2020
  - \* Land for one IPS in Kankarbagh and one IPS for Digha STP and network project.
  - \* Compensation towards land for the Begusarai STP is yet to be resolved so that work can start at site.
  - \* Part land for one IPS in Karmalichak network project
  - \* Land for one IPS in Sultanganj I&D and STP project.
- These issues are being continuously flagged for early resolution and were also raised recently during 8<sup>th</sup> meeting of Central Monitoring Committee held on 05.01.2021 followed by DO letter dated 18.01.2021 from the Secretary (Jal Shakti).
- Another inter-Departmental issues to be resolved pertains to permissions from Road Construction Department (RCD) of Bihar/ NHAI. The requisite permissions that have been delaying the progress of ongoing works to significant levels leading to spilling of this tribunal mandated timelines as below:
  - \* RCD permission for 39Km road cutting and NHAI permission for 5.62Km road cutting is pending
  - \* RCD permission is pending for 30.22km, from NHAI- 8.66km (mainly in Naugachia, Begusarai and Chhapra for sewerage projects outside Patna)
  - \* Railway crossing permission in Mokama, Begusarai and Sonapur is pending.
- The tendering for the schemes like Munger, Hajipur, Barahiya, Kahalgaon and Khagaria has been pending for a long. In particular, the tendering for Hajipur and Munger sewerage infrastructure projects, the guidelines and/or directions of NMCG have not been adhered by State authorities. The insistence of the State to ignore the directions of NMCG has led to inordinate delays in finalization of procurement.
- These schemes along with Buxar sewerage network and STP need to be awarded without further delay. Secretary

*(Jal Shakti) vide his DO letter dated 18.01.2021 has requested Chief Secretary Govt of Bihar that the concerned officials from BUIDCo and State Mission for Clean Ganga sitting over the directions/ guidelines of NMCG be directed or else identified so that seamless procurement procedures are implemented without further delays. The matter yet remains to be sorted out and information awaited at NMCG.*

**West Bengal:**

- **Hooghly Chinsurah I&D and STP project:** - Revised DPR of Hooghly Chinsura has been sanctioned in 29th EC meeting and AA&ES amounting of Rs. 154.73 Crs. was issued on 23rd Sep 2020. Kolkatta Metropolitan Development Authority (KMDA) invited the tender on 23.11.2020. Now tenders have been kept on hold due to inter-Departmental issues (Department of Education) related to land which has not been sorted out by State. The land allocated for STP requires to be retained as proposal has already been changed twice and lingering since 2018.
- **Tolly Nullah I&D and STP project:** - NMCG has sanctioned a project for Pollution Abatement & Rehabilitation of Tolly's Nullah (Adi Ganga), Kolkata (Interception & Diversion with Pumping Station and STP) at a cost of Rs. 307.12 crore on 17.08.2017. Kolkata Municipal Corporation (KMC) has invited the tenders and bid have been received on 2<sup>nd</sup> call on 10.12.2020. KMC has to complete the award process at the earliest as the grounding of project is inordinately delayed. NMCG has provided necessary advise in the procurement matter.
- **Rehabilitation of Keorapukur & Garden Reach STP:-** NMCG has sanctioned the project on 05.03.2018 amounting of Rs. 165.16 Crs. State Government is revising the scope and revised DPR is yet to be received. State Government may expedite the work and submit the revised DPR at the earliest. The project will have to be re-sanctioned thereafter.

**11.3 Faecal Sludge and Septage management:**

*The Govt. of India issued the National Policy on Faecal Sludge and Septage Management in February 2017. NMCG has suggested the States Govts. that FSTP implementation in all towns with population less than 1 lakh should be adopted in consonance with National Policy on FSSM.*

*NMCG had organized an online Webinar on "Strengthening Capacity of ULBs in Planning and Implementation of FSSM across Cities and Towns of Ganga Basin" on 19<sup>th</sup> January 2021. The webinar aimed to reiterate the commitment and focus of NMCG towards Faecal Sludge and Septage Management (FSSM)s one of the key approaches to reducing the pollution into river Ganga. Additionally, the webinar also*

aimed to build awareness around the broad array of capacity building opportunities in this sector for effective planning and implementation of FSSM. It aimed to bring together various institutions and tools that are of relevance to these urban local bodies to implement FSSM.

The Webinar was attended by around 250 government officials from almost all the States. The webinar is a part of long term training and capacity building project on FSSM for Ganga towns being taken up with WASH Institute, supported by USAID and BMGF. The webinar presented case studies of various states where FSSM has been scaled up. Presentations were made by National Institute of Urban Affairs (NIUA) with regard to integrating FSSM in river management plan and by MoHUA on the schemes and initiatives of MoHUA that ULBs can utilize to scale up FSSM. The Webinar also included a session on experience of Odisha which has taken up FSSM extensively, besides initiatives taken by NMCG in this direction. States were urged to consider the implementation of FSTPs and/ or co-treatment of faecal sludge in existing STPs, in all towns wherever feasible, so that dumping of the faecal sludge in water bodies/ land and thereby polluting them, can be avoided.

Major initiatives/achievements undertaken by the States towards adoption of FSSM are as following:-

- **Uttarakhand:** The Govt. of Uttarakhand has notified the protocol for Septage Management. Septage Management Committee has been formed in all 15 priority towns/ULBs situated on the main stem of River Ganga as per the provisions of the Septage Management Protocols (SMP).
- **Uttar Pradesh:** UP Septage Management Policy' 2019 was approved in October 2019. FSTP is operational in Jhansi and Unnao and under construction in 05 towns (Chunar, Loni, Lakhimpur, Rae Bareilly and Modinagar). Projects approved and LOA issued for FSTP in 31 AMRUT towns (Aligarh, Moradabad, Shahjahanpur, Ayodhya, Pilibhit, Pt Deen Dayal Upadhyay Nagar, Shamli, Baraut, Hapur, Khurja, Chandausi, Hathras, Amroha, Badauan, Shikohabad, Farrukabad, Hardoi, Sitapur, Bahraich, Gonda, Orai, Jhansi, Lalitpur, Banda, Fatehpur, Akbarpur, Basti, Deoria, Azamgarh, Jaunpur, Maunath Bhanjan), LOA issued for co-treatment in 04 towns (Saharanpur, Mathura, Rampur, Muzaffarnagar); while tenders floated for co-treatment in 17 towns (Lucknow, Kanpur, Agra, Meerut, Varanasi, Prayagraj, Ghaziabad, Gorakhpur, Etawah, Mirzapur, Firozabad, Mainpuri, Sultanpur, Ballia, Bulandshar, Ghazipur, Ayodhya-Faizabad).
- **Bihar:** State has prepared **DPR** for FSSM for three towns namely, Digwara, Manihari and Teghra. The DPR are awaiting sanction of government for their implementation. This needs to be expedited.

#### **11.4 Industrial Pollution Management:**

CPCB through the State Pollution Control Boards is the central agency responsible for controlling the discharge of industrial/trade effluents in to the rivers and waterbodies and their effective treatment as per set standards through proper functioning of the ETPs/CETPs. NMCG has been regularly pursuing this issue with the apex regulator as well as the State agencies. A tabulated statement on the total number of Industries, effluent load, installed treatment capacity and proposed capacity to be created in the States of Uttarakhand, U.P., Bihar, Jharkhand and west Bengal has been represented in table below:

**Table- 1: Statement on Industries and Treatment Capacity established in States**

State	No. of Industries	Effluent Discharge (MLD)	No. of Industries having ETPs	Treatment Capacity of ETPs (MLD)	CETPs (Nos. and Capacity in MLD)
Uttarakhand	830	145	830	175	<b>Existing-3(13.2MLD) Proposed- 3 CETPs of 18 MLD</b>
Uttar Pradesh	1648	850.5	1404	NA	<b>Existing — 7 (58.60 MLD) (NC-01/07 operational)/7 Nos. of cumulative capacity 58.55 MLD, Under Construction — 01No. (20</b>
Jharkhand	190	-	187	-	<b>Existing : 2 Nos. of 25.05 KLD Under Construction: 3.5 MLD at Ranchi, Tupadana Industrial Cluster.</b>
Bihar	219	NA	212	-	<b>Existing : NA Under Construction/Proposed: There are 52 industrial areas under control of BIADA, 5</b>
West Bengal	454	1360.60	454 (400SPIs & 54 GPIs)	1360.60	<b>Existing : 20 MLD CETP Under Construction: 4 module CETP of 20 MLD</b>

Amongst others, major issues related to control and management of industrial pollution in Ganga basin area are as following:

- Upgradation of 6.25 MLD CETP (Rs.13,87 crore) for textile cluster at Mathura was sanctioned by NMCG with 25% contribution from industry members as well 100% O&M cost to be borne by them. There is provision for 50% reuse of treated water. LoA has been issued and contract is to signed but industry is not willing to sign the contract seeking additional time of 2-3 years due to industry running in loss due to Covid. The State Govt. of U.P./ agencies involved should be directed to expedite the process, of completing the upgradation of CETP and assuring its O&M upon commissioning of CETP.
- 2.1 MLD CETP for textile park at Pilkuwa under Pilkuwa-Hapur Development Authority remain non-compliant and nonresponsive to submission of action plan for shifting of industries working in residential areas to textile park since 2018.



- *1.5 MLD ZLD based CETP for Farrukabad textile cluster has been considered by NMCG for sanction. However, the project could not be sanctioned for transfer of land costing Rs. 7.95 crore, already allocated to SPV by UPSIDC as about 1.03 crore has been imposed as interest for 1.25 year towards delay in land acquisition process. A decision was taken by Hon'ble Cabinet Minister of Khadi, Village Industries, Sericulture, Textile, Micro, Small & Medium Enterprises and Export Promotion, Uttar Pradesh for exemption of overhead and Interest charges of the land from cabinet. This was discussed in meeting of Hon'ble Minister, (Jal Shakti) and the Chief Minister, State of U.P. held on 18.01.2021. The cabinet decision is awaited.*

**11.5 Environmental Flows:** *That as regards "Environmental flows" in River Ganga, as per paragraph 5 of the Notification dated 7.10.2016, every State Government shall endeavour to ensure that uninterrupted flows are maintained at all times in River Ganga. Further it is mentionable that every State Government shall also endeavour to maintain adequate flows of water in River Ganga in different seasons to enable River Ganga to sustain its ecological integrity and to achieve the goal and that all concerned authorities shall take suitable actions in a time bound manner.*

*That the Government of India, in exercise of the powers conferred vide notification viz 'River Ganga (Rejuvenation, Protection and Management) Authority Order, 2016, has notified on 09.10.2018 the minimum environmental flows to be maintained in river Ganga, for stretch starting from its origin to Unnao in Uttar Pradesh specifically at locations downstream of structures or projects meant for diversion of river flows for purposes like irrigation, hydropower, domestic and industrial and other requirements.*

*The environmental flow regime is applicable to all existing, under-construction and future projects [barring Mini and Micro projects which do not alter the flow characteristics of the river or stream significantly]. An Expert Team comprising of officials from Central Water Commission, Central Electricity Authority and National Institute of Hydrology, Roorkee based on their inspection of projects during 1216 June, 2019 reported that all the existing projects have provisions for releasing the mandated e-flows through controlled gated spillways/ waterways and structural modifications in the body of projects may not be required for the same. The release of mandated e-flows is not being maintained by some of the projects, mainly HEPs, due to commercial considerations. In view of this, it was decided that the three year period given in original notification may not be needed. Accordingly, the time period for complying with the environmental flow norms has been reduced from 3 years i.e., 09.10.2021 to 15.12.2019.*

*The Central Water Commission (CWC) is the designated authority and custodian of the data, responsible for supervision, monitoring and regulation of flows. The monitoring of E-flows is being carried by Upper Ganga Basin Organization (UGBO), CWC since 01.01.2019. CWC in its capacity as the designated Authority, for supervision, monitoring and regulation of*

*Environmental flows regime, fixed the e-flow targets for the Hydro Electric Projects (HEPs) operating in the Ganga river Basin in the State of Uttarakhand and ensures strict adherence to the stipulated e-flow norms/targets by 15.12.2019. CWC has been submitting e-flows, monitoring-cum-compliance report on quarterly basis to NMCG*

**(a) Uttarakhand :** *The project currently being monitored by CWC are Maneri Bhali Stage —I, Maneri Bhali Stage —II, Tehri Dam, Koteshwar Dam, Vishnuprayag HEP, Srinagar HEP, Pashulok barrage/ Chilla HEP, Bhimgoda barrage, Bijnor barrage, Narora barrage and Kanpur barrage. The structures/ projects to be monitored are to be reviewed after each year.*

*The CWC started monitoring of the 11 projects from January, 2019 and findings of the quarterly monitoring cum compliance reports for year 2019 had been submitted before this Hon'ble Tribunal in the report submitted on 11.12.2019. The 8<sup>th</sup> monitoring-cum-compliance report for quarter October-December, 2020 is enclosed as **Annexure -V**. The findings of the report are as follows:*

- *Most of the projects are providing the flow data on hourly basis regularly except Tehri and Kanpur barrage. The data from Tehri project is being received regularly but on daily basis instead of hourly basis while Kanpur barrage authorities are measuring and providing flow data on two hourly basis. The project authorities are being pursued to provide the data in desired format on regular basis. During the 2nd Phase of Inspection visit from 7-9 August, 2019, it was stressed that the pond level (between 609 m to 612 m) of Koteshwar dam extends up to the toe level of Tehri dam, as such the whole river reach between Tehri and Koteshwar remains under pool of water. It was suggested that whole system of Tehri and Koteshwar should be considered as one single system for e-flow monitoring with inflows in Tehri reservoir and outflows from Koteshwar dam. The same has been agreed upon and incorporated in this report.*
- *The automatic data acquisition and transmission system have not been installed on projects so far except at Tehri, Koteshwar dam, Bhimgoda barrage and Narora barrage. The project authorities are being pursued to complete the installation. Project authorities of Pashulok barrage and Maneri-Bhali-II HEP have completed the installation. In case of Vishnuprayag HEP, SCADA system has been installed by the project authority on all the gates including at sluice gates and desilting chambers entrance and flow data is being shared with CWC in hourly or half hourly basis.*
- *Based on the data supplied by project authorities, most of the projects met the e-flow norms during the period as inflows are normally high in monsoon period. However, the Srinagar HEP (GVK) does not comply with the mandated e-flow norms.*
- *It is submitted that as per the quarterly reports, provided by CWC starting from January 2019 till December, 2020, following projects have been found non-compliant in respective quarter:*

- 1<sup>st</sup> monitoring-cum-compliance quarterly report (Jan — March, 2019): Maneri Bhali-1, Maneri Bhali-2 HEP, Vishnuprayag HEP, Srinagar HEP
- 2<sup>nd</sup> monitoring-cum-compliance quarterly report (April-June 2019): Maneri Bhali-2 HEP, Vishnuprayag HEP, Srinagar HEP
- 3<sup>rd</sup> monitoring-cum-compliance quarterly report (July-Sep'2019): Maneri Bhali-2 HEP, Vishnuprayag HEP, Srinagar HEP
- 4<sup>th</sup> monitoring-cum-compliance quarterly report (Oct-Dec, 2019): Maneri Bhali-2 HEP, Vishnuprayag HEP, Srinagar HEP, Pashulok barrage.
- 5<sup>th</sup> monitoring-cum-compliance quarterly report (Jan-March, 2020): Srinagar HEP.
- 6<sup>th</sup> monitoring-cum-compliance quarterly report (April-June, 2020): Srinagar HEP.
- 7<sup>th</sup> monitoring-cum-compliance quarterly report (July-Sept, 2020): Srinagar HEP.
- 8<sup>th</sup> monitoring-cum-compliance quarterly report (Oct-Dec, 2020): Srinagar HEP. That only Srinagar HEP has been found non-compliant with e-flow norms even after ending of exemption provided to existing projects till 15.12.2019 as per the amendment Notification dated 14.09.2019. That as per as per protocol for e-flow monitoring and compliance specified in SOPs "If non-compliance continued for more than 5 days without any compelling circumstances, a penalty may be imposed on project authorities by NMCG under section 3 of Environment (Protection) Act 1986".

Further, it is relevant to submit that Alaknanda Hydropower Co. Ltd. (operator of the Srinagar HEP), has assailed the amended Notification dated 14.09.2019, for complying the minimum e-flows by 15.12.2019, before the Hon'ble High Court of Uttarakhand in a WP(C) No. 3889/2019 - Alaknanda Hydropower Co. Ltd. Vs. State of Uttarakhand. The Hon'ble High Court in its interim order dated 20.12.2019, has directed to keep the notification in abeyance qua the petitioner i.e stayed the notification, qua the petitioner till further order. The matter is still pending. A copy of the said order dated 20.12.2019 passed by the Hon'ble High Court of Uttarakhand is enclosed as **Annexure — VI**. NMCG has initiated action to move the Hon'ble Court for vacating the stay in the matter. The matter is yet to be decided by the Hon'ble High Court.

**(b) Uttar Pradesh:** The State of Uttar Pradesh is complying with the notification dated 14.09.2019, Department of Water Resources, River Development and Ganga Rejuvenation, Government of India with regard to ecological flow in River Ganga from Bhimgoda (Haridwar), Bijnore and Narora. Kanpur barrage project authority is not providing any flow data and same is being collected on monthly basis by CWC officials from their office. It was informed that project authority has stated that diversions from barrage are made for the purposes of drinking water supply only, which has priority over environmental

flows. Thus even if environmental flows are not met, State is bound to provide water for drinking needs.

The beta version of online portal for e-flows is currently under trial and same is being developed by Central Water Commission along with National Mission for Clean Ganga.

**(c) Bihar:** Water Resource Department, Government of Bihar has informed that steps have been taken for installation of new gauge stations and making arrangements for the discharge measurement in the rivers throughout the year.

**(d) Jharkhand:** That the Government of Jharkhand has reported that there is no water flow/ discharge regulatory structure on river Ganga within the territory of Jharkhand, hence there is no issue regarding the maintenance of e-flow within the stretch of river Ganga in Jharkhand which is being maintained. Installation of Real Time Data Acquisition System along with Data Center is to be established at Ranchi for analysis and information and it shall be completed by 2024. Further, in order to maintain the E-flow, installation of instruments across the barrages shall be completed by March 2024.

**(e) West Bengal:** The river Ganga is perennial river of Bengal. The environmental flow is maintained in the river Ganga through the release of water from Farakka Barrage throughout the year.

**11.6 Flood plain demarcation:** That the Flood Plain demarcation/ Zoning is required to be done by the State Governments concerned. In this regard the provisions of the Authority's Order, 2016 also mandate the State Government to identify and demarcate the flood plains in the concerned State. This Hon'ble Tribunal in its various orders has also directed that till the action is taken by the State Government, the criterion of 1 in 25 years HLF shall be taken into consideration for flood plain demarcation/zoning. As per the information furnished to NMCG, the action taken by the State Government with respect to demarcation, protection and management of floodplain area of the river Ganga is as following:

**(a) Uttarakhand:** Under the provisions of Uttarakhand flood plain zoning Act 2012, State Govt. of Uttarakhand vide notification dated 28.02.2017, for Haridwar District's Chandi Ghat bridge to village Kalsia (Laksar) stretch flood plains identified in schedule list-1 and list-2 within 50km reach, has been categorized as prohibited and restricted areas. The permissible land use activities in these identified prohibited and restricted areas has also been specified. Similarly, for Uttarkashi District's Gangori to Badethi Chungi stretch flood plains mentioned in the schedule list-1 and schedule list-2 within 10 km reach, has been categorized as prohibited and restricted areas. Initial notification in other 06 stretches namely; (1) Gangotri to Devprayag, (2) Bhilangana river, (3) Badrinath to Devprayag, (4) Mandakini river, (5) Devprayag to Rishikesh, and (6) Rishikesh to Bhimgauda has been issued in the month of September, 2020 to November, 2020 and final

notification is under process and is likely to be issued by February, 2021. Flood plain zoning work for Suswa, Gola and Kosi rivers have been planned and proposal has been sent for sanction. After sanctioning it is likely to be completed in 18 months.

**(b) Uttar Pradesh:** The State of Uttar Pradesh has submitted that for Phase —I (Segment B) of river Ganga, the notification for identification of flood plain zones as per the final report furnished by the Special Committee has been done. Flood plain has been notified as being either 100 m or 50 m from firm banks of river presently. In urban areas, this zone corresponds to 50 return period flood. The flood plain zone is to be physically demarcated and notified. Budget has been allocated for permanent demarcation of flood plain zones by fixing of stone pillars in Segment B of Phase—I. For Phase-II of River Ganga, identification of flood plain zone by Central Water Commission is under process. Additionally, demarcation of flood plain for Yamuna, Hindon, Kali-East, Varuna, Gomti, Ramganga, Betwa, Ghagra, Rapti, Sai, Saryu and regulation of construction/development activities are to be notified by the State Government.

NMCG has suggested the Govt. of U. P. for geo-tagging of stone pillars delineating flood plain area of the rivers. This will guard against physical damages to the pillars as geo-tagged pillar locations can always be accurately traced by simple dGPS tools and remain unaffected by physical damages.

**(c) Bihar:** That the State of Bihar in its report has submitted that considering the densely populated northern plain terrain and embanked river in the State, the directions pertaining to flood plain zonation is not applicable in case of Bihar and the State Government is contemplating to approach the Hon'ble NGT in this regard.

That Hon'ble NGT in its order dated 13.08.2020 has passed direction for constitution of a Joint Committee of members from NMCG, MoJS and CPCB to look into the issue of river floodplains demarcation and protection in the State of Bihar. In this regard, this Hon'ble Tribunal is to be apprised that the State Govt. of Bihar requested for modification in the definition of flood plain as described in the Gazette Notification S. O. 3187(E) dated 07.10.2016. The State Govt. of Bihar was asked to carry out a scientific study and report action taken based on such study and accordingly, letters dated 31.07.2020, 10.12.2020 and 06.01.2021 was issued to the Secretary, Water Resource Deptt. Govt. of Bihar. Copies of afore mentioned letters are placed at **Annexure - II**. No information in this respect has been furnished by the State Govt. of Bihar till date. The Joint Committee could look into issues pertaining to demarcation and protection of floodplains in State of Bihar once this study is in place and the requisite data is provided for examination.

**(d) Jharkhand:** That the State of Jharkhand in its report has submitted that demarcation of flood plain zones

*necessitates earmarking in the vicinity of its existing water bodies which in turn requires regulation to ascertain flood plain zones for which the Water Resources Department (WRD), Government of Jharkhand has appointed Consultant. Further, for accurate assessment of the food pain zone, hydrology of the rivers is also required. That the Government of India sponsored National Hydrology Project in underway and is likely to provide the requisite data by the end of March 2024. Hence, the demarcation of the flood plains of the rivers in Jharkhand will be done during 2024-2025.*

*NMCG, after examination of this information observes that scientific studies for flood plain zonation are yet to be initiated by State for which State is having sufficient data base. There is no case for awaiting the outcome of National Hydrology Project before decision on flood plain zoning in State is taken. State has yet to start delineation of floodplains.*

**(e) West Bengal:** *That the State of West Bengal has submitted that protection works on the left bank of the river Ganga from Mangal Pandey Ghat to Malancha Tourist lodge for a length of 135mts. including renovation of sluice gate under Barrackpore Municipality is in progress. Additionally flood protection works has been started on the right bank of river Hooghly at 04 locations of total length of 900mts. No further information has been provided by the State with regard to flood plain zoning work in Ganga River.*

*NMCG, after examination of this information observes that these works are flood protection works undertaken by the State government and scientific studies for flood plain zonation followed with protection and management of identified floodplain areas, are yet to be initiated by the State.*

**11.7 Depicting biological diversity of Ganga in public domain:** *One of NMCG's long term visions for Ganga Rejuvenation is to restore the viable populations of all endemic and endangered biodiversity of the river so that the biological communities occupy their full historical range and fulfil their role in maintaining the integrity of the Ganga River ecosystems.*

*Presence of rich biodiversity in a river ecosystem is the ultimate indicator of the river's health. The Ganga river ecosystem supports more than 25,000 floral and faunal species. Biodiversity of any ecosystem is threatened foremost by the loss or degradation of its habitat. Major threats to River Ganga's biodiversity can be grouped under five overlapping categories: over-exploitation, water pollution, flow modification, destruction or degradation of habitat and invasion by exotic species, with global scale environmental changes being superimposed upon all of them.*

*Under Namami Gange Programme, biological water quality is assessed using Bio-monitoring field protocol towards semi-quantitative monitoring developed by Central Pollution Control Board. Community structure of the benthic macro-invertebrates of*

*River Ganga and its tributaries reflects taxonomic richness with representative distributed taxa.*

*As mentioned above, under Namami Gange Programme, since 2014 onwards bio-monitoring of River Ganga and its tributaries is being carried out on regular basis to know the spacio-temporal trends in biological water quality for better understanding of health of the river system. In total, 8 rounds of bio-monitoring along the entire course of River Ganga were carried out during 2014-2020.*

*The biological data is available for 93 unique locations of River Ganga covered so far. Based on comparative bio-assessment study of same period carried out at 41 locations and covered in eight rounds of bio-monitoring during 2014-2020, the spatio-temporal picture of biological water quality status of an entire river is reported.*

*It is revealed that there is improvement in biological water quality from moderate to good class at maximum number of (29 out of 41) locations during present investigation. These locations include Jagjeetpur u/s; Sukartal; Anupshahar; Narora; Kachla Ghat; Ghatia Ghat, Farrukhabad; Kannauj; Kannauj d/s; Bithoor; Kanpur u/s; Asni Village Fatehpur; Sirsa, Prayagraj Bridge; GT Road, Prayagraj; Varanasi u/s ; Varanasi, Rajghat; Rajwari a/c Gomti; Patna, Digha ghat; Patna, Fatuha (Bihar); Patna Malsalami; Falgu River (WB); Falgu River; Murshidabad; Behrampore d/s; Srirampore d/s; Belgharia; Ballykhal,; Howrah Bridge; Garden Reach.*

*Location of Khudaganj shows improvement in the water quality from moderate to clean class during 2014-2018. In Uttarakhand stretch, biological water quality at Haridwar Barrage (UK) recorded improvement from slight pollution or clean to very good class during 2014-2018. Towards post-monsoon 2020, the water quality at this location, however, fell to moderate class. Biological water quality of the river in Uttar Pradesh at Bijnour (UP); Varanasi d/s and Bihar at Patna Gandhi Ghat remained moderate during 2014-2020 however; some improvement upto clean class level was obtained during intermediate periods of investigation. Jagjeetpur d/s is the exceptional location of River Ganga in Uttarakhand where biological water quality deteriorated from clean or slight pollution (2014-2015) to poor class (post monsoon 2018-2019) during present investigation. Decline in the biological water from clean to moderate class was observed in the Kanpur stretch of river at Shakula Ganj, Deorighat during 2014-2019.*

*As reflected from the above comparative analysis, improvement with respect to biological water quality of River Ganga has been found which indicates the river environment in tendency of enhancing its ecological health.*

*Further, in order to address the threats to the aquatic biodiversity of Ganga, NMCG is working with Wildlife Institute of India (WII), Dehradun, Central Inland Fishery Research Institute (CIFRI), Barrackpore and State Forest Departments. All the reports generated from the study are uploaded in NMCG website:*

[https://nmcg.nic.in/biodiversity\\_reports.aspx](https://nmcg.nic.in/biodiversity_reports.aspx). Summary of these reports is as below:-

- 49 % Ganga River has rich biodiversity value while sustained actions have to be continued to improve bio-diversity in the remaining reach.
- Six High Biodiversity Areas and Twelve Conservation Priority Zones exists
- Rescue & rehabilitation center established in Narora, Sarnath Bhagalpur and Kolkata.
- Cadre of more than 1000 volunteers (Ganga Praharis) developed and trained. These Ganga Praharis are actively involved in the Namami Programme and carrying out awareness programmes, cleanliness drives and plantation drives contributing towards the mission of the Namami Gange programme.
- Key ecosystem services of Ganga River identified and an assessment framework developed.
- The floating interpretation centre at Varanasi "Ganga Tarini" and interpretation centre at Sarnath "Ganga Darpan" established. Floating livelihood centre "Jalaj" established at Varanasi. Model was also adopted by District Administration in Jharkhand.
- Assessment of fish and fisheries conducted and a total of 190 fish species mapped in GIS platform to understand the fish status and distribution in Ganga
- Tagging procedures have been initiated to see whether the selected fishes like Hilsa can negotiate existing barrages.
- Conducted ranching cum awareness programmes and released more than 30 lakhs of fish seed in river Ganga for conservation and restoration of IMC & Mahseer.
- New sightings of Gangetic dolphins were recorded from downstream of Kanpur barrage, Smooth coated otters from Bhagalpur, Gharials at downstream of Rishikesh barrage and nesting of Indian skimmers near Prayagraj.
- On the basis of the recommendations by WII, a 30 km stretch near Varanasi was declared as 'Turtle Wildlife Sanctuary' by Government of Uttar Pradesh for the protection of the aquatic biodiversity and their habitat in the Ganga River.
- Continued engagement of the riverside communities was ensured in the conservation process through skill development trainings conducted for women Ganga Praharis from Uttar Pradesh and Jharkhand. The training and establishment of linkages are helping in improving livelihood and also linked with conservation.
- Training manuals created and distributed to teachers as resource material in Ganga bank districts.

**11.8 Plantation Activities and setting up biodiversity parks:** Plantations and setting up biodiversity parks along the floodplain of the rivers plays significant role in protection of floodplain area as well as restoration of river ecology. The initiatives and achievements of the States regarding plantation activities and setting up biodiversity parks are as following:-

- **Uttarakhand:** The plantation activities are being carried out in the larger catchment area of Ganges. In the year 2020-



2021 about 4151 ha of plantation activities have been completed under the various schemes of CAMPA.

- **Uttar Pradesh:** As per the MPR, status of plantation activities undertaken and proposed:

River Stretch	No. of Sampling	
	Planted Year 2019-20	Proposed for 2020-21
Hindon	55.34	55.64
Kali	65.93	69.35
Varuna	25.62	14.79
Yamuna	175.68	252.00
Gomti	180.26	151.99
Ganga	183.24	226.39
Ramganga	77.28	68.97
Betwa	24.61	49.78
Ghaghara	39.72	26.22
Sai	77.20	71.36
Rapti	57.25	29.08
Saryu	35.29	34.13
<b>Total</b>	<b>997.42</b>	<b>1049.70</b>

As per the MPR, Uttar Pradesh has identified the sites for the development of Bio-diversity parks in 25 districts in the main stem of Ganga and 02 districts in Yamuna covering a total area of 3591.984 ha. The project proposals for development of Bio-diversity parks are prepared under the supervision of Prof. C R Babu, former Pro Vice Chancellor, University of Delhi/ Emeritus Professor, CEMDE/ Incharge, Yamuna Bio Diversity park and his scientific team.

- **Bihar:** Plantation is being done under Namami Gange Scheme and Krishi Road Map wherein the polluted river stretches will be prioritized. The Bihar state has successfully achieved the total tree cover target of 15% for the Phase-I of Bihar Agriculture Road Map. For the Phase-II of Bihar Agriculture Road Map for the period 2017-18 to 2021-22 a target of 17% total tree cover has to be achieved by 2022. A team from the State Government had visited Yamuna Biodiversity Park in Delhi and at present are exploring possibilities of developing the replication of the same in the State.

- **Jharkhand:** Plantation activities along the rivers: Total — 124.69 Kms. 9 (Jumar — 20 Kms, Swarnrekha — 65 Kms, Damodar- 20.69 Kms, Konar — 6 Kms, Sankh -8 Kms and Garga - 5 Kms)

**11.9 Action against officials responsible for delays in various projects for sanction, award of works etc.:** NMCG has been continuously pursuing with the State Governments of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal

for furnishing details regarding action against officials responsible for delays in sanction, award of works for various projects. In this regard communications were also sent to the Chief Secretaries of the respective States; however, the details are still awaited from their end.

As per the provisions of section 25 of the Water Act and section 21 of the Air Act, primarily the SPCBs are mandated and responsible for laying the consent conditions and ensure compliance of the conditions for prevention, control and abatement of pollution. Under section 18 of the above said Acts, the CPCB exercises the power for superintendence and supervision over the SPCBs and even may issue appropriate directions, as the case maybe, to the SPCBs for mitigating and or controlling/ preventing pollution. That NMCG/ Secretary, MoJS, while seeking timely submission of the next Quarterly Progress report, requested the Chief Secretaries of the respective States vide letter dated 21.08.2020 to arrange to furnish the list of officers identified for delays in sanction and award of works etc. for various projects and action taken against the erring officers for delay in commencement of sewage infra structure projects in River Ganga basin.

This was reiterated vide reminder letters dated 19.11.2020, 28.12.2020 and 18.01.2021 wherein it was emphasized that afore mentioned information is essentially required as per the directions passed by the Hon'ble Tribunal in order dated 18.12.2019. Copies of the letters issued on dated 21.08.2020, 19.11.2020, 28.12.2020 and 18.01.2021 are enclosed as **Annexure – VII.**

It is pertinent to mention before this Hon'ble Tribunal that directions under Section -5 of the Environment (Protection) Act, 1986 were issued on 29.10.2020 to the State Govt. of U.P./ Sate PCB by Director General, NMCG for taking coercive action including initiation of criminal proceedings against operators/clients etc. in respect of non-operational or dysfunctional STPs at Ghaziabad, Noida and Greater Noida. Copy of direction issued on 29.10.2020 is enclosed as **Annexure – VIII.** The compliance of the State of U. P. and its other agencies, in this respect is still awaited.

That there has been inordinate delay in award of works/ execution for the STP/ sewerage projects in Bihar, particularly, the tendering for Hajipur and Munger sewerage infrastructure projects due to non-adherence of the guidelines and/ or directions of NMCG by the officials of BUIDCo and State Mission for Clean Ganga who are sitting over the directions/ guidelines of NMCG.”

13. Annexure-4 to the report giving bird's eye view by way of tables 1,2 and 3 was quoted as follows:-

**“Status as on Jan 2021**

**Table-I**

Table-I
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<b>Summary of the Sewerage Projects (Haridwar (d/s) to Unnao d/s)</b>					
<b>Projects</b>	<b>No. of Projects</b>	<b>Completed</b>	<b>Ongoing</b>	<b>Under Tendering</b>	<b>Remarks</b>
NMCG	19	6	9	4	Annexure: IV.1
AMRUT	4	2	2	0	
<b>TOTAL</b>	<b>23</b>	<b>8</b>	<b>11</b>	<b>4</b>	

<b>Table-II</b>							
<b>Status of Sewerage Infrastructure projects in Ganga Basin (d/s of Unnao to Ganga Sagar) as on 31-01-2021</b>							
<b>S.no</b>	<b>State</b>	<b>Total</b>	<b>Completed</b>	<b>Ongoing</b>	<b>Under Tendering/ Tender under Evaluation</b>	<b>Tender To be Floated</b>	<b>Remarks</b>
1	Uttar Pradesh	32	14	14	3	1	Annexure- IV.2
2	Bihar	30	2	21	4	3	Annexure- IV.3
3	Jharkhand	3	1	1	1	0	Annexure- IV.4
4	West Bengal	23	3	13	2	5	Annexure- IV.5
	<b>Total</b>	<b>80</b>	<b>20</b>	<b>49</b>	<b>10</b>	<b>9</b>	

<b>Table - III</b>			
<b>Statement showing State-wise Sewerage Infrastructure Projects</b>			
<b>State</b>	<b>Prior No. of Sewerage Projects to 2014</b>	<b>No. of Sewerage Projects after 2014 up to Jan 2021</b>	<b>Total</b>
Uttarakhand	10	25	35
Uttar Pradesh	10	41	51
Bihar	1	29	30
Jharkhand	1	2	3
West Bengal	4	19	23
Delhi	0	11	11
Himanchal Pradesh	0	1	1
Haryana	2	0	2
<b>Total</b>	<b>28</b>	<b>128</b>	<b>156</b>

14. The Tribunal also noted the summary of compliance status prepared by the NMCG on issues of:

1. **Setting up of the STPs, I&D of drains and preventing discharge of untreated sewage/effluents into River Ganga**
2. **In-situ treatments of untapped drains through Bioremediation/Phytoremediation**
3. **Industrial Pollution Control through preventing discharge of industrial effluents into River Ganga and its**

**tributaries by ensuring proper installation of ETPs/CETPs**

- 4. Septage Management**
- 5. Flood Plain demarcation**
- 6. Maintenance of E-Flows**
- 7. Mechanism for Monitoring**

Mechanism is placed for monitoring of the compliance of directions of Hon'ble Tribunal has been established and monitoring is being done through CMC review meetings under Chairmanship of Secretary, (Jal Shakti), meetings by DG, NMCG and joint meeting of the Chief Secretaries. Pg No. 19-20

- 8. Depicting biological diversity of Ganga in public domain**
- 9. Plantation Activity & Setting up biodiversity parks**
- 10. Action against officials responsible for delays in various projects/sanction/award, monitoring etc.**

**Observations in the last order:**

15. The Tribunal found that the progress left much to be desired and inspite of enactment of Water Act, 1974 forty seven years back, there was rampant violation even by the State Authorities on account of failure of treatment of sewage. This was adversely affecting the health of the citizens and threatening food safety. There was continued violation of Hon'ble Supreme Court orders on the subject. The observations of the Tribunal are reproduced below:-

*"13. From the above, it is patent that the progress achieved so far leaves much to be desired. Table II in para 11 above shows out of 80 projects for treatment of sewage, only 20 have been completed so far. 11 projects are at tender stage. The summary of 3<sup>rd</sup> quarterly progress report filed by learned Senior Counsel for NMCG shows 'partly complied' status about various proposed targets in terms of earlier orders. Situation is particularly unsatisfactory in the States of Bihar and West Bengal. Even in Uttarakhand, UP and Jharkhand, there are areas of partial compliance. Obviously, water quality cannot improve till all the projects are successfully executed. This requires mission mode approach. This is only one aspect. Other steps have already been mentioned and need no repetition. It is only when all steps are effectively taken, one can say that there is good progress. During the interaction with the Chief Secretaries present, this has been conveyed to them.*

*14. At the cost of repetition, it may be mentioned that inspite of the fact that Water (Prevention and Control of Pollution) Act, 1974 was enacted 47 years back, to give effect to the decision in Stockholm Conference in the year 1972, the water pollution remains rampant. Though water pollution is a serious criminal offence under the law of*

the land, the authorities have failed to take stringent action against the violators. In a way the major violators remain State-authorities, who are constitutionally under obligation to ensure treatment of sewage before the same is discharged into the rivers and drains connected thereto which is not fully happening. The effect of water pollution on health and food safety is well known. Water is scarce and large population remains deprived of access to drinking water but still steps to prevent pollution of sources of drinking water are inadequate. The Hon'ble Supreme Court in its judgment in *Paryavaran Suraksha vs. Union of India & Ors.*, (2017) 5 SCC 326 discussed the problem in detail and fixed a firm deadline of 31.03.2018 by which all necessary CETPs/STPs/ETPs should be in place failing which coercive action, including prosecution of State authorities was mandated. The States continue to violate the directions of the Hon'ble Supreme Court and give their own convenient deadlines which are thereafter further relaxed at will. This can hardly be held to be conducive to the environmental rule of law. The sewage treatment is less than 50% (**the sewage generation from the urban population of the country is reported to be about 70000 MLD and treatment capacity about 27000 MLD**)<sup>4</sup> which is a matter of serious concern. The Tribunal has issued repeated directions. Till it is remedied, the goal of sustainable development is far cry.

15. The environmental law principles, which this Tribunal is mandated to apply under sections 20 and 15 of the NGT Act, 2010, are – 'sustainable development', 'precautionary' and 'polluter pays'. These principles, accepted in Stockholm conference, have been held to be part of right to life under article 21 of the Constitution in *Vellore Citizens' Welfare Forum v. Union of India*, (1996) 5 SCC 647. In *Hanuman Laxman*, (2019) 15 SCC 401, (paras 142-156), significance of environmental rule of law has been highlighted to achieve sustainable development goals for prosperity, health and well being. **This requires filling of gap between law and enforcement.** In *T.N. Godavarman Thirumulpad v. Union of India*, (2002) 10 SCC 606, at page 621, it was observed that the State has to

*“forge in its policy to maintain ecological balance and hygienic environment. Article 21 protects right to life as a fundamental right. Enjoyment of life and its attainment including the right to life with human dignity encompasses within its ambit, the protection and preservation of environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed. Any contra acts or actions would cause environmental pollution. Therefore, **hygienic environment is an integral facet of right to healthy life and it would be impossible to live with human dignity without a humane and healthy environment.** Environmental protection, therefore, has now become a matter of grave concern for human existence. Promoting environmental protection implies maintenance of the environment as a whole comprising the man-made and the natural environment. Therefore, there is constitutional imperative on the Central Government, State Governments and bodies like municipalities, not only to ensure*

<sup>4</sup> As per report of the CPCB dated 30.09.2020 quoted in the order of this Tribunal dated 05.02.2021 in OA 95/2018, *Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors.*

*and safeguard proper environment but also an imperative duty to take adequate measures to promote, protect and improve the man-made environment and natural environment.”*

16. In *A.P. Pollution Control Board v. Prof. M.V. Nayudu*, (1999) 2 SCC 718, at page 732, it was observed “..**Good governance is an accepted principle of international and domestic laws. ....It includes the need for the State to take the necessary “legislative, administrative and other actions” to implement the duty of prevention of environmental harm...**”. In *Techi Taga Tara* (2018) 11 SCC 734, the Hon’ble Supreme Court referred to several Committees on **need for revamping the regulatory bodies by appointing persons of outstanding ability and high reputation to the State PCBs and equipping them with laboratories and other equipment for performing statutory functions**. Apart from the Tribunal being approached under sections 14 and 15 by aggrieved parties, pointing out degradation of environment and inaction of the statutory regulators, the Hon’ble Supreme Court has required this Tribunal to monitor compliance of such statutory obligations for protecting environment. This is not possible unless the statutory regulators are effective. The Tribunal has recently dealt with the issue in some of its orders as follows:

“(I) OA 593/2017, *Paryavaran Suraksha Samiti & Anr. vs. Union of India & Ors.*<sup>5</sup>, involves monitoring of liquid waste management in terms of orders of the Hon’ble Supreme Court in (2017) 5 SCC 326. We have found that as a result of continuing failure of the statutory authorities to ensure compliance, industrial as well as municipal liquid waste is being discharged **resulting in pollution of groundwater as well as surface water, including water bodies, drains, streams, rivers and coastal areas. The Tribunal has noted that as per data compiled by the CPCB, 351 river stretches are declared polluted. Comprehensive Environment Pollution Index (CEPI) prepared by the CPCB shows that 100 industrial clusters are polluted.** The Tribunal is also dealing with the remedial action for restoration of the 351 stretches in OA 673/2018<sup>6</sup>, In Re: News item published in “The Hindu” authored by Shri Jacob Koshy, titled “More river stretches are now critically polluted: CPCB” for which the Tribunal has directed **preparation and execution of action plans for each of such stretches by constituting River Rejuvenation Committees (RRCs) for all States/UTs headed by Environment Secretaries which action needs to be overseen by the Chief Secretaries at the State level and by a Central Monitoring Committee (CMC) headed by Secretary, Jal Shakti alongwith NMCG and CPCB at the national level.** OA 829/2019<sup>7</sup>, *Lt. Col. Sarvadaman Singh Oberoi v. Union of India & Ors.* deals with the remedying of **coastal pollution for which directions have been issued on the same pattern for preparation and execution of**

<sup>5</sup> Vide order dated 21.09.2020

<sup>6</sup> Vide order dated 21.09.2020

<sup>7</sup> Vide order dated 21.09.2020

**action plans by the RRCs to be overseen by the Chief Secretaries at the State level and by the CMC at the national level.** The same order also deals with utilisation of treated water, being OA 148/2016, Mahesh Chandra Saxena vs South Delhi Municipal Corporation & Ors. and OA 325/2015<sup>8</sup>, Lt. Col. Sarvadaman Singh Oberoi v. Union of India & Ors., dealing with the issue of restoration of water bodies by removing encroachments and preventing pollution has been dealt with by this Tribunal. OA 176/2015, Shailesh Singh v. Hotel Holiday Regency, Moradabad & Ors.<sup>9</sup>, the Tribunal has directed monitoring of groundwater extraction to give effect to the mandate in Hon'ble Supreme Court judgment in M.C. Mehta v. Union of India & Ors. (1997) 11 SCC 312.

(II) xxx.....xxx .....xxx

(III) The issue of solid waste management has been dealt with by this Tribunal in OA 606/2018 in pursuance of directions of the Hon'ble Supreme Court in Writ Petition No. 888/1996, Almitra H. Patel & Anr. v. Union of India & Ors. In the said matter, the Chief Secretaries of all States/UTs were required to remain present before this Tribunal<sup>10</sup> and after interaction with them, separate orders for all States/UTs referring to the individual issues in such States/UTs,<sup>11</sup> particularly **issue of legacy waste dump sites and remediation of current waste on scientific basis were dealt with and the Chief Secretaries were directed to monitor compliance every month by creating a monitoring cell, directly under them, in terms of directions of the Hon'ble Supreme Court and the District Magistrates monitoring such compliances every fortnight. It has been found that there are more than 3000 dump sites where legacy waste has accumulated over the years but the remedial action has not been taken except at very few places. This is resulting in water and air pollution and soil degradation on continuous basis, to the detriment of the environment and the public health.** The statutory timelines have come to an end. Reference is made in this regard also to order dated 29.01.2021 in OA No. 519/2019, In re: News item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes" and order dated 28.02.2020 in OA No. 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016. It was directed, vide order dated 10.01.2020, that compensation will be payable for failure to comply with the requirement of taking steps mentioned in Rule 22 of the SWM Rules, 2016 at scales mentioned therein, depending on the size of local bodies, from 01.04.2020 till compliance. Compensation was also directed to be recovered at the laid down scale for delay in commencing and completing the legacy waste remediation measures.

<sup>8</sup> Vide order dated 18.11.2020

<sup>9</sup> Vide order dated 20.07.2020

<sup>10</sup> Vide order dated 16.01.2019

<sup>11</sup> Vide order dated 18.07.2019 (last such order is in respect of Jammu & Kashmir)

(IV) With regard to **bio-medical waste**, the matter has been dealt with in OA 710/2017, *Shailesh Singh, v. Sheela Hospital & Trauma Centre, Shahjahanpur & Ors.*<sup>12</sup>, with regard to **hazardous waste**, matter has been dealt with in OA 804/2017, *Rajiv Narayan v. Union of India & Ors.*<sup>13</sup>, with regard to **e-waste**, matter has been dealt with in OA 512/2017, *Shailesh Singh v. State of UP*<sup>14</sup>, with regard to **plastic waste**, matter has been dealt with in EA 13/2019 in OA 247/2017, *Central Pollution Control Board v. State of Andaman & Nicobar & Ors.*<sup>15</sup> for laying down liability to pay compensation for non-compliance.

17. The Tribunal has also found need for stringent monitoring at the higher level:

“18. It is well known that most of the key environmental laws have been enacted in the wake of Stockholm Conference (1972) under Entry 13 of List-I read with Article 253 of the Constitution, with a view to achieve ‘sustainable development’ of which the ‘Precautionary’ principle, “Polluter Pays” principle, Intergenerational Equity and Public Trust Doctrine principles are integral part. Sad part is that even after 47 years of Water Act and 40 years of Air Act, water and air pollution is rampant, without serious adverse action. Though there are criminal offences with minimum prescribed sentence, hardly any punishment is handed down. Hardly any compensation is recovered from the violators. Victims continue to suffer and so does the environment. This requires attention of all concerned at higher levels in governance.”

18. The Tribunal directed the Chief Secretaries of all the States/UTs in OA 606/2018 to appear before this Tribunal and after interaction with them directions were issued including a direction to set up a monitoring cell directly reporting to them and monitoring by the Chief Secretaries personally atleast once in a month and by the District Magistrates atleast twice in a month. Directions have been issued to the MoEF&CC to revamp monitoring mechanism for compliance of the EC conditions. The Tribunal finding negligence of the statutory regulators in controlling the water pollution appointed several independent Monitoring Committees<sup>16</sup>. Finally, it was found

<sup>12</sup> Vide order dated 18.01.2021

<sup>13</sup> Vide order dated 29.01.2021

<sup>14</sup> Vide order dated 15.01.2021

<sup>15</sup> Vide order dated 08.01.2021

<sup>16</sup> To monitor compliances with regard to:

- (i) River Ghaggar in OA No. 138/2016 (TNHRC), *Stench Grips Mansa’s Sacred Ghaggar River*
- (ii) River Sutlej in OA 916/2018, *Sobha Singh v. State of Punjab & Ors.*
- (iii) River Yamuna in OA 06/2012, *Manoj Mishra v. UOI & Ors.*
- (iv) River Musi in OA 426/2018, *Mohammed Nayeem Pasha & Anr. v. State of Telangana & Ors.*
- (v) River Ganga in OA 200/2014, *M.C. Mehta v. Union of India & Ors.*
- (vi) River Jojari in OA 329/2015, *Gram Panchayat Araba v. State of Rajasthan & Ors.*
- (vii) CETP in Taloja District in OA 125/2018, *Arvind Pundalik Mhatre v. Ministry of Environment, Forest and Climate Change & Ors.*
- (viii) District Environment Plan in OA 360/2018 *Shree Nath Sharma v. Union of India & Ors.*



that at the State level monitoring should be at the level of Chief Secretaries and at the Central level by a CMC headed by the Secretary, Ministry of Jal Shakti alongwith NMCG and CPCB.

19. In view of above, control of pollution of river Ganga needs to be taken seriously at all levels in Uttarakhand, UP, Bihar, Jharkhand and West Bengal. In absence thereof, the desired result of rejuvenation of river Ganga which is dream of every Indian will remain unfulfilled. As observed earlier, the Hon'ble Supreme Court has monitored the subject for 34 years (1985-2014) and finally transferred the matter to this Tribunal in the year 2014. Though certain steps have been taken, the tables and compliance summary filed by NMCG quoted above show that with respect to various projects, the matter is still at the tender/DPRs stage and progress in completing the ongoing projects in a timely manner remains a challenge, inspite of availability of funds, supported by the Government of India initiatives.

20. We have noted the huge gaps in preventing water pollution and generation. We also note inadequate steps in demarcating and protecting the floodplain zones inspite of there being a clear Notification dated 07.10.2016 issued by the Ministry of Water Resources, River Development, and Ganga Rejuvenation under the Environment (Protection) Act, 1986. The definition is as follows:

“3. xxx.....xxx .....xxx

(l) flood plain” means such area of River Ganga or its tributaries which comes under water on either side of it due to floods corresponding to its greatest flow or with a flood of frequency once in hundred years;”

21. While removing already raised constructions from the floodplain zones may be dealt with separately, there is need to atleast identify and take protective measures. All remedial measures have already been outlined in the earlier orders of this Tribunal and need not be repeated. As earlier observed, the desirable situation is that not a drop of pollution is discharged into the river Ganga, but in any case, **every next report must show decreasing trend of pollution load which needs to be quantified by the NMCG in a tabular form giving the extent of pollution load on a particular date and reduction achieved in terms of gap after steps for treatment.** Stopping pollution is as much necessary as stopping any other heinous crimes of homicides and assaults as pollution is acknowledged cause of deaths and diseases and deprivation of access to drinking water.

22. Out of reverence for the Ganga water, innocent citizens drink the same without knowing the harmful contents including high level

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- (ix) 'Rat Hole' coal mining in OA 110(THC)/2012, Threat to Life Arising Out of Coal Mining in South Garo Hills District v. State of Meghalaya & Ors.
  - (x) Solid waste management rules in OA 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues.

of faecal coliform. **Least expected from the authorities, till satisfactory results are shown, is to notify the extent of harmful contents at appropriate locations including at Ganga Sagar to avoid adverse health effects.** These steps are required on war footing.

23. With regard to the recovery of laid down compensation, it is made clear that the compensation must be faithfully paid by the concerned States by way of deposit to the CPCB which can thereafter be spent for restoration in the same State, as per action plan prepared for the purpose by the State and approved by the NMCG, after due evaluation on the pattern of orders earlier passed by this Tribunal<sup>17</sup>. NMCG may monitor compliance. Control of pollution of river Ganga will be incomplete without controlling pollution of all the tributaries and drains connected thereto. In this regard, we have noted the report of CPCB dated 04.02.2021 which gives the summary of environmental compensation calculation in terms of earlier orders of this Tribunal as follows:

**“SUMMARY OF UTTARAKHAND DRAINS FOR EC CALCULATION**

**EC Calculation Period: 01.07.2020 till 31.12.2020**

1. Drains Discharging into River Ganga or its tributaries	:	156
2. Tapped Drains	:	127
3. Drains, where interim measures not required (Dry drains-03, Drains with Eutrophication-02, STP Outlet drains-02)	:	07
4. Untapped Drains, where interim measures required	:	22
5. Untapped Drains, where interim measures taken	:	0
6. No. of drains considered for EC calculation	:	22
7. Calculated EC = No. of drains x @10 lakhs/month/drain (Since 01.07.2020 till 31.12.2020)	:	22x 10 x 06 Lakhs = 1320

**EC Calculation Period: 01.11.2019 till 30.06.2020**

1. Drains Discharging into River Ganga or its tributaries	:	142
2. Tapped Drains	:	118
3. Drains, where interim measures not required (Dry/Stagnant/STP Outlet)	:	07
4. Untapped Drains, where interim Measures not feasible (130D <40mg/1)	:	08
5. Untapped Drains, where interim measures required	:	09

<sup>17</sup> Vide order dated 22.01.2021 in OA 916/2018, Sobha Singh v. State of Punjab & Ors.

6. Untapped Drains, where interim measures taken	:	09
7. No. of drains considered for EC calculation	:	0
8. Calculated EC = No. of drains X @5 lakhs/month/drain (Since 01.11.2019 till 30.06.2020)	:	0

**SUMMARY OF UTTARAICHAND STPs FOR EC CALCULATION**

**EC Calculation Period: 01.07.2020 till 31.12.2020**

1. Total no. of STPs	:	87
2. Completed/Operational STPs	:	64
3. Non-operational STPs	:	0
4. Under Construction STPs	:	06
5. Under Tendering/DPR/Proposed STPs	:	17
6. No. of STPs considered for EC calculation	:	04
7. Calculated EC = No. of STPs x @10 lakhs/month/STP (Since 01.07.2020 till 31.12.2020)	:	04x 10 x 6 = 240 Lakhs

\*\* Environmental Compensation (EC) to be calculated for under tendering/DPR/Proposed STPs (17 nos.) with effect from 01.01.2021

**SUMMARY OF UTTAR PRADESH DRAINS FOR EC CALCULATION**

**EC Calculation Period: 01.07.2020 till 31.12.2020**

1. Drains Discharging into River Ganga or its tributaries	:	301
2. Tapped drains	:	116
3. Drains, where interim measures not required (Dry drains-01 & STP Outlet drains-03)	:	15
4. Untapped Drains, where interim measures required	:	170
5. Untapped Drains, where interim measures taken	:	0
6. No. of drains considered for EC calculation	:	170
7. Calculated EC = No. of drains x @10 lakhs/month/drain (Since 01.07.2020 till 31.12.2020)	:	170 x 10 x 06 = 10200 Lakhs

**EC Calculation Period: 01.11.2019 till 30.06.2020**

1. Drains Discharging into River Ganga or its tributaries	:	152
2. Tapped drains	:	08

3. Drains, where interim measures not required (Dry/Stagnant/partially tapped)	:	02
4. Drains, where Interim Measures not feasible (BOD <40mg/l)	;	22
5. Untapped Drains, where interim measures required	:	120
6. Untapped Drains, where interim measures taken	:	Nil
7. No. of drains considered for EC calculation	:	120
8. Calculated EC = No. of drains X @5 lakhs/month/drain (Since 01.11.2019 till 30.06.2020)	:	120 x 8 x 5 = 4800 Lakhs

### **SUMMARY OF UTTAR PRADESH STPs FOR EC CALCULATION**

1. Total no. of STPs	:	169
2. Operational STPs	:	102
3. Non-operational STPs	:	02
4. Under Construction STPs	:	44
5. Under Tendering/ Proposed STPs	:	21
6. No. of STPs to be considered for EC calculation	:	44
7. Calculated EC = No. of STPs x @10 lakhs/month/STP (Since 01.07.2020 till 31.12.2020)	:	44 x 10 x 06 = 2640 Lakhs

\*\* Environmental Compensation (EC) to be calculated for Under tendering/DPR/Proposed STPs (17 nos.) with effect from 01.01.2021

### **SUMMARY OF BIHAR DRAINS FOR EC CALCULATION EC**

**Calculation Period: 01.07.2020 till 31.12.2020**

1. Drains Discharging into River Ganga or its tributaries	:	130
2. Tapped Drains	:	0
3. Drains, where interim measures not required (Dry drains-01)	:	01
4. Untapped Drains, where interim measures required	:	129
5. Untapped Drains, where interim measures taken	:	79
6. Untapped Drains, where interim measures not taken	:	50
7. No. of drains considered for EC calculation	:	50
8. Calculated EC = No. of drains x @,10 lakhs/month/drain (Since 01.07.2020 till 31.12.2020)	:	50 x 10 x 6 = 3000 Lakhs

**EC Calculation Period: 01.11.2019 till 30.06.2020**

1. Drains Discharging into River Ganga or its tributaries	:	19
2. Drains Tapped	:	Nil
3. Drains where, interim measures not required (Dry/Stagnant)	:	01
4. Interim Measures not feasible (BOD <40mg/ l)	:	08
5. Untapped Drains, where interim measures required	:	10
6. Untapped Drains, where interim measures taken	:	02
7. No. of drains considered for EC calculation	:	08
8. Calculated EC = No. of drains X @5 lakhs/month/drain (Since 01.11.2019 till 30.06.2020)	:	08 x 08x 05 = 320 Lakhs

**SUMMARY OF BIHAR STPs FOR EC CALCULATION****EC Calculation Period: 01.07.2020 till 31.12.2020**

1. Total no. of STPs	:	52
2. Completed/Operational STPs	:	02
3. Non-operational STPs	:	02
4. Under Construction STPs	:	15
5. Under Tendering/DPR/Proposed STPs	:	33
6. No. of STPs considered for EC calculation	:	15
7. Calculated EC = No. of STPs x @10 lakhs/month/STP (Since 01.07.2020 till 31.12.2020)	:	15 x 10 x 06 = 900 Lakhs

\*\* Environmental Compensation (EC) to be calculated for Under tendenng/DPR/Propose STPs nos.) with effect from 01.01.2021

**SUMMARY OF JHARKHAND DRAINS FOR EC CALCULATION**

1. Drains Discharging into River Ganga or its tributaries	:	06
2. Tapped Drains	:	02
3. Drains where interim measures not required (Dry/STP Outlet/Stagnant)	:	Nil
4. Untapped Drains (where interim measures required)	:	04
5. Interim Measures taken (Bioremediation)	:	04
6. No. of drains to be considered for EC calculation	:	0

7. Calculated EC = No. of drains x @10 lakhs/month/drain (Since 01.07.2020 till 31.12.2020)	:	0
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### **SUMMARY OF JHARKHAND STPs FOR EC CALCULATION**

1. Total no. of STPs	:	15
2. Completed/Operational STPs	:	02*
3. Non-operational STPs	:	0
4. Under Construction STPs	:	0
5. Under Tendering/DPR/Proposed STPs	:	03
6. No. of STPs to be considered for EC calculation	:	0
7. Calculated EC = No. of STPs x @10 lakhs/month/STP (Since 01.07.2020 till 31.12.2020)	:	0

*\*The Bengdubbi STP at Rajmahal is under trial from Dec 2020*

*\*\* Environmental Compensation (EC) to be calculated for Under tendering/DPR phase STPs (06 nos.) with effect from 01.01.2021*

### **SUMMARY OF WEST BENGAL DRAINS FOR EC CALCULATION**

#### **1. EC Calculation Period: 01.07.2020 till 31.12.2020**

1. Drains Discharging into River Ganga or its tributaries	:	56
2. Tapped Drains	:	25
3. Untapped Drains, where interim measures required	:	31
4. Untapped Drains, where interim measures not feasible	:	21*
5. Untapped Drains, where interim measures taken	:	1 (Jangirpur drain)
6. Untapped Drains, where interim measures not taken	:	09
7. No. of drains considered for EC calculation	:	09
8. Calculated EC = No. of drains X @10 lakhs/month/drain (Since 01.07.2020 till 31.12.2020)	:	09x10x06 = 540 Lakhs

*\* Please refer Explanatory Note on 21 Special Category drains with a request to exempt the listed drains for EC calculations*

#### **2. EC Calculation Period: 01.11.2019 till 30.06.2020**

1. Drains Discharging into River Ganga or its tributaries	:	56
2. Tapped Drains	:	03
3. Drains, where interim measures not required (Dry/Stagnant)	:	29
4. Drains, where interim Measures not feasible (BOD <40mg/l and Tidal effect)	:	23

5. Untapped Drains, where interim measures required	:	1
6. Untapped Drains, where interim measures taken	:	Nil
7. No. of drains considered for EC calculation	:	01
8. Calculated EC = No. of drains X @5 lakhs/month/drain (Since 01.11.2019 till 30.06.2020)	:	01x05x08 = 40 Lakhs
9. EC deposited in CPCB account (in Jun 2020)	:	Rs. 20 Lakhs
10. EC to be deposited	:	Rs. 20 Lakhs

### **SUMMARY OF WEST BENGAL STPs FOR EC CALCULATION**

#### **EC Calculation Period: 01.11.2019 till 30.06.2020**

1. Total no. of STPs	:	61
2. Completed/Operational STPs	:	18
3. Partially operational STPs	:	02
4. Under Rejuvenation/Renovation STPs	:	18
5. Under Construction STPs	:	07
6. Under Tendering/DPR/Proposed STPs	:	16
7. No. of STPs considered for EC calculation	:	07
8. Calculated EC = No. of STPs x @10 lakhs/month/STP (Since 01.07.2020 till 31.12.2020)	:	07 x 10 x 6 = 420 Lakhs

**\*\* Environmental Compensation (EC) to be calculated for Under tendering/DPR/Proposed STPs (16 nos.) with effect from 01.01.2021”**

24. The CPCB has also mentioned that the guidelines for the biodiversity parks have been issued. With regard to impact of e-flow on riverine and aquatic life, CPCB has sought time of one and a half years which is not necessary in view of report of the NMCG.

25. The requisite e-flow may be maintained in terms of Notification dated 09.10.2018. The main part<sup>18</sup> of the Notification is as follows:

**“I. Upper Ganga River Basin Stretch** starting from originating glaciers and through respective confluences finally meeting at Devprayag up to Haridwar:

<b>Sl. No.</b>	<b>Season</b>	<b>Months</b>	<b>(%) Percentage of Monthly Average Flow observed during each of preceding 10-daily period</b>
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<sup>18</sup> Exceptions and other conditions are not being quoted

1	Dry	November to March	20
2	Lean	October, April and May	25
3	High Flow season	June to September	30 <sup>a</sup>

\* 30% of monthly flow of High flow season.

**II. Stretch of main stem of River Ganga from Haridwar, Uttarakhand to Unnao, Uttar Pradesh**

S. No.	Location of Barrage	Minimum flow releases immediately downstream of barrages (In Cumecs) Non-Monsoon (October to May)	Minimum flow releases immediately downstream of barrages (In Cumecs) Monsoon (June to September)
(1)	Bhingoda (Haridwar)	36	57
(2)	Bijnor	14	48
(3)	Narora	24	48
(4)	Kanpur	24	48

Cumec — Cubic Meter per second.”

**26. In view of above discussion, the concerned five States may take further remedial action on the subject of preventing discharge of untreated sewage/effluents and compiling the relevant information under relevant heads in terms of earlier directions as on 15.6.2021, which must include the following:**

- (a) **Quantity of Sewage being discharged in river Ganga and its tributaries/connected drains and correspondingly proposed / existing STPs to intercept the same with timelines.**
- (b) **Performance of STPs and their compliance, particularly for Fecal coliform.**
- (c) **Water quality of Ganga at inter-State borders and at important public places/Ghats, which may show the level of compliance with regard to water quality.**
- (d) **Status of compliance of CETPs at Jajmau, Unnao and Banther (applicable only to UP).**

**27. Further progress reports may be furnished by the concerned five States to the NMCG on or before 30.06.2021 showing status as on 15.6.2021. NMCG may give its consolidated progress report with its recommendations to this Tribunal by 15.07.2021 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, with liberty to the States to file their response to such report. The NMCG report may inter alia specify reduction in pollution load, if any achieved during the interregnum, and if not, suggest further measures to achieve such reduction.”**



**Separate consideration of connected issues:**

16. Two connected issues are being dealt with by separate orders – relating of Varuna and Assi rivers at Varanasi which are tributaries of Ganga and issue of chromium dump at Jajmau and continued discharge of chromium and other waste into Ganga at Jajmau and nearby places in UP.

**Today's consideration and discussion of progress with reference to earlier orders:**

17. **Progress on the subject of setting up and maintaining STPs, in-situ treatments of drains, Septage Management, flood plain demarcation, maintenance of e-flow, industrial pollution, monitoring, depiction of biological diversity of Ganga, plantation activity and setting up biodiversity parks and actions against officials responsible for delays in various projects/sanction/award, monitoring etc. has not improved inspite of order dated 08.02.2021. Compensation assessed has not been recovered nor coercive measures in terms of orders date 13.9.2020 and 8.2.2021 reported.** Further, remedial action on specific points mentioned in para 26 of the last order, quoted above, with regard to the prevention of discharge of sewage in Ganga and its tributaries, performance of STPs particularly for Fecal coliform, water quality at inter-State borders and at other important locations and status of compliance of CETPs at Jajmau, Unnao and Banther has also not improved which will be depicted from the report of the NMCG filed on 12.11.2021, extracts from which are reproduced below:-

*“8. Further specific observations of NMCG on the status furnished by the States on the issues as well as compliance status are as follows:-*

**8.1 Status of bio-remediation/ phyto-remediation of drains as interim remedial measures for treatment:**

*The bioremediation related interventions are best decided at local levels and State may take up the projects as per need at their level. This would be more appropriate and would also be quick. This view has earlier been conveyed to all the States in a meeting held under Chairmanship of Director General, NMCG on 12.09.2019 and also in meeting of Supervisory Committee of NGT held on 11.10.2019. The decision was once again reaffirmed that the State government may take up the projects from their own funds in a meeting chaired by Secretary, DoWR, RD & GR held on 08.01.2020. Further, in 3rd meeting of the CMC in NGT matter OA No. 673/2018 held under Chairmanship of Secretary, DoWR, RD & GR on 23.06.2020, many of the States have apprised that they have initiated bio-remediation and phyto-remediation measures under their own funding towards compliance of NGT directions in the matter. The views as above have been communicated to States to take necessary steps to comply with extant directions of the Hon'ble NGT. The Action undertaken by various State Governments after order of the Hon'ble NGT dated 13.08.2020 for bio-remediation/ phyto-remediation of drains as interim remedial measures for treatment are as following:*

- **Uttarakhand:** Uttarakhand State Govt. earlier submitted (vide letter No. 23/SPMG/ Namami Gange/Bio-Remediation Tech) that a total of 13 untapped drains required treatment through bioremediation/ phyto-remediation. Out of which, tendering for work in 9 drains have been completed and will start within one month. As regards the remaining 04 drains it has been informed that 01 drain at Swargashram is intercepted for treatment and with respect to other 03 drains at Joshimath, their water quality is being monitored regularly and their BOD level is reported to be less than 30 mg/l, hence, bioremediation is not required in these 03 drains. Further, as informed by the State, in-situ treatment work has been taken up in February, 2021 for 19 drains along 9 polluted river stretches identified in Uttarakhand. The independent monitoring of these works is being carried out by the Doon University. However, appraisal of water quality status of these drains in terms of reduction in pollution load, post-bioremediation works is awaited from the State Government.
- **Uttar Pradesh:** UP State Government earlier submitted (vide letter No. 4559/No-5-19-234/19 dated 04.11.2019) that a total of 459 drains in the State needed treatment through bioremediation/ phyto-remediation. It has been informed that bio-remediation is being done in 42 drains of Prayagraj. As reported in the latest MPR submitted in the matter of O. A. No. 673 of 2018 a total of 5,500 MILD sewage is generated in 652 ULBs present in Uttar Pradesh. The State has instructed the concerned ULBs to take up interim measures for treatment of drains till permanent infrastructure for treatment of sewage is

created. However, status of the interim measures in place is to be provided by the State Government. Bio-remediation in other drains is proposed through ULBs who had been directed to carry out this work. However, work in these balance drains is yet to commence.

- **Bihar:** As submitted by the State Govt. of Bihar, Bihar has 416 drains in 103 towns carrying 2,056 MLD flow. Out of these 42 drains (760 MLD flow) are discharging into Ganga and 111 drains (976 MLD flow) are discharging into various tributaries. Balance drains are discharging either into low lying areas (83 Nos.; 253 MLD flow) or are in stagnant condition (24 Nos.). It has been reported that 541 MLD of sewage is being treated through alternate technology. In-situ treatment through bio-remediation of 89 drains joining Ganga and other polluted rivers that started in September 2020 has been discontinued with effect from 18.06.2021 due to heavy rains. Letter of award is in process for 115 drains. Screening arrangements have been provided in a total no. of 124 out of 127 drains along the Ganga front towns in the State. In remaining 03 Nallas screening is not required as their water quality is not deteriorated.
- **Jharkhand:** The State of Jharkhand in its report has submitted that DPR for in-situ treatment through bioremediation of drains in identified ULBs viz. Chas, Ranchi, Mango and Adityapur, involving CSIR—NEER1 has been prepared and tendering is under process. The State Govt. has projected to treat approx. 120 MLD of waste water by adopting in-situ treatment through bioremediation/ phyto-remediation.

As an interim measure at 04 nos. of drains at Rajmahal, that are considered as dry/ stagnant drains in which flow occurs only during monsoon season at Rajmahal, the screens at drains have been installed on dated 25.03.2019. Provisions for tapping of 04 drains to 3 5 MLD STP have been completed under Namami Gange Programme. The interception and diversion work has been completed and 600 house service connections have been provided. Accordingly, flow of sewage into these drains has been arrested and bio-remediation may not be required. However, Jharkhand State PCB may continue monitoring the water quality of these drains regularly.

- **West Bengal:** There are total 56 drains reported by State Government out of which 41 drains are part of various interceptions and diversion projects while remediation in respect of balance 15 drains are yet to be planned. Amongst these 41 drains, presently in-situ treatment work is ongoing on one drain viz., Jangipur drain. The State Government of West Bengal has submitted that work for in-situ treatment of drains through

*bioremediation has been started as pilot project for drains discharging in Ganga and Churni river stretches. Besides State is implementing primary treatment of drains identified on rivers in Priority V by adopting techniques such as providing screens, sedimentation tank followed by disinfection. 82.58 MLD is proposed to be treated using such primary treatment techniques. It is submitted by the State that 910 MLD of sewage is being treated by East Kolkata wetlands by natural process.*

*As reported by the State, screens has been put up in 400 drains out of 402 discharging to River Ganga in 31 Ganga towns in West Bengal. In rest 2 Nos. of drains where screening is not technically feasible, bio-remediation/ phyto-remediation measures have been undertaken. However, WBPCB may be directed to monitor and report the water quality of these drains regularly.*

**8.2 Monitoring & updated status of STPs/ Sewerage Infrastructure projects [as on 31.10.2021]:** *In respect of Status of various projects related to setting up of STPs/ sewerage infrastructure in majors cities along the main stem of River Ganga in State of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal, it is submitted that these projects are being regularly monitored by NMCG at the highest level to ensure their completion within the timelines and shortfalls, if any, are duly reported. NMCG ensures that technical hand-holding, assistance prior to grounding of project and during implementation is also provided by field monitoring and supervision visits. Since, August' 2020, 23 monitoring/ review meetings have been held at the level of the Hon'ble Minister (Jal Shakti); Secretary, DoWR, RD&GR, Ministry of Jal Shakti and Director General, NMCG. Earlier, the meeting of National Ganga Council was held under Chairmanship of the Hon'ble Prime Minister of India on 14.12.2019. 6th, 7th and 8th meeting of Empowered Task Force under Chairmanship of the Hon'ble Minister for Jal Shakti was held on 25.09.2020, 19.03.2021 and 22.09.2021 respectively. In addition to above, seven meetings were taken by Hon'ble Minister for Jal Shakti, nine at level of Secretary DoWR, RD &GR and seven at the level of Director General, NMCG.*

*Besides regular review meeting as well as visit to project sites are also undertaken at level of Executive Directors of NMCG to ensure completion of project works in accordance to prescribed timelines.*

*The updated status of STPs/ sewerage infrastructure (as on 31.10.2021) is enclosed as Annexure — III.*

*It emerges from the above status that in the reach of d/s Unnao to Ganga Sagar, 01 new project has been sanctioned, 07 projects have been completed and work has started for 04 projects.*

Amongst others, major issues related to control and management of sewage pollution besides synopsis of sewerage infrastructure in Ganga basin area are as follows:-

**Uttarakhand:**

- State has made timely progress in completion of sewerage infrastructure projects. Out of 33 projects sanctioned (for towns situated on main stem of River Ganga) under Namami Gange Programme, 30 projects have been completed. Thus 2 more sewerage infrastructure projects have been completed since last quarterly report submitted to this tribunal.
- Hon'ble Prime Minister of India inaugurated all the major sewerage infrastructure projects in the State on 29.09.2020. These projects are:
  - \* 68 MLD STP at Jagjeetpur, Haridwar, 26 MLD STP at Lalckarghat, Rishikesh, 7.5 MLD STP at Chandeshwarnagar and 5 MLD STP at Chorpani, Muni-ki-Reti;
  - \* Upgradation of 27 MLD STP at Jagjeetpur & 18 MLD STP at Sarai;
  - \* 1 MLD STP and 0.01 MLD STP at Badrinath;
  - \* Ganga Avlokan — a museum on Ganga at Chandighat, Haridwar.
- 01 STP project at Joshimath was delayed because of landslide at original STP location necessitating change of STP location. The STP is expected to be completed by June, 2022.
- 01 project for sludge management at Muni-ki-Reti which has been sanctioned by NMCG in October, 2020 has been completed and is under trial run.
- 09 Nos. of STPs having total capacity of 30.30 MLD to rejuvenate river Bhela — 02 STPs (3 MLD), Dhela — 03 STPs (10.80 MLD), Kichha — 01 STP (3 MLD), Kosi — 01 STP (0.50 MLD), Nandhore — 01 STP (3 MLD), and Pilankher — 01 STP (10 MLD) and 17 Nos. of I&D of drains in 06 Polluted river stretches mainly Bhela, Dhela, Kichha, Kosi, Nandhore, Pilankher, and Kashipur Sewerage (I&D) Scheme phase-1 on (Dhela River) has been sanctioned on 17.09.2021 under Namami Gange Programme. The work for these projects is under tendering stage and tenders will be finalized by end of December'2021.
- Towards monitoring of functioning of STPs, 16 STPs have online monitoring systems that are connected to Ganga Twang web portal. A dashboard is also being developed for monitoring the functioning of STPs.

**Uttar Pradesh:**

- 10 STPs (50 MLD Ramanna, Varanasi/ 10 MLD Ramnagar/ 21 MLD Etawah/ 0.01 MLD Chunar/ 24 MLD Etah/ 20 MLD Modinagar/ 67 MLD Firozabad/ 120 MLD Lucknow/ 26 MLD Jhansi/ 15 MLD Kanpur) out of 32 STPs were expected to be completed by March'2021. Out of them, 9 projects were to be completed by December 2020. However, construction for only 5 STPs (50 MLD Ramanna, Varanasi/ 10 MLD Ramnagar/ 0.01 MLD Chunar/ 67 MLD Firozabad/ 26 MLD Jhansi) has been completed and is under trial run. In addition, 01 STP at Jhansi is also reported by the State to be under stabilization process. Rigorous monitoring is required at the State level. Efforts should be made to complete remaining 5 STPs at the earliest and other 22 STPs as per indicated timelines.
- The State of U.P. should make effort to complete remaining 05 STPs at the earliest and other 22 STPs as per the timelines.
- No progress since September 2020 for 03 projects at Balia, Pratapgarh, and Kanpur (Baniyapurwa). Efforts should be made to expedite the progress and complete the projects as per the timelines.
- Letter of Award (LoA) for project at Daulat Ganj, Lucknow was issued in September 2020, however, the same has run into legal issues. The work order for the project was awarded. While the Hon'ble High Court of Allahabad (Lucknow Bench) has dismissed the Writ Petition No. 15664/2020 — M/s Geo Miller & Co. Pvt. Ltd. Vs. U P. Jul Nigam and Others vide order dated 17.08.2021, the Petitioner has filed a SLP against the said order dated 17.08.2021 in the Hon'ble Supreme Court. The SLP is pending for final disposal. The legal process has delayed the project by close to 02 year.
- LoA for Moradabad project was issued on 30.03.2020 but this project has also been delayed due to filing of Writ Petition No. 7155/2020 - Kallan Vs. State of U.P. & Others and Writ Petition No. 647/2020 — Abdul Razzak Vs. State of U.P. & Others in the Hon'ble High Court of Allahabad that are pending adjudication.
- In addition to sub-optimal capacity utilization, poor operation and maintenance of the created sewage and industrial effluent treatment infrastructure also appears to be a critical issue of concern evident from the fact that 13 (03 MLD STP Firozabad/ 13.59 MLD, Masani, Mathura/ 13.5 MLD Mauja Umrain, Etawah/ Kanpur/ 36 MLD Kanpur/ 130 Jajmau, Kanpur/ 14.5 MLD, Trans Yamuna, Mathura/ 16 MLD, Trans Yamuna, Laxmi Nagar, Mathura/ 2.76 MLD Goverdhan STP/ 5 MLD Hathia Nala Sultanpur)/ 12 MLD DLW, Varanasi/ 2 MLD Greater Noida (Badalpur)/ 15 MLD Eco-Tech -2 (Greater Noida)/ 20 MLD Eco-Tech -3 (Greater Noida)/ 137 MLD

*Kasna (Greater Noida) of the 103 STPs are non-complying with prescribed standards apart from 02 non-operational (20 MLD Moradabad/ 4 MLD Kanwara Road Banda STPs. 01 non-operational STP at Sultanpur (5 MLD) is currently under upgradation. Action plan for making these STPs compliant needs to be drawn along with timelines. Officials responsible for maintenance of these infrastructures need to be made accountable.*

**Bihar:**

- *That with regards to status of various projects for STPs/ Sewerage infrastructure in the State of Bihar (as on October 2021), among the 29 projects; 4 nos. of project (43 MLD Beur, 37 MLD Karmalichak, 60 MLD & 55.10 km sewer network Patna, 87.69kms Sewerage at Pahari Zone IVA) has been completed. Trial run for 01 STP (10 MLD) and I&D Sultanganj is expected completion by November, 2021. The I&D and STP Scheme of Sultanganj is expected to be completed by December 2021.03 ongoing projects (11 MLD I&D and STP at Barh, 60MLD STP—Pahari (Patna), and I&D and STP 3.5 MLD Sonepur) projects are expected to be completed by December, 2021 and 14 projects (Sewerage Scheme at Pahari Zone-V 115.93kms, Beur Sewerage Network 180 km, Sewerage Scheme at Karmalichak 97Kms, Saidpur Sewerage Network 172kms, Digha 100MLD STP and Network 303kms; Kankarbagh 50 MLD STP and Network 1501tms, Mokama I&D and 8 MLD STP, Begusarai STP 17 MLD and Network 1141ans, Chhapra 32 MLD STP and I&D, Bhakhtiyarpur 10 MLD STP and I&D, Maner 6.5 MLD SW and I&D, Danapur 25 MLD STP and I&D, Phulwarishariff 13 MLD STP and I&D, Fatuha 7 MLD STP and I&D are expected completion not beyond December 2022. Tenders have been floated for 6 projects and works awarded for 3 projects (namely Bhagalpur 45 MLD SIT and I&D scheme, Hajipur 22 MLD STP and Sewerage Network 189.30kms and Munger 30 MLD STP and Sewerage Network 174.75kms). These projects are expected to be completed not beyond December, 2023. Tender is under evaluation for the remaining 3 projects (namely Khalagaon 6 MLD STP and I&D scheme, Barahiya 6 MLD STP and I&D scheme and Buxar 16 MLD STP and Sewerage Network 106.06kms).*
- *Following ongoing STP and I&D schemes/projects in Bihar have been delayed inordinately and pending because of inter departmental issues related to land NOC to be granted by State Deptt./agencies:*
  - \* *Land for 02 number IPS in Bakhtiyarpur STP project. Land NOC for STP and IPS was received very late i.e. on 02.12.2020 and 01.04.2021 respectively.*
  - \* *Compensation towards land for the Begusarai STP is yet to be resolved. The issue requires faster resolution.*
  - \* *Land for one IPS in Sultanganj I&D and STP project.*
- *These issues are being continuously flagged for early resolution and were also raised recently during 08th,*

09<sup>th</sup> & 10<sup>th</sup> meeting of Central Monitoring Committee and in the review meetings taken by DG, NMCG followed with DO letter dated 01.07.2021 and 09.07.2021. Copies of letters dated 01.07.2021 and 09.07.2021 are annexed as Annexure - IV.

**West Bengal:**

- **Hooghly Chinsurah I&D and STP project:** - Revised DPR of Hooghly Chinsura has been sanctioned in 29<sup>th</sup> Executive Committee meeting and administrative approval and expenditure sanction amounting of Rs. 154.73 Crore was issued on 23.09.2020. Kolkatta Metropolitan Development Authority (KMDA) invited the tender on 23.11.2020. Now tenders have been kept on hold due to inter-Departmental issues (Department of Education) related to land which has not been sorted out by State. Land for new STP has been finalized, which is now in possession of KMDA. Scope of work has changed due to change in STP site. A new effluent Pumping Stations has also been added in the scope. The tendering is underway. Bids have been received from 09 bidders and technical examination is undergoing.
- **Tolly Nullah I&D and STP project:** - NMCG has sanctioned a project for Pollution Abatement & Rehabilitation of Tolly's Nullah (Adi Ganga), Kolkata (Interception & Diversion with Pumping Station and STP) at a cost of Rs. 307.12 crore on 17.08.2017. Kolkata Municipal Corporation (KMC) has invited the tenders and bid have been received on 2<sup>nd</sup> call on 10.12.2020. KMC has to complete the award process at the earliest as the grounding of project is inordinately delayed. NMCG has provided necessary advice in the procurement matter. Financial bid have been opened and report submitted to World Bank for NOC. World Bank has sought few clarifications and it is informed that the State is preparing explanations to observations of the World Bank. Work will be awarded after receiving NOC from the World Bank.
- **Rehabilitation of Keorapukur & Garden Reach STP:-** NMCG has sanctioned the project on 05.03.2018 amounting of Rs. 165.16 Crores. State Government has revised the scope and submitted the revised DPR and some observations on DPR have been communicated to KMDA which are being incorporated in DPR. Proposal from the State is awaited. The State has been advised to examine the possibility of setting up new STP as proposal for upgradation of GAP —I STP to comply with new norms prescribed by the Hon'ble NGT order dated 30.04.2019 (passed in the matter of O. A. No. 1069/2018 — Nitin Shankar Despande Vs. Union of India & Ors.) costs more than the proposal for setting up new STPs compliant to NGT prescribed norms.

**8.3 Faecal Sludge and Septage management:** In the 2<sup>nd</sup> Quarterly Report it was stated that the Govt. of India issued the National Policy on Faecal Sludge and Septage



Management in February 2017. NMCG has suggested the States Governments that FSTP implementation in all towns with population less than 1 lakh should be adopted in consonance with National Policy on FSSM. Further, NMCG had organized an online Webinar on "Strengthening Capacity of ULBs in Planning and Implementation of FSSM across Cities and Towns of Ganga Basin" on 19.01.2021. The webinar aimed to reiterate the commitment and focus of NMCG towards Faecal Sludge and Septage Management (FSSM) as one of the key approaches to reducing the pollution into river Ganga. States were urged to consider the implementation of FSTPs and/ or co-treatment of faecal sludge in existing STPs, in all towns wherever feasible, so that dumping of the faecal sludge in water bodies/ land and thereby polluting them, can be avoided.

Major initiatives/ achievements undertaken by the States towards adoption of FSSM are as following:-

- **Uttarakhand:** The Govt. of Uttarakhand has notified the protocol for Septage Management. Septage Management Committee has been formed in all 15 priority towns/ULBs situated on the main stem of River Ganga as per the provisions of the Septage Management Protocols (SMP). State has submitted 4 DPRs to NMCG for which third party appraisal of 2 DPRs (Rishikesh and Haridwar) have been completed and examination of other 2 DPRs is underway.
- **Uttar Pradesh:** UP Septage Management Policy' 2019 was approved in October 2019. FSTP is operational in Jhansi and Unnao and under construction in 05 towns (Chunar, Loni, Lakhimpur, Rae Bareilly and Modinagar). Projects have been approved and Letter of Award (LoA) issued for FSTP in 31 AMRUT towns (Aligarh, Moradabad, Shahjahanpur, Ayodhya, Pilibhit, Pt. Deen Dayal Upadhyay Nagar, Shamli, Baraut, Hapur, Khurja, Chandausi, Hathras, Amroha, Badauan, Shikohabad, Farrukabad, Hardoi, Sitapur, Bahraich, Gonda, Orai, Jhansi, Lalitpur, Banda, Fatehpur, Akbarpur, Basti, Deoria, Azamgarh, Jaunpur, Maunath Bhanjan), Letter of Award (LOA) has been issued for co-treatment in 04 towns (Saharanpur, Mathura, Rampur, Muzaffarnagar); while tenders have been floated for co-treatment in 17 towns (Lucknow, Kanpur, Agra, Meerut, Varanasi, Prayagraj, Ghaziabad, Gorakhpur, Etawah, Mirzapur, Firozabad, Mainpuri, Sultanpur, Ballia, Bulandshar, Ghazipur, Ayodhya-Faizabad). Thus, as informed by the State, tender has been also finalized and LoA issued for another 50 FSTP Plants and expected to be completed by December'2021 end.
- **Bihar:** State has prepared DPR for FSSM for three towns namely, Digwara, Manihari and Teghra. The DPR are awaiting sanction of government for their implementation. This needs to be expedited.
- **Jharkhand:** The State Government has reported that works have started for 04 projects for integrated liquid

waste management through FSTP. 04 projects are in tendering stage and 15 projects are in DPR stage. The State may be requested to expedite.

- **West Bengal:** 30ICLD integrated septage treatment plant of capacity 30KLD for South Dum Dum Municipality had commissioned. Another 30ICLD Septage treatment plant for North Dum Dum and Baranagar Municipalities is under construction stage. As reported by State, 01 FSTP in every district in the State is being planned.

**8.4 Industrial Pollution Management:** CPCB through the State Pollution Control Boards is the central agency responsible for controlling the discharge of industrial/ trade effluents into the rivers and water bodies and their effective treatment as per set standards through proper functioning of the ETPs/CETPs. NMCG has been regularly pursuing this issue with the apex regulator as well as the State agencies. A tabulated statement on the total number of industries, effluent load, installed treatment capacity and proposed capacity to be created in the States of Uttarakhand, U.P., Bihar, Jharkhand and West Bengal has been represented in **Table-1** below:

Table-1: Statement on Industries and Treatment Capacity established in States

State	No. of Industries	Effluent Discharge (MLD)	No. of Industries having ETPs	Treatment Capacity of ETPs (WILD)	CETPs (Nos. and capacity in MLD)
<b>Uttarakhand</b>	830	145	830	175	Existing-3 (13.2MLD) Proposed- 3 CETPs of 18 MLD.
<b>Uttar Pradesh</b>	1648	850.5	1404	NA	Existing— 7 (58.55 MUD) (01 non-operational, 06 operational)*  Under Construction — 01No. (20 MLD)/ 3 Nos. of 26.65 MLD. Sanctioned — 2 Nos. of (7.1 MLD)
<b>Jharkhand</b>	190	NA	187		Existing :2 Nos. (2.2 MLD in Operation, 0.5 MLD CETP complete) Under Construction: 3.5 MLD at Ranchi, Tupadana Industrial Cluster.

<b>Bihar</b>	179	34.40	148	93.63	<p>Existing: Nil Under Construction/ Proposed: There are 52 industrial areas under control of State Bihar Industrial Area Development Authority (BIADA) which is implementing construction of five CETP projects in five industrial areas out of State Plan. 5</p> <p>Industrial Areas were identified in first Phase for construction of CETPs – Fathua (distt Patna), Hajipur (distt. Vaishali), Bela (distt Muzaffarpur), Barari (distt Bhagalpur), Patliputra (distt Patna).</p> <p>In respect of four industrial areas viz., Hajipur (distt Vaishali), Fatua (distt Patna) Barhi (distt Bhagalpur) and Bela (distt Muzaffarpur), State government has called tenders for five times but the bids were not successful. Sixth bid attempt for Hajipur in Vaishali distt with help of GIZ is underway and financial bids are under processing.</p> <p>Bihar Pollution Control Board has also sought advice from CPCB in respect of three industrial areas viz., Fatua (distt Patna) Barari (distt Bhagalpur) and Bela (distt Muzaffarpur) as to whether these areas can be exempted from CETP construction as volume of effluent involved is small and accordingly construction of CETP is commercially unviable vide their letter dated June 2021, CPCB vide letter dated 6.8.2021 has conveyed that State may ascertain the feasibility of CETP but industries shall remain compliant through functioning ETPs.</p>
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<b>West Bengal</b>	454	1360.60	454(400 SPIs & 54 GPIs)	1360.60	<b>Existing</b> : 20 MLD CETP  <b>Under Construction:</b> 4 module CETP of 20 MLD. No update provided.
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- Earlier in July-2021 State has reported that all operational 6 CETPs in Jajmau, Banthar, Unnao, Tronica Ghaziabad Rooma Kanpur, are compliant to norms while 01 CETP is nonoperational. As per report of Oversight Committee for the same period, out of 7 CETPs only 5 are operational. Out of the operational CETPs, 3 are achieving norms while two are not. However as per status reported for October-2021., all operational 6 CETPs in Jajmau, Banthar, Unnao, Pilakhuon, Rooma Kanpur and Mathura are non-compliant to norms while 01 CETP at Tronika City Ghaziabad is non-operational.

Amongst others, major issues related to control and management of industrial pollution in Ganga basin area are as following:

- Upgradation of 6.25 MLD CETP (Rs. 13.87 crore) for textile cluster at Mathura was sanctioned by NMCG with 25% contribution from industry members as well 100% O&M cost to be borne by them. There is provision for 50% reuse of treated water. Contract agreement has been signed on 4.4.2021. The construction work has been started and proposed completion date is February-2022. The State Govt. of U.P./agencies involved should be directed to monitor the progress to ensure timely upgradation of CETP and assuring its O&M upon commissioning of CETP.
- 1.5 MILD ZLD based CETP for Farrukhabad textile cluster has been considered by NMCG for sanction. However, the project could not be sanctioned for transfer of land costing Rs. 7.95 crore, already allocated to SPV by UPSIDC as about 1.03 crore has been imposed as interest for 1.25 year towards delay in land acquisition process. A decision was taken by Hon'ble Cabinet Minister of Khadi, Village Industries, Sericulture, Textile, Micro, Small & Medium Enterprises and Export Promotion, Uttar Pradesh for exemption of overhead and Interest charges of the land from cabinet. This was discussed in meeting of Hon'ble Minister, (Jal Shakti) and the Chief Minister, State of U.P. held on 18.01.2021. The cabinet decision is awaited.

**8.5 Environmental Flows:** That as regards "Environmental flows" in River Ganga, as per paragraph 5 of the Notification dated 7.10.2016, every State Government shall endeavor to ensure that uninterrupted flows are maintained at all times in River Ganga. Further it is mentionable that every State Government shall also make effort to maintain adequate flows of water in River Ganga in different seasons to enable River Ganga to sustain its ecological integrity and to achieve the goal and that all concerned authorities shall take suitable actions in a time bound manner.

That the Government of India, in exercise of the powers conferred vide notification viz. `River Ganga (Rejuvenation,

*Protection and Management) Authority Order, 2016, has notified on 09.10.2018 the minimum environmental flows to be maintained in river Ganga, for stretch starting from its origin to Unnao in Uttar Pradesh specifically at locations downstream of structures or projects meant for diversion of river flows for purposes like irrigation, hydropower, domestic and industrial and other requirements.*

*The environmental flow regime is applicable to all existing, under-construction and future projects [barring Mini and Micro projects which do not alter the flow characteristics of the river or stream significantly]. An Expert Team comprising of officials from Central Water Commission (CWC), Central Electricity Authority and National Institute of Hydrology, Roorkee based on their inspection of projects during 12-16 June, 2019 reported that all the existing projects have provisions for releasing the mandated e-flows through controlled gated spillways/ waterways and structural modifications in the body of projects may not be required for the same. The release of mandated e-flows is not being maintained by some of the projects, mainly HD's, due to commercial considerations. In view of this, it was decided that the three year period given in original notification may not be needed. Accordingly, the time period for complying with the environmental flow norms has been reduced from 3 years i.e., 09.10.2021 to 15.12.2019.*

*The CWC is the designated authority and custodian of the data, responsible for supervision, monitoring and regulation of flows. The monitoring of E-flows is being carried by Upper Ganga Basin Organization (UGBO), CWC since 01.01.2019. CWC in its capacity as the designated Authority, for supervision, monitoring and regulation of Environmental flows regime, fixed the e-flow targets for the Hydro Electric Projects (HEPs) operating in the Ganga river Basin in the State of Uttarakhand and ensures strict adherence to the stipulated e-flow norms/targets by 15.12.2019. CWC has been submitting e-flows, monitoring-cum-compliance report on quarterly basis to NMCG.*

*(a) **Uttarakhand:** Projects currently being monitored by the CWC are Maneri Bhali Stage —I, Maneri Bhali Stage —II, Tehri Dam, Koteshwar Dam, Vishnuprayag HEP, Srinagar HEP, Singoli-Bhatwari HEP, Pashulok barrage/ Chilla HEP. The structures/ projects to be monitored are to be reviewed after each year.*

*The CWC started monitoring of the 11 projects from January, 2019 and findings of the quarterly monitoring cum compliance reports for year 2019 had been submitted before this Hon'ble Tribunal in the report submitted on 11.12.2019. The findings of the 9th monitoring-cum-compliance report for quarter January-March, 2021 and 10<sup>th</sup> draft monitoring-cum compliance report for quarter April-June, 2021 report are as follows:*

- *Most of the projects are providing the flow data on hourly basis regularly except Tehri and Kanpur barrage. The data from Tehri project is being received regularly but on daily basis instead of hourly basis while Kanpur barrage authorities are measuring and providing flow data on two hourly basis. The project authorities are being pursued to provide the data in desired format on regular basis. During the 2nd Phase of Inspection visit from 7-9 August, 2019, it was stressed that the pond level (between 609 m to 612 in) of Koteshwar dam extends up to the toe level of Tehri dam, as such the whole river reach between Tehri and Koteshwar remains under pool of water. It was suggested that whole system of Tehri and Koteshwar should be considered as one single system for e-flow monitoring with inflows in Tehri reservoir and outflows from Koteshwar dam. The same has been agreed upon and incorporated in this report.*
- *The automatic data acquisition and transmission system have not been installed on projects so far except at Tehri, Koteshwar dam, Bhimgoda barrage and Narora barrage. The project authorities are being pursued to complete the installation. Project authorities of Pashulok barrage and Maneri-Bhali-II HEP have completed the installation. In case of Vishnuprayag HEP, SCADA system has been installed by the project authority on all the gates including at sluice gates and desilting chambers entrance and flow data is being shared with CWC in hourly or half hourly basis.*

*Based on the data supplied by project authorities, most of the projects met the e-flow norms during the period as inflows are normally high in monsoon period. However, the Srinagar REP (GVK) and Pashulok Barrage do not comply with the mandated e-flow norms.*

- *It is submitted that as per the quarterly reports, provided by CWC starting from January 2019 till June, 2021, following projects have been found non-compliant in respective quarter:*
- *1<sup>st</sup> Monitoring-cum-compliance quarterly report (Jan — March, 2019): Maneri Bhali-1, Maneri Bhali-2 HEP, Vishnuprayag HEP, Srinagar HEP.*
- *2<sup>nd</sup> monitoring-cum-compliance quarterly report (April-June 2019): Maneri Bhali-2 HEP, Vishnuprayag REP, Srinagar HEP.*
- *3<sup>rd</sup> monitoring-cum-compliance quarterly report (July-Sep'2019): Maneri Bhali-2 HEP, Vishnuprayag HEP, Srinagar HEP.*
- *4<sup>th</sup> monitoring-cum-compliance quarterly report (Oct-Dec, 2019): Maneri Bhali-2 HEP, Vishnuprayag HEP, Srinagar HEP, Pashulok barrage.*
- *5<sup>th</sup> monitoring-cum-compliance quarterly report (Jan-March, 2020): Srinagar HEP.*
- *6<sup>th</sup> monitoring-cum-compliance quarterly report (April-June, 2020): Srinagar HEP.*
- *7<sup>th</sup> monitoring-cum -compliance quarterly report (July-Sept, 2020): Srinagar HEP.*

- 8<sup>th</sup> monitoring-cum-compliance quarterly report (Oct-Dec, 2020): Srinagar HEP.
  - 9<sup>th</sup> monitoring-cum-compliance quarterly report (Jan-March, 2020): Srinagar HEP, Pashulok Barrage
  - 10<sup>th</sup> monitoring-cum-compliance quarterly report (April-June, 2021): Maneri Bhali-2, Pashulok barrage, Srinagar HEP.
- i. That only Srinagar HEP has been found non-compliant with e-flow norms for First 10 days of January 2021 and from April to June 2021 except few days in June 2021.
  - ii. Pashulok barrage is in non-compliance only for Month of February, 2021 and for few days in April 2021.
  - iii. Maneri Bhali-2 Project is broadly in compliance with the e-flow norms except for few days in April and May 2021.

*That as per as per protocol for e-flow monitoring and compliance specified in SOPs "If non-compliance continued for more than 5 days without any compelling circumstances, a penalty may be imposed on project authorities by NMCG under section 3 of Environment (Protection) Act 1986".*

*(b) **Uttar Pradesh:** The State of Uttar Pradesh is complying with the notification dated 14.09.2019, Department of Water Resources, River Development and Ganga Rejuvenation, Government of India with regard to ecological flow in River Ganga from Bhimgoda (Haridwar), Bijnore and Narora. Kanpur barrage project authority is not providing any flow data and same is being collected on monthly basis by CWC officials from their office. It was informed that project authority has stated that diversions from barrage are made for the purposes of drinking water supply only, which has priority over environmental flows. Thus even if environmental flows are not met, State is bound to provide water for drinking needs.*

*The ecological flow as per notification dated 02.07.2021 in River Ganga from Bhimgoda Barrage (Haridwar), Bijnore Barrage and Narora Barrage is being complied.*

*The beta version of online portal for e-flows is currently under trial and same is being developed by Central Water Commission along with National Mission for Clean Ganga.*

*(c) **Bihar:** The State Govt. of Bihar vide Letter Dt. 24.04.2019 flagged issues of quantum of e-flows in upper riparian States of Uttar Pradesh/Uttarakhand and desired that e-flows should be maintained at > 36 cumecs in upper riparian States of Uttar Pradesh/ Uttarakhand. Further, it is desired that MoJS/GOI should notify the quantum of e-flows for entire stretch of Ganga as well as important tributaries. In this regard it is submitted that minimum flows observed at UP-Bihar border are of an order of not less than 400 cumecs*

while e-flows mandated through notification dated 09.10.2018 at Kanpur barrage during lean season (October-May) is 24 cumecs. Additional of 12 cumecs to be mandated as e-flows to be released by upper Riparian State, as being pointed out by Govt of Bihar, may be insignificant in view of more than 30 times flows availability at border location of UP-Bihar. The issues raised by the Govt. of Bihar may therefore may therefore not be relevant.

(d) **Jharkhand:** That the Government of Jharkhand has reported that there is no water flow/ discharge regulatory structure on river Ganga within the territory of Jharkhand, hence there is no issue regarding the maintenance of e-flow within the stretch of river Ganga in Jharkhand which is being maintained. Installation of Real Time Data Acquisition System along with Data Center is to be established at Ranchi for analysis and information and it shall be completed by 2024. Further, in order to maintain the E-flow, installation of instruments across the barrages shall be completed by March 2024.

(e) **West Bengal:** The river Ganga is perennial river of Bengal. The e-flows is maintained in the river Ganga through the release of water from Farakka Barrage throughout the year.

**8.6 Flood Plain Demarcation:** That the Flood Plain demarcation/ Zoning is required to be done by the State Governments concerned. In this regard the provisions of the Authority's Order, 2016 also mandate the State Government to identify and demarcate the flood plains in the concerned State. This Hon'ble Tribunal in its various orders has also directed that till the action is taken by the State Government, the criterion of 1 in 25 years HLF shall be taken into consideration for flood plain demarcation/zoning. As per the information furnished to NMCG, the action taken by the State Government with respect to demarcation, protection and management of floodplain area of the river Ganga is as following:

(a) **Uttarakhand:** Under the provisions of Uttarakhand flood plain zoning Act 2012, State Govt. of Uttarakhand vide notification dated 28.02.2017, Notification done for Haridwar District's ChandiGhat bridge to village Kalsia; Uttarkashi District's Gangori to Badethi Chungi stretch; Gangotri to Devprayag, Bhilangana river, Badrinath to Devprayag, Mandakini river. The process has been initiated for flood plain zoning of Susva Gola and Kosi river, about 295 kuu, and proposal has been sent for approval. Further scope of flood plain zoning in 1st phase 13 rivers about 955 lam and in 21'd phase 9 rivers about 1151 km have been identified.

(b) **Uttar Pradesh:** The State of Uttar Pradesh has submitted that for Phase —I (Segment B) of river Ganga, the notification for identification of flood plain zones as per the final report



*furnished by the Special Committee has been done. Flood plain has been notified as being either 100 m or 50 m from firm banks of river presently. In urban areas, this zone corresponds to 50 return period flood. The flood plain zone is to be physically demarcated and notified. Budget has been allocated for permanent demarcation of flood plain zones by fixing of stone pillars in Segment B of Phase—I. Additionally, demarcation of flood plain for Yamuna, Hindon, Kali-East, Varuna, Gomti, Ramganga, Betwa, Ghagra, Rapti, Sai, Saryu and regulation of construction/development activities are to be notified by the State Government.*

*NMCG has suggested the Govt. of U. P. for geo-tagging of stone pillars delineating flood plain area of the rivers. This will guard against physical damages to the pillars as geo-tagged pillar locations can always be accurately traced by simple dGPS tools and remain unaffected by physical damages.*

*(c) **Bihar:** With respect to status floodplain zonation and management in the State of Bihar, Hon'ble Tribunal in its order dated 08.02.2021 observed as following:*

*"...(c) Bihar: That the State of Bihar in its report has submitted that considering the densely populated northern plain terrain and embanked river in the State, the directions pertaining to food plain zonation is not applicable in case of Bihar and the State Government is contemplating to approach the Hon'ble NGT in this regard. That Hon'ble NGT in its order dated 13.08.2020 has passed direction for constitution of a Joint Committee of members from NMCG, MoJS and CPCB to look into the issue of river floodplains demarcation and protection in the State of Bihar. In this regard, this Hon'ble Tribunal is to be apprised that the State Govt. of Bihar requested for modification in the definition of flood plain as described in the Gazette Notification S. O. 3187(E) dated 07.10.2016. The State Govt. of Bihar was asked to carry out a scientific study and report action taken based on such study and accordingly, letters dated 31.07.2020, 10.12.2020 and 06.01.2021 was issued to the Secretary, Water Resource Deptt. Govt. of Bihar. Copies of afore mentioned letters are placed at Annexure - II No information in this respect has been furnished by the State Govt of Bihar till date. The Joint Committee could look into issues pertaining to demarcation and protection of floodplains in State of Bihar once this study is in place and the requisite data is provided for examination."*

*In this regard the Hon'ble Tribunal is to be apprised that the Govt. of Bihar has furnished on 10.08.2021 a 'Report on Scientific study on the feasibility of Flood Plain Zoning in the State of Bihar' prepared by the Flood Management*

*Improvement Support Centre (FMISC), Water Resource Deptt., Govt. of Bihar (Copy annexed as Annexure — V). Further, an inter-departmental Joint Committee has been constituted for reviewing the report submitted by the Govt. of Bihar and examining the request of the State of Bihar as regards their claim that (i) demarcation of floodplains of the river Ganga in Bihar cannot be done, and (ii) provisions of flood plain zoning in subsection (1) (1) of Section 3 and subsection (3) of Section 6 of the River Ganga (Rejuvenation, Protection and Management) Order, 2016 needs revisiting and amended thereof, for having special provisions for Bihar State. The 151 meeting of the Committee is proposed to be held on 23.11.2021 with participation of officials of State Govt. of Bihar.*

*(d) **Jharkhand:** That the State of Jharkhand in its report has submitted that demarcation of flood plain zones necessitates earmarking in the vicinity of its existing water bodies which in turn requires regulation to ascertain flood plain zones for which the Water Resources Department (WRD), Government of Jharkhand has appointed Consultant. Further, for accurate assessment of the food pain zone, hydrology of the rivers is also required. That the Government of India sponsored National Hydrology Project in underway and is likely to provide the requisite data by the end of March 2024. Hence, the demarcation of the flood plains of the rivers in Jharkhand will be done during 2024-2025. Under National Hydrology Project, Central Water Commission is working on developing advance flood warning monitoring system. Demarcation of flood plain zone along river Ganga as per available data has been completed.*

*NMCG, after examination of this information observes that scientific studies for flood plain zonation are to be undertaken by State. There is no case for awaiting the outcome of National Hydrology Project before decision on flood plain zoning in State is taken.*

*(e) **West Bengal:** The State Govt. of West Bengal has submitted that a report regarding demarcation of flood plain has been prepared by Department of Geography, University of Calcutta that has been received on 28.06.2021. This report is being examined by the Environment Deptt. and the Urban Development & Municipal Affairs Deptt., Govt. of West Bengal. The State has submitted that action will be taken after through study and review of the report. Further, the State has submitted status of various protection works which is provided in Table - 2 below.*

**Table-2: Status of protection and management of floodplain zones in the State of West Bengal**

<b>Sr. No.</b>	<b>Protection and management of flood plain zones (FPZ)</b>	<b>Current Status Target</b>	<b>Revised</b>	<b>Action taken or suggested for violation of</b>

				<b>timelines or non-achieving of targets</b>
<b>1</b>	<b>North 24 Parganas</b> - Protection to the severely damaged left bank of river Hooghly in between Chaiotanya Ghat and Kanch Mandir Ghat by providing cement concrete block pitching for a length of 170 nun and boulder sausage protection work for a length of 50 m within Ward no. 30 & 31 of Baranagar municipality in <b>P.S. Baranagar, District North 24 Parganas.</b>	10% physical progress achieved.	Sep-21	All out effort has been laid to complete revised target in
<b>2</b>	<b>North 24 Parganas</b> - Protection to the severely damaged left bank of river Hooghly in between Alambazar Government Quarter campus to Ramlochan Babu Ghat by providing cement concrete block pitching for a length of 215 m and reconstruction of 50 m guard wall in front of Bhabkunja Ashram undre Ward no. 4 of Baranagar municipality in P.S. Baranagar, District North 24 Parganas.	29% physical progress achieved.	Jun-21	Allout effort has been laid to complete revised target in
<b>3</b>	<b>North 24 Parganas</b> - Protection to the left bank of river Hooghly from Mangal Pandey Ghat to Malanch Tourist Lodge near Vivekananda State Police Academy for a length of 135 m including renovation of sluice under Barrackpore Municipality in PS – Barrackpore, Dist. – North 24 Pgs.	Completed	NA	NA
<b>4</b>	<b>South 24 Parganas</b> - Protection work to the left bank of Hooghly embankment at SulapaniGhat near Harna Sluice for a length of 200m in Block - Diamond Harbour-I, P.S. Diamond Harbour, Dist-South 24 Parganas.	Administrative approval issued by the Finance Department on 02.02.2021, tender has been invited.	Dec-21	All out effort has been laid to complete revised target in
<b>5</b>	<b>South 24 Parganas</b> - Protection on left embankment of the Hooghly River for a length of 150 m by dumping Geo-Bag below L.W.L with slope protection by HDPE bags at pujali in P.S —	85% physical progress achieved.	NA	NA

	<i>Budge Budge, Dist- South 24 Parganas.</i>			
<b>6</b>	<b>South 24 Parganas-</b> <i>Protection of Hooghly left embankment with Brick Block Pitching for a length of 250 Mat Kanchantala Shasan Ghat Department Kali Mandir within Ward No 140 of KMC in P.S — Nadial, Dist- South 24 Parganas</i>	<i>Administrative Approval issued by the Finance on 21.01.2021, tender has been invited.</i>	<i>Dec-21</i>	<i>All out effort has been laid to complete revised target. in</i>
<b>7</b>	<b>Howrah</b> - <i>Protection to right embankment of Hooghly River at the confluence of Chapa Khal for a length of 210 m at Kalinagar in Block Uluberia -I, P.S. Uluberia, District Howrah.</i>	<i>Completed</i>	<i>NA</i>	<i>NA</i>
<b>8</b>	<b>Howrah</b> - <i>Protection to right embankment of Hooghly River at Tetikhola for a length of 150 m in Block Shyampur-I, P.S Shyampur, District Howrah.</i>	<i>Completed</i>	<i>NA</i>	<i>NA</i>
<b>9</b>	<b>Howrah</b> - <i>Protection to right embankment of Hooghly River at the confluence of Gouriganga Khal at Challcashi for a length of 240 m in Block Uluberia-I, PS Uluberia, District Howrah.</i>	<i>Completed</i>	<i>NA</i>	<i>NA</i>
<b>10</b>	<b>Howrah</b> - <i>Protection of right Hooghly embankment for a length of 300 m at Sirishtala, Gadiara, in Block Shyampur-I, P.S Shyampur, District Howrah.</i>	<i>Completed</i>	<i>NA</i>	<i>NA</i>

*NMCG, after examination of this information observes that these works are flood protection works undertaken by the State government. Decision on above mentioned report on flood plain zonation followed with protection and management of identified floodplain areas, are yet to be undertaken by the State.*

**8.7 Depicting biological diversity of Ganga in public domain:** *One of NMCG's long term visions for Ganga Rejuvenation is to restore the viable populations of all endemic and endangered biodiversity of the river so that the biological communities occupy their full historical range and fulfill their role in maintaining the integrity of the Ganga River ecosystems.*

*Presence of rich biodiversity in a river ecosystem is the ultimate indicator of the river's health. The Ganga river ecosystem supports more than 25,000 floral and faunal*

*species. Biodiversity of any ecosystem is threatened foremost by the loss or degradation of its habitat. Major threats to River Ganga's biodiversity can be grouped under five overlapping categories: over-exploitation, water pollution, flow modification, destruction or degradation of habitat and invasion by exotic species, with global scale environmental changes being superimposed upon all of them.*

*Under Namami Gange Programme, biological water quality is assessed using Bio-monitoring field protocol towards semi-quantitative monitoring developed by Central Pollution Control Board. Community structure of the benthic macro-invertebrates of River Ganga and its tributaries reflects taxonomic richness with representative distributed taxa.*

*As mentioned above, under Namami Gange Programme, since 2014 onwards bio-monitoring of River Ganga and its tributaries is being carried out on regular basis to know the spatio-temporal trends in biological water quality for better understanding of health of the river system. In total, 8 rounds of bio-monitoring along the entire course of River Ganga were carried out during 2014-2020.*

*The biological data is available for 93 unique locations of River Ganga covered so far. Based on comparative bio-assessment study of same period carried out at 41 locations and covered in eight rounds of bio-monitoring during 2014-2020, the spatio-temporal picture of biological water quality status of an entire river is reported.*

*It is revealed that there is improvement in biological water quality from moderate to good class at maximum number of (29 out of 41) locations during present investigation. These locations include Jagjeetpur u/s; Sukartal; Anupshahar; Narora; Kachla Ghat; Ghatia Ghat, Farrukhabad; Kannauj; Kannauj d/s; Bithoor; Kanpur u/s; Asni Village Fatehpur; Sirsa, Prayagraj Bridge; GT Road, Prayagraj; Varanasi u/s ; Varanasi, Rajghat; Rajwari a/c Gomti; Patna, Digha ghat; Patna, Fatuha (Bihar); Patna Malsalami; Falgu River (WB); Falgu River; Murshidabad; Behrampore d/s; Srirampore d/s; Belgharia; Ballykhal,; Howrah Bridge; Garden Reach. Location of Khudaganj shows improvement in the water quality from moderate to clean class during 2014-2018. In Uttarakhand stretch, biological water quality at Haridwar Barrage (UK) recorded improvement from slight pollution or clean to very good class during 2014-2018. Towards post-monsoon 2020, the water quality at this location, however, fell to moderate class. Biological water quality of the river in Uttar Pradesh at Bijnour (UP); Varanasi d/s and Bihar at Patna Gandhi Ghat remained moderate during 2014-2020 however; some improvement upto clean class level was obtained during intermediate periods of investigation. Jagjeetpur d/s is the exceptional location of River Ganga in Uttarakhand where biological water quality deteriorated*

*from clean or slight pollution (2014-2015) to poor class (post monsoon 2018-2019) during present investigation. Decline in the biological water from clean to moderate class was observed in the Kanpur stretch of river at Shakula Ganj, Deorighat during 2014-2019.*

*As reflected from the above comparative analysis, improvement with respect to biological water quality of River Ganga has been found which indicates the river environment in tendency of enhancing its ecological health.*

*Further, in order to address the threats to the aquatic biodiversity of Ganga, NMCG is working with Wildlife Institute of India (WII), Dehradun, Central Inland Fishery Research Institute (CIFRI), Barrackpore and State Forest Departments. All the reports generated from the study are uploaded in NMCG website:*

*[https://nmcg.nicin/biodiversity\\_reports.aspx](https://nmcg.nicin/biodiversity_reports.aspx). Summary of these reports is as below:-*

- *49% Ganga River has rich biodiversity value while sustained actions have to be continued to improve biodiversity in the remaining reach.*
- *Six High Biodiversity Areas and Twelve Conservation Priority Zones exists*
- *Rescue & rehabilitation center established in Narora, Sarnath Bhagalpur and Kolkata.*
- *Cadre of more than 1300 volunteers (Ganga Praharis) developed and trained. These Ganga Praharis are actively involved in the Namami Gange Programme and carrying out awareness programmes, cleanliness drives and plantation drives contributing towards the mission of the Namami Gange Programme.*
- *Key ecosystem services of Ganga River identified and an assessment framework developed.*
- *The floating interpretation Centre at Varanasi "Ganga Tarini" and interpretation Centre at Sarnath "Ganga Darpan" established. Floating livelihood Centre "Jalaf" established at Varanasi. Model was also adopted by District Administration in Jharkhand.*
- *Assessment of fish and fisheries conducted and a total of 190 fish species mapped in GIS platform to understand the fish status and distribution in Ganga.*
- *Tagging procedures have been initiated to see whether the selected fishes like Hilsa can negotiate existing barrages.*
- *Conducted ranching cum awareness programmes and released more than 30 lakhs of fish seed in river Ganga for conservation and restoration of IMC & Mahseer.*
- *New sightings of Gangetic dolphins were recorded from downstream of Kanpur barrage, Smooth coated otters from Bhagalpur, Gharials at downstream of Rishikesh barrage and nesting of Indian skimmers near Prayagraj.*

- On the basis of the recommendations by WII, a 30 km stretch near Varanasi was declared as 'Turtle Wildlife Sanctuary' by Government of Uttar Pradesh for the protection of the aquatic biodiversity and their habitat in the Ganga River.
- Continued engagement of the riverside communities was ensured in the conservation process through skill development trainings conducted for Women Ganga Praharis from Uttar Pradesh and Jharkhand. The training and establishment of linkages are helping in improving livelihood and also linked with conservation.
- Training manuals created and distributed to teachers as resource material in Ganga bank districts.

**8.8 Plantation Activities and setting up biodiversity parks:** Plantations and setting up biodiversity parks along the floodplain of the rivers plays significant role in protection of floodplain area as well as restoration of river ecology. The initiatives and achievements of the States regarding plantation activities and setting up biodiversity parks are as following:-

- **Uttarakhand:** The plantation activities are being carried out in the larger catchment area of River Ganga. In the year 2020-2021 about 4,151 ha of plantation activities have been completed under the various schemes of CAMPA.
- **Uttar Pradesh:** As per the latest MPR, status of plantation activities undertaken and proposed by the State Govt. of Uttar Pradesh in the State are enumerated in the **Table - 3** below:

Table-3: Status of plantation activities

<b>River Stretch</b>	<b>No. of Sampling</b>	
	<b>Planted Year 2019-20</b>	<b>Proposed for 2020-21</b>
Hindon	55.34	55.64
Kali	65.93	69.35
Varuna	25.62	14.79
Yamuna	175.68	252.00
Gomti	180.26	151.99
Ganga	183.24	226.39
Ramganga	77.28	68.97
Betwa	24.61	49.78
Ghaghara	39.72	26.22
Sai	77.20	71.36
Rapti	57.25	29.08
Saryu	35.29	34.13
<b>Total</b>	<b>997.42</b>	<b>1049.70</b>

*As per the MPR, Uttar Pradesh has identified the sites for the development of Bio-diversity parks in 25 districts in the main stem of Ganga and 02 districts in Yamuna covering a total area of 3591.984 ha. The project proposals for development of Bio-diversity parks are prepared under the supervision of Prof. C.R. Babu, former Pro Vice Chancellor, University of Delhi/ Emeritus Professor, CEMDE/ Incharge, Yamuna Bio Diversity Park and his scientific team.*

*It is relevant to mention that a project for 'Conserving and Sustainably Managing Gangetic Floodplain Wetlands of Uttar Pradesh' has been sanctioned to Uttar Pradesh State Forest Department under Namami Gange Programme at a cost of Rs. 4.16 Crores. The project under implementation since June 2020 and an amount of Rs 2.49 Crores has been released by NMCG till date for the project. The project involves comprehensive and management of Gangetic floodplain wetlands of U.P. within buffer of 10kms each side from the flood plain of river Ganga main stem in the 27 Ganga river bank districts in Uttar Pradesh. The major components of project include — Wetland Inventory and Assessment, Wetland Management Planning, Wetland Monitoring and Capacity Building and Outreach.*

*The UP State Forest Department has reported that out of 282 wetlands identified, 197 wetlands have been reviewed and brief documents of 118 wetlands have been prepared. The 'Rapid Wetlands Ecosystem Services Assessment Protocol' has been developed, strengthening of GIS infrastructure and lab development has been done, and training and workshops of wetland managers has been completed at Prayagraj, Badaun, Kanpur, Meerut and Varanasi and hydro-geomorphic based wetland classification for the model district (Meerut) has been completed.*

- **Bihar:** *Plantation is being done under Namami Gange Scheme and Krishi Road Map wherein the polluted river stretches will be prioritized. The Bihar state has successfully achieved the total tree cover target of 15% for the Phase-I of Bihar Agriculture Road Map. For the Phase-II of Bihar Agriculture Road Map for the period 2017-18 to 2021-22 a target of 17% total tree cover has to be achieved by 2022. A team from the State Government had visited Yamuna Biodiversity Park in Delhi and at present are exploring possibilities of developing the replication of the same in the State.*
- **Jharkhand:** *Plantation activities along the rivers: Total — 124.69 Kms. 9 (Jumar — 20 Kms, Swarnrekha — 65 Kms, Damodar-20.69 Kms, Konar — 6 Kms, Sankh -8 Kms and Garga - 5 Kms).*
- **West Bengal:** *24 biodiversity parks construction projects are ongoing in the State.*



**9. Quantity of Sewage being discharged in river Ganga and its tributaries /connected drains and correspondingly proposed/existing STPs to intercept the same with timelines.**

States in the Ganga Basin have submitted updated information with regard to the sewage generation and existing sewage infrastructure in the States. Therefore, as per the updated information, 10,139.30 MLD of sewage (from urban settlements) is being generated in 5 States in the Ganga Basin and 5,586.74 MLD capacity of STPs (226 nos.) is existing which approximates to about 50% of sewage generation. Against the existing capacity, only 61% of the capacity is being utilized for treatment of municipal sewage. Rest of the existing capacity remains unutilized because of various reasons, including lack of availability of conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality on various counts. This leaves a gap of 4,619.96 MLD in treatment capacity for which States are regularly being asked to provide details with regards to their plans to fill the gap, including that for financing the creation of infrastructure. It is also important that operational STPs remain compliant to the STP outlet standards as per environmental norms. The details of sewage generation, existing sewage treatment capacity, its utilization and gap thereof is presented in **Table-4**.

**Table-4: Details of Existing Sewage Infrastructure in the 5 Ganga Basin States**

No.	State	Sewage generation (MLD)	Existing STP (capacity in MLD and Nos.)	Capacity Utilization (MLD)	Gap in Treatment at present (MLD)
1	Bihar	1100	230 (6 STPs)	100 (44%)	870
2	Jharkhand	452	103.5 (15 STPs)	77%	348.45
3	Uttarakhand	329.3	396.75 (66 STPs)	235.82 (59%)	-
4	Uttar Pradesh	5500	3471.8 (108 STPs)	2616.7 (75%)	2028.2
5	West Bengal	2758	474.69 (31 STPs) +910 MLD addl. Treatment through EKW	1201 (86%)	1373.31
	Total	10,139.3	5586.74 (226 STPs)	68%	4619.96

\*State reported that 910 MLD of sewage is being treated by East Kolkata Wetlands by natural process.

**10. Performance of STPs and their compliance, particularly for Faecal coliform.**

As per the information received from CPCB on the basis of the inspections undertaken for verifying the

compliance status of STPs, it is observed that out of 128 STPs being monitored by CPCB (102 operational STPs at the time of inspections), 09 STPs were found complying and 74 were found non-complying for Faecal Coliform as per Hon'ble NGT prescribed norms (<230 MPN/100ml) dated 30.04.2019 passed in the matter of O. A. No. 1069/2018 —Nitin Shanzar Despande Vs. Union of India & On. Details of the compliance status of STPs in five Ganga basin States (as on 31.10.2021) is depicted in Table- 5 below:

Table- 5: Compliance Status of STPs in 5 Ganga Basin States (Till October 31st 2021)

State	Towns covered by 128 STPs	Average Sewage Generation in Ganga Front towns (MLD)	Installed sewage treatment capacity (MLD)	Utilized Capacity (MLD)	Total STPs monitored	Operational STPs	No. of non-complying STPs	No. of STPs Non-Complying for Faecal Coliform (<230 MPN/100 ml) norms
Uttarakhand	16	239.8	347.2	214.1	54	51	36	35*
Uttar Pradesh	11	1255.2	1137.9	930.11	32	29	26	19
Bihar	01	480	205	64	05	04	4	04
Jharkhand	01	12	12	07	02	02	2	2
West Bengal	22	1571.5	545.7	184.9	35	16	15	14
Total	51	3558.5	2247.8	1400.1	128	102	83	74

Note: 1. For 2020 and 2021 compliance status is based on norms prescribed by Hon'ble NGT in order dated 30.04.2019 (passed in OA No. 1069/2018).

2. STPs in Jharkhand and Bihar were not monitored in 2021 and last reported status is given in the Table-5.

\* As reported by Uttarakhand Govt., all the STPs have been reported to be compliant with respect to Faecal Coliform norms, based on inspections carried out during January-October'2021.

The State of U. P. has informed that directions have been issued by the State PCB for starting monitoring of Faecal Coliform in STP treated water. Presently, Faecal Coliform is being monitored for STPs in Chitrakoot and Lucknow only and the value is found to be within prescribed limits. It is to be submitted that it is responsibility of the State to ensure that all operational STPs are compliant to prescribed outlet standard, including that for Faecal Coliform norms and compliance to directions issued is reported accordingly.

*Further, in view of contradictory claims of CPCB and Uttarakhand Govt. in respect of compliance status of existing STPs it for consideration of the Hon'ble Tribunal that the compliance monitoring may be carried out jointly by the Central and State regulators and the raw data may be shared with NMCG. In many of projects inspected by NMCG officials, it is seen that residual chlorine is being reported at the outlet while significantly higher Faecal Coliform levels are also being reported. This may not be physically and scientifically possible. Therefore, reconciliation of scientific finding by both State and Central regulator is necessary. It is also to be verified by State PCB and CPCB alike that availability of the OCEMS sensors in respect of various parameters like pH, DO, BOD (or TOC wherever applicable), COD, Total Nitrogen and Total Phosphorous at STPs (in all five Ganga basin States) including their operational status and connectivity on real time basis with CPCB, SPCB and NMCG be ascertained and reported upon.*

**11. Water quality of Ganga at inter-State borders and at important public places/Ghats, which may show the level of compliance with regard to water quality.**

**(A) Water Quality assessment at Inter State Borders:** *Water Quality of River Ganga at inter-state borders were comparatively assessed at 07 locations of Inter State Border in the Ganga main stem States namely Uttarakhand, Uttar Pradesh, Bihar and West Bengal namely; border of Uttarakhand and U.P - D/s Roorkee, Garhmukteshwar; border of UP and Bihar — Tarighat (Ghazipur), Buxar; border of Bihar and W.B. — Kahalgaon, Berhampore; border end of W. B. - Diamond Harbour. The comparative assessment of median data of Biochemical Oxygen Demand (BOD) of year 2014 and 2021 reveals that BOD levels have improved at all the 6 out of 7 identified water quality locations at the Inter-State Borders (except for Tarighat, Ghazipur).*

*The comparative assessment of water quality median data was done for water quality parameters viz. Dissolved Oxygen (DO) and Biochemical Oxygen Demand (BOD) for the year 2014 and 2021 is depicted in **Fig. 1 and Fig. 2 resp. at Annexure — VI.***

**(B) Compliance to water quality standards:** *Under the Namami Gange Programme, CPCB is carrying out the manual water quality monitoring of River Ganga at 97 water quality locations in association with SPCBs. As per CPCB data for the year 2021 (January to July), the observed water quality of River Ganga indicates that DO has been found to be within acceptable limits of notified primary bathing water quality criteria.*

*As per comparison of median data of water quality parameters viz., DO, BOD and Faecal Coliform of year*

2014 and 2021 (January to July), Dissolved Oxygen has improved at 40 locations, BOD at 41 locations and Faecal Coliform at 21 locations, respectively. Graphic representation of the comparative assessment for DO, BOD and Faecal Coliform is depicted in annexed **Fig. 3, Fig. 4 and Fig. 5 resp. at Annexure – VII.**

(C) **Water Quality in Polluted River Stretches:** The water quality data presented by the 5 Ganga Basin States during period since January 2020 up to December 2020 has been analyzed and the same has been summarized in **Table-6** given below:

**Table - 6: Water Quality Status Stretch wise for States of Bihar, Jharkhand, Uttarakhand, Uttar Pradesh, West Bengal.**

Sl. No.	States	Water Quality Status Stretch wise	
		Stretch	Range of BoD (mg/l)
1	Bihar	Ganga River, Buxar to Manihari; P-V	1.2-5
		Punpun River, Fatuha; P-V	1.8-5.6
		Ramrelcha River Harinagar (Ramnagar) ; P-V	1.9-4.0
		Sikrahna River, Narkatiaganj; P-V	1.1-3.2
		Parmar River, Jogbani; P-V Sirsia River, Raxual; P-III	1.9- 4.0 3-5
2	Jharkhand	Garga, Along Talmuchu; P-IV	3.7
		Sankh, Kongserabasar to Bolba; P-IV	8.4
		Swarnrekha, Hatia Dam to Jamshedpur, P-IV	3.4 – 10
		Damodar, Phusro Road Bdg to Turio; P-V	3.9
		Jumar, Kanke Damto Kadal; P-V	2.1 – 3.3
		Konar, Along Tilaya and Komar; P-V	3.4 – 3.6
3	Uttar Pradesh	Nalkari, Along Patratu; P-V	3.8
		Based on Water Quality report for August& September 2020, as reported in the MPR provided.	
		Ganga	2.1 – 4.8
		Yamuna	1.9 – 27
		Kali East	4.6 – 66
		Hindon	14 – 52
		Sai	2.8 – 14
Ami	3.2 – 4.6		

		Rapti Saryu Betwa	5.8 – 20 4 – 5.4 3.2 5.4
<b>4</b>	<b>Uttarakhand</b>	Dhella Bhella Kichha Suswa Kalayni Kosi Pilakhar Nandhour Ganga	1.8-16 4-17 3-9 2-28 2.4-18 3-7.8 4.1-10 2.5- 5 1- 1.2
<b>5</b>	<b>West Bengal</b>	Vidyadhari Mahananda Ganga Chumi Dwarka Damodar Mathanbhanga Kansi Jalangi Rupnarayan Mayurakshi Dwarakeshwar Silabati Barakar Kaljani Karola Teesta	5.42-10 1.20-21 1-3.20 2-7.3 3.05-4.20 1.65-3.75 4-5.88 0.6-2.40 2.25-2.85 0.90-1.70 <2 1.85 - 2.80 <2 2.15-2.45 1.20-2.10 <2 0.80-1.4

*As informed by the State of U. P., water quality of River Ganga is being monitored by UPPCB at 32 sampling points in U. P. and data is uploaded at UPPCB website. Water quality of River Ganga at borders and important public places-ghats is reported to show improvement from 2017 to 2021.*

*It is relevant to mention that the Oversight Committee has reported that as per the latest available report for the period Jan-May, 2021, water quality at 22 locations in U.P. is critically polluted. Out of the 22 locations, at 8, water quality falls in category C which means that water is suitable for drinking purpose after conventional treatment and disinfection while at 14 locations the water quality falls in category D which suggests that water is not suitable for drinking or bathing purposes but only for propagation of wildlife and fisheries.*

## 12. Status of compliance of CETPs at Jajmau, Unnao and Banther (applicable only to UP)

As per the recent inspections of these three CETPs, the status is presented in Table -7 below.

**Table -7: Status of CETPs in Ganga Main stem (As on October, 2021)**

CETP Name/ District	Installed Capacity (MLD)	Utilized capacity (MLD)	Type & nos. of Operational member Units	Compliance status/ date of monitoring	Issues/Action taken
CETP Jajmau Kanpur, UP	36 (09 MLD industrial + 27 MLD sewage)	34.5- 36 (11.26 - 12 industrial effluent + 23.3- 24 Sewage)	Tannery (345)	<p><u>Latest inspection:</u> 06.09.2021</p> <p><u>Compliance status</u></p> <p>Non-complying w.r.t. BOD (176 mg/l against norm of 30 mg/l) COD (391 mg/l against norm of 250 mg/l), TSS (151 mg/l against norm of 100 mg/l), chloride (1428 mg/l against norms of 1000 mg/l), Oil &amp; Grease (28.2 mg/l against norm of 10 mg/l) and Chromium (4 mg/l against norm of 2.0 mg/l).</p>	<ul style="list-style-type: none"> <li>CETP was found operational and non-complying during inspection carried out on 06.09.2021.</li> <li>CPCB issued direction dated 23.07.2021 to UPPCB under section 18 (1) (b) of Water Act, 1974 regarding non compliance of CETP Jajmau</li> <li>Letter dated 20.09.2019 issued to UPPCB regarding non-compliance of CETP.</li> <li>Direction dated 13.05.2019 issued to UPPCB under Section 18 (1) (b) of Water Act, 1974.</li> </ul>
CETP, Site-II, Unnao Unnao City, UP	2.15	0.786 to 0.999	Tannery (15)	<p><u>Latest inspection:</u> 07.09.2021</p> <p><u>Compliance status:</u></p> <p>Non-complying w.r.t. FDS (3490 mg/l against norm- 2100 mg/ l) and Chloride (1521 mg/ l against norm- 1000 mg/ l).</p>	<ul style="list-style-type: none"> <li>CETP was found operational and non-complying during inspection carried out on 07.09.2021.</li> <li>Letter was issued on 06.09.2021 to Unnao Tanneries Pollution Control Company (UTPCC) for non-compliance of CETP Unnao.</li> <li>CPCB issued directions dated 10.05.2019 under 18 (1) (b) of Water Act, 1974 based on inspection of CETPs Site-II, Unnao.</li> </ul>
CETP, Banthar Unnao, UP	4.5	0.918 to 1.098	Tannery (27)	<p><u>Latest inspection:</u> 07.09.2021</p> <p><u>Compliance status:</u></p> <p>Non-complying w.r.t. BOD (140 mg/l against 30 mg/l), COD</p>	<ul style="list-style-type: none"> <li>CETP was found operational and non-complying during inspection carried out on 07.09.2021.</li> <li>Show Cause Notice dated 21.10.2021 was</li> </ul>

				(466 mg/l against 250 mg/l), TSS (118 mg/l against norm- 100 mg/l), FDS (11057 mg/l against norm- 2100 mg/l) and Chloride (3911 mg/l against norm- 1000 mg/l).	<p>issued to Banthar Industrial Pollution Control Company (BIPCC) and directed to show cause as to, why environmental compensation should not be levied on the BIPCC for the non-compliance period from 15.03.2021 to 15.06.2021.</p> <ul style="list-style-type: none"> <li>• CPCB issued directions dated 10.05.2019 under 18 (1)(b) of Water Act, 1974 based on inspection of CETPs, Banthar.</li> </ul>
CETP, Rooma Kanpur, UP	1.55	0.498 MLD (August, 2021)	Textile (18)	<p><u>Latest inspection:</u> 02.09.2021</p> <p><u>Compliance status:</u> Non-complying w.r.t. BOD (75.6 mg/l against norm- 30 mg/l) and FDS(3689 mg/l against norm-2100 mg/l).</p>	<ul style="list-style-type: none"> <li>• CETP was found operational and non-complying during inspection carried out on 02.09.2021.</li> <li>• CETP was found operational and non-complying during inspection on 04.03.2021. Show Cause Notice dated 15.06.2021 was issued to CETP under Section 5 of E (P) A, 1986 regarding non-compliance of CETP Rooma.</li> <li>• Show Cause Notice dated 15.07.2019 was issued to CETP under Section 5 of E(P)A, 1986.</li> <li>• Closure directions dated 12.06.2018 issued to all member units for continuous non-complying of CETP.</li> <li>• Member units are permitted to operate on 50% of operational capacity.</li> </ul>
CETP, Pilakhuwal Hapur, UP	2.1	500-800 KLD	Textile (11)	<p><u>Latest inspection:</u> 12.10.2021</p> <p><u>Compliance status:</u> Non-complying w.r.t. BOD (53 mg/l against 30 mg/l) and FDS (297 mg/l against 2100 mg/l)</p>	<ul style="list-style-type: none"> <li>• CETP was found operational and non-complying during inspection carried out on 12.10.2021.</li> <li>• CETP was found complying w.r.t. treated effluent discharge norms on 13.07.2021. Revocation of closure direction dated 11.05.2021 is proposed. As proposed by NMCG, re-inspection of CETP Pilakhuwa to verify compliance status of CPCB directions dated 11.05.2021 was carried out by officials of CPCB,</li> </ul>

					<p>NMCG and UPPCB on 12.10.2021.</p> <ul style="list-style-type: none"> <li>• CETP was found operational and non-complying during inspection on 22.03.2021. Direction dated 11.05.2021 issued under Section 5 of E(P) A, 1986 regarding non-compliance w.r.t. treated effluent discharge standards. UPPCB issued letter dated 12.07.2021 to HPDA to comply with CPCB directions dated 11.05.2021.</li> <li>• Letter dated 21.02.2020 issued to HPDA, Hapur to explain the reason for high TDS at outlet.</li> <li>• Show Cause Notice dated 24.09.2019 issued under Section 5 of E(P)A, 1986.</li> </ul>
<p>CETP SIDCUL, Haridwar, UK</p>	4.5	4.8-5.0	<p>Mixed type industries (516)</p>	<p><u>Latest inspection:</u> 29.09.2021</p> <p><u>Compliance status:</u> Non-complying w.r.t. BOD (31 mg/l against norm-30 mg/l).</p>	<ul style="list-style-type: none"> <li>• CETP was found operational and non-complying during inspection carried out on 29.09.2021.</li> <li>• CETP was found operational and non-complying during inspection on 17.03.2021, Letter dated 31.08.2021 issued to SIDCUL Haridwar.</li> <li>• A meeting was held on 16.01.2019 under NGT directions dated 29.11.2018 regarding installation of bio-digester and ZLD system for CETP.</li> <li>• Show Cause Notice dated 11.05.2018 issued to SIDCUL.</li> </ul>
<p>CETP, Pantnagar (SIDCUL)  US Nagar, UK</p>	4.0	2.3	<p>Mixed type industries (309)</p>	<p><u>Latest inspection:</u> 22.09.2021</p> <p><u>Compliance status:</u> Non-complying w.r.t. Fluoride (2.1 mg/l against 2.0 mg/l) and Boron (15.48 mg/l against 2.0 mg/l)</p>	<ul style="list-style-type: none"> <li>• CETP was found operational and non-complying during inspection carried out on 22.09.2021.</li> <li>• CETP was found inspection on 19.08.2021. Letter dated 01.11.2021 issued to CETP Operator (M/s Ramky Infrastructures Pvt. Ltd.).</li> <li>• Direction dated 16/20.09.2019 issued under 18(1)(b) for OCEMS connectivity and flow meters operationalization.</li> </ul>



CETP, Sitarganj  US Nagar, UK	4.0	1.3-1. 9	Mixed type industries (Agro based and Engineering) (67)	<u>Latest inspection:</u> 23.09.2021  <u>Compliance status:</u>  Non-complying w.r.t. TDS (2456 mg/l against norm- 2100 mg/l), Fluoride (11.83 mg/l against 2.0 mg/l), Cyanide (0.42 mg/l against 0.2 mg/l) and Boron (8.34 mg/l against 2.0 mg/l).	<ul style="list-style-type: none"> <li>• CETP was found operational and non-complying during inspection carried out on 23.09.2021.</li> <li>• CETP was found operational and non-complying during inspection on 22.03.2021. Letter dated 18.08.2021 issued to Jindal ES1PL.</li> <li>• Show Cause direction dated 03.07.2019 under Section 5 of E(P) A, 1986 issued by CPCB, reply from the unit received on 19.07.2019 &amp; 20.09.2019.</li> <li>• Matter is prejudice and NGT is monitoring the case of CETP non-compliance. NGT imposed an EC of Rs. 5,70,000 on the operating agency which was deposited by the unit.</li> <li>• NGT imposed another EC for Rs. 1.00 Crore vide order dated 07.09.2019 in the matter of OA No. 200/2014.</li> </ul>

**13. Authorities at State and District Level:** The River Ganga (Rejuvenation, Protection and Management) Authorities order under Environment (Protection) Act, 1986 by the Government of India dated 7<sup>th</sup> October, 2016, creates mechanism at the State and District Level (State Ganga Committees and District Ganga Committees) for addressing the challenge of pollution abatement and rejuvenation of river Ganga. The SGCs have been formed in all five Ganga States and DGCs have been constituted for all the 52 Ganga main stem districts and 7 on tributaries. In total 59 DGCs have been notified.

A symbiotic and close functional relationship is now evolving, one - between NMCG and SGCs, two- between NMCG and DGCs directly and three - between SGCs and DGCs leading to joint partnership and ownership in Ganga rejuvenation efforts. Regular meetings of SGCs and DGCs are taking place under the chairmanship of respective Chief Secretaries and the DMs on matters relating to various aspects of Ganga rejuvenation. NMCG is closely associating the DGCs in river rejuvenation activities directly addressing bottlenecks on the ground and playing a greater coordination role with

Central Government departments as well as with State level agencies to resolve the issues.

The DGCs have also been directly provided with funds by NMCG to begin their activities and set up requisite secretariat for Ganga Rejuvenation and DGCs. The NMCG is also holding regular dialogues with the concerned line departments of the respective States to resolve the inter-department issues and to speed up clearances and grounding of projects. The line departments of the State Governments have also been asked to involve various agencies of the States in Ganga rejuvenation efforts to make the programme more organic and comprehensive.

NMCG has also held a number of Virtual Conferences directly with DGCs across states to sensitize them on the Ganga restoration initiatives, appraising their work on river rejuvenation efforts and guiding them further for bringing the river Ganga as the key focus of their planning and development in the districts.

NMCG is working continuously to develop an organic and three tiered relationship between the State and District level authorities to converge all efforts and resources specially in Ganga towns and villages to not only restore the health of the river but also to bring about Ganga centric development in the areas abutting the river for a symbiotic relation between the river ecology and sustainable growth in livelihood opportunities. States have also been requested to suitably strengthen the institution of DGC, so that it can start performing various tasks assigned to it in the Authority Notification.

As of now, the following District Ganga Committees (DGCs) have been constituted, on main stem of river Ganga and on tributaries of River Ganga:

Table- 8: District Ganga Committees in States

States	Number of Districts	
	Main Stem of River Ganga	Tributaries
Uttarakhand	7	6
Uttar Pradesh	25	23
Bihar	12	26
Jharkhand	1	3
West Bengal	7	2
Total	52	60
Grand Total	112	

*Moving ahead with rejuvenation of tributaries of Ganga, DGCs are being constituted for districts on major tributaries and the State and respective District authorities have been asked to nominate members for the DGCs.*

14. That vide order dated 17.06.2021 passed by the Hon'ble NGT in another matter of O. A. No. 128 of 2021 — Saurabh Tiwari Vs. Union of India & Ors. related amongst others to pollution caused into the rivers Ganga, Varuna and Assi at Varanasi due to discharge of untreated sewage and unauthorized construction in river bed/floodplain of these rivers, the Hon'ble NGT directed for constitution of a Monitoring Committee comprising of members from NMCG, CPCB, UPPCB and Varanasi District administration for monitoring action for remedial measures for rejuvenation of rivers Ganga, Varuna, and Assi in Varanasi. UPPCB is nodal agency for this Committee. Further, based on the report of the Committee, NMCG has been directed to submit action taken report in the matter before 04.08.2021 inter alia giving information on (a) status of water quality of Varuna & Assi; (b) action taken on diversion and treatment of sewage; (c) water quality of u/s and d/s of confluence of Assi and Varuna to Ganga, and (d) demarcation of flood plain zones of Assi, Varuna and Ganga at Varanasi.

*It is submitted for consideration of this Hon'ble Tribunal that in furtherance of compliance of above said order, the Monitoring Committee has been constituted and the Committee held its first meeting on 03.07.2021. The copy of minutes of the Monitoring Committee held on 03.07.2021 is annexed as Annexure — VIII. Further follow up including site visits and field assessment has also been carried out.*

*That in the above said meeting it was decided amongst others that NMCG may engage experts from the Center for Environmental Management of Degraded Ecosystems (CEMDE) for guidance and preparing Action Plans for revival of river ecosystem activity and experts from Deptt. of Civil Engineering, IIT-Roorkee may be engaged for review of existing sewage master plan and to suggest further action points on Sewage Management, industrial Waste Management, Solid Waste & Flood Plain Zone Management, Ground Water Management, E-monitoring & Evaluation. Accordingly, NMCG vide letters dated 20.07.2021 requested Prof. C. R. Babu, CEMDE and Prof. A. A. Kazmi, IIT-Roorkee for preparation of Action Plan and to start field works in Varanasi in consultation with the Monitoring Committee. The Copies of aforesaid letters are annexed as **Annexure — IX**. Further, the Hon'ble Tribunal is to be apprised that Action Plan has been submitted by UPPCB to NMCG on 16.08.2021 (copy annexed as **Annexure — X**).*

*Following are the significant observations/recommendations in the Action Plan:*

- *The river Varuna traverses the districts of Prayagraj, Bhadohi and Varanasi of Uttar Pradesh. For restoration of the river it is divided into three stretches with specific activities to be undertaken.*
- *Stretch I constitute the origin of the river Varuna which is a highly silted wetland, converted to paddy fields that receives agricultural run-offs. Suitable intervention proposed for it is to acquire cultivated land and convert it back into wetland as well as biodiversity park. Also, desilting may be carried out for restoration.*
- *Stretch II has two tributaries of river Varuna which carry agricultural run-off, excess water from canals and catchments from agricultural fields may carry high levels of nutrients & pesticides. Depending upon the results of assessment of nutrient load & pesticides, these may be remediated by riparian vegetation along the embankments. Besides, Burbuspur drain (Rampur) and Chauri drain (Kom, Bhadahi) were found to discharge sewage into Morwa river. Basuhi carries both sewage and industrial waste water. The sewage of Burbuspur drain and Chauri drain is suggested to be treated by Constructed Wetland System (CWS) at the mouth of the drains.*
- *Dhoraira drain, Basti Bazar drain and Durga drain discharges into the river Varuna. Basti Bazar drain carries sewage and industrial effluents from carpet industries. Durga drain carries sewage and industrial effluents from Lohta of Varanasi. In-situ bioremediation through CWS is suggested for treatment of these drains.*
- *Stretch III is the most polluted stretch that carries that carries untapped and tapped drains. Untapped drains is to be tapped via interception/diversion to the related STPs. If overflow exists even after interception/ diversion that could be tapped into Constructed Wetlands System for in-situ remediation.*
- *The floodplains on either side of Ganga, particularly the side where Varuna joins Ganga (Adikeshwar Ghat) and the area between ghat and bridge in d/s of Ganga, is suggested to be developed into floodplain Biodiversity Park.*
- *River Assi originates from Kardmeshwar Kund — Khandwa Pokhiri, Varanasi. Continued illegal constructions along the river course and encroachment of the river bed/flood plain, obstructed the flow of the river especially from Kardmeshwar kund to pond near Kadmeshwar Inter College. This blockage of the river path led to back flow of wastewater into the Kardmeshwar kund that caused pollution of the kund. The outlet of the Kardmeshwar kund is sealed that changed the origin of River Assi, thus, effecting flow and pollution status of the river. River Assi is polluted and encroached all along its course starting from origin till it joins River Ganga.*
- *For rejuvenation of the River Assi it is divided into two stretches out of which Stretch I is relatively clean and do*

*not require any major intervention. Pollution is not the pressing issue in this stretch but it is the restoration of the origin, identification of the lost path of the river Assi and allowing freshwater from the Kardmeshwar kund into the channel. The presumed path is heavily encroached therefore it is required that the encroachment may be removed and channel is restored by excavation / desilting.*

- *In Stretch II, Drains mainly, DLW-1 and DLW-2 coming from DLW area and discharges sewage load from Indira Nagar Colony, Newada area, into Assi.*
- *The present confluence points of River Assi, behind Ravidas Ghat Park is situated 770 meters u/s of original confluence point at Assi Ghat. A bandh is constructed on the River Assi just before the old confluence with River Ganga near the Assi Ghat. The old channel of River Assi carries household sewage from the point of bandh onwards and is encroached at diversion point.*
- *It is recommended that the first step, towards the rejuvenation of this stretch of Assi river, should be removal of the encroachments (wherever required and possible) through coordinated action by State and district administrations.*
- *The Khandwa Pokhri near Kardmeshwar Mahadev Inter College, Kandwa, from which it originates is a wetland and it could be restored by desilting it upto its bed level and the desilted material will be used for making embankments. The embankments should be vegetated. The sewage that enters into this pond should be channelized and treated by CWS that will be setup at the mouth of channel that discharge sewage into wetland. A series of CWS (minimum 5 units) is suggested to be setup at stretches where width of Assi river is maximum. Also, CWS is suggested at the mouth of DLW-2 drain (an open storm drain) where this drain empties into River Assi. The BOD level of the drain is 16.1 mg/L that could be easily taken care by CWS and can help reduce it further.*
- *A floodplain Biodiversity Park may be developed concurrently in d/s upto 5 km of the area where once River Assi used to confluence with River Ganga around Assi ghat. Once this biodiversity park is constructed having functional CWS, the channel of River Assi can be restored back by passing the river water through treatment wetlands of Biodiversity Park before it is discharged into Ganga.*

**Views of NMCG:**

*The views of NMCG on Action Plan that emerged during discussions with Prof. C. R. Babu and Prof. A. A. Kazmi are as below:*

- *Water quality of u/s and d/s of confluence of Assi and Varuna to Ganga as per reported monitoring data for the*

period January to July 2021 is tabulated below in Table - 9.

**Table - 9: Water quality of u/s and d/s of confluence of Assi and Varuna**

Stretch	DO (mg/L)	BOD (mg/L)	Faecal Coliform (MPN/100ml)
U/s Varanasi (Assi Ghat)	8,8	2.3	800
Varanasi D/s (Malviya Bridge)	7.9	3.8	11,000

- *Regarding sewerage management in sewerage district 3, the current estimation of Assi flow appears to consider monsoon runoffs, hence, there is a need for assessment of dry weather flow of Assi river post monsoon, sometime in October- November'2021 through scientific measurements using V-notch etc.*
- *Non-revenue water need to be checked and controlled. There has been significantly higher per capita water supply/ uses compared to CPHEEO guidelines and the non-revenue water is around 40-50% as against the norm of less than 15%. It is worth mentioning that JICA in its sewerage master plan estimated the need for 37 MLD STP at Ramana for year 2015 and 75 MLD for year 2030 (with de-commissioning of Bhagwanpur STP) which was reviewed in 2014-15 by RCA and revised the proposed 75 MLD SW capacity at Ramana to 50 MLD with continuation of 9.8 MLD SW at Bhagwanpur. Recently, a visit was undertaken in Varanasi by a senior official of NMCG to look into the aforementioned issue of excess flow into the Ramana STP. Various interventions have been suggested to control excess flow in this SIT. These interventions are being studied so that further cation plan can be finalized.*
- *There has been storm water drain, with smaller drains and sewerage connections, constructed under JNNURM programme connecting part of sewerage district 2 to sewerage district 3 leading to river Assi. These drains should be only be used as storm water drain only. Thus controlling waste water from other sewerage districts reaching Assi has also to remain under focus.*
- *Biodiversity park near Assi Ghat with sewage feed on the flood plains may not be desirable considering it to be right at the upstream of all major ghats of Varanasi.*
- *12 MLD DLW STP is treating around 5-6 MLD and the treated water is discharged to the DLW-1 drain leading to river Assi which not only is required to be treated again at Ramana STP but also increases the hydraulic load. The feasibility of optimum utilization of DLW SIT i.e. 12 MLD and laying a separate pipeline for discharging the treated water to river Ganga/ Varuna without its*

*mixing with flows of Assi through DLW-I drain (leading to double treatment of treated water) has to be explored and ensured by UPJN. This alone may reduce the flows at Ramana STP by about 10-12 MLD. An interceptor sewer network has been laid all along Assi and the feasibility of connecting all inlets/ outfalls, currently into the Assi river, to this interceptor sewer may need to be examined. This will ensure that sewage from contributing catchment is trapped and conveyed to downstream instead of sewage diluted with raw ground water allowed to flow into Assi. Thereafter, the collected sewage from interceptor can be conveyed to OTS or RTS through a link conveyance to be treated at existing 140 MLD STP at Dinapur where spare capacity is available. This can be explored provided discharging capacity is available in OTS/ RTS and space for laying of link conveyance and a pumping station, if required, is available. Actions in this respect have to be ensured by UPN.*

- *Recommendations for an additional STP of requisite capacity can always be considered as part of long term futuristic planning based on merits but since the entire process is time consuming starting from conceptualizing the project, its sanction, procurement and implementation, the priority has to ensure using the spare capacity available in existing STPs located in other sewerage zones by providing inter-sewerage zonal linkages, which can be implemented in comparatively shorter time span.*
- *Short term measures indicated by the experts pertaining to restoration of the wetlands and development of the constructed wetlands for river Varuna and Assi appears to be in order and can be accepted for further actions i.e. detailed feasibility / project report and implementation. Regarding sewage management, re-assessment of the dry weather flow post monsoon is necessary before any investment decision is taken. The engineered transfer of water may be reviewed internally after examination of MCA sewerage plans as well as follow-up meetings with relevant stakeholders i.e. UPPCB, CPCB, UPJN, department of Irrigation, NMCG, UPSMCG etc. before arriving at final recommendations. It is submitted for consideration of this Hon'ble Tribunal that as far as the short-term measures such as constructed wetlands system, ecological restoration, Biodiversity parks and bio-remediation/phyto-remediation etc. are concerned, NMCG is in agreement with the recommendations and these measures may be taken up by the State agencies as it would also add not only to aesthetic beauty of the riverscape in Varanasi but will also contribute towards pollution abatement and river rejuvenation. The Dept. of Irrigation, Govt. of U.P. is being consulted for their input in this regards as they are the custodian of the land along the rivers that will be used for initiating these short-term measures. As regards long term measures in the form of setting up additional STPs, laying of interceptor and diversion lines, NMCG is in discussion*

*with all stakeholders and requests this Hon'ble Tribunal to grant two months' time to come up with firm recommendation/suggestions in this regard.”*

18. Report of the Oversight Committee dated 12.11.2021 in continuation of report dated 29.07.2021 gives the compliance status as follows:-

“

**V. LATEST COMPLIANCE STATUS IN O.A 200/2014**

*The Tribunal had directed Oversight Committee to monitor the compliance of directions passed. In view of the same, the latest compliance status as per the reports received from the concerned departments is as follows:*

**1. Compliance report received from Uttar Pradesh Jal Nigam (Annexure 1)**

**a) Status of tapping of drains**

*The report details out the status of Tapping of 86 Drains in Phase-I, Segment-B (Bijnor to Kanpur) and 215 Drains Phase-II (Kanpur to U.P. Border) as on 22.01.2021.*

**It has been stated that in Phase I, (Details in Annexure 1a)**

- *09 drains do not require tapping*
- *34 drains are tapped*
- *05 are partially tapped*
- *38 drains are untapped (24-to be tapped in project under construction, 10-to be tapped in sanctioned projects, 04-to be tapped in projects which are submitted for approval)*
- *The timeline for 24 untapped drains which are under construction is as follows:*

*01- Drain by Aug- 21*

*13- Drains by Sep-21*

*5- Drains by Oct-21*

*05 Drains in 24 months after availability of land for Moradabad STP. Matter is currently sub-judice at Hon'ble High Court*

**The status of Phase II (details in Annexure 1b) is as follows:**

- *14 drains do not require tapping*



- 104 drains are tapped
- 01 are partially tapped
- 96 drains are untapped (23-to be tapped in project under construction, 35-to be tapped in sanctioned projects, 38-to be tapped in projects which are submitted for approval)
- The timeline for 23 untapped drains which are under construction is as follows:
  - 11 Drains by Sep-21
  - 06 Drains by Dec-21
  - 06 Drains of Trans Varuna region are being taken up by Irrigation Deptt.

#### **b) Status of Sewage Treatment Plants**

The State has 106 existing STPs out of which O & M of 67 STPs are being taken up by Uttar Pradesh Jal Nigam. The status of 67 STPs is as follows:-

##### **Operational - 66 STPs.**

##### **Not-operational - 01 STPs (at Banda, 4 MLD)**

LOA for rehab works at Banda STP was issued to M/s Verdhmanh Engineering Works Pvt., Delhi Ltd. on 25.11.2020, but work could not be started before as permission from Railway Deptt. was required for laying the rising main pipeline beneath the railway line. The permission has been given on 24.06.2021 and presently, the rehab work is in progress. The STP will be made operational by August, 2021.

##### **Out of 66 operational STPs, 60 STPs are compliant and 06 STPs are non-compliant. Details of these 06 non-compliant STPs are as follows: -**

- 03 STPs at Mathura (Masani 13.59 MLD, Trans-yamuna 16 MLD and Trans-yamuna-2 14.5 MLD) are undergoing rehabilitation under the Namami Gange Programme in Hybrid Annuity Model (HAM) and are likely to be completed by Oct-2021. In addition to this, the above STPs are non-compliant due to ingress of untreated industrial effluent into the domestic sewage. As a result, the treated effluent parameters are higher than the prescribed standards. In this regard, the Managing Director, UPJN has requested Member Secretary, UPPCB, Lucknow for taking adequate measures to stop the ingress of untreated industrial effluent into the domestic sewage vide his letter dated 03.06.2021.
- 02 STPs at Kanpur (Jajmau 130 MLD and Bingawan 210 MLD) are non-compliant. Rehab of 130 MLD STP is under progress as on HAM Project under the Namami Gange Programme and is likely to be completed by Oct-21. The COD of sewage reaching

*the 210 MLD STP at Bingawan is higher than the design parameters.*

- *01 STP at Sultanpur (Lolepur 05 MLD) is non-compliant as capacity upgradation is being done under the Namami Gange Programme which is proposed to be completed by Dec-21.*
- c) **Status of Fecal Sludge and Sewage Treatment Plants under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) programme** :Detailed Status of FSSTP under AMRUT programme is annexed herewith (Annexure-1c ). Work is in progress in 56 towns while it is complete in Unnao.
- d) **Status of CETP Jajmau:** O&M of the 36 MLD CETP at Jajmau is being done by U. P. Jal Nigam. At present, the CETP is compliant.

## **2. Compliance report received from Uttar Pradesh Pollution Control Board (Annexure 2)**

### **a) Status of Chromium dump, Kanpur Dehat**

- *The dump is still lying and so far no progress has been made in clearing off the site.*
- *Tenders were floated thrice by UPSIDA for shifting of hazardous waste to the nearby TSDF but only one bid was received which was rejected on the ground of being monopolistic and prohibitive. To resolve the issue scientifically, under instructions from the Government, IIT Kanpur has been selected for the Project Management Consultancy (PMC). An MOU has been signed on 2.02.2021 with the following scope of work:*
  - *Suitable technology to be adopted for remediation of hazardous chromium waste*
  - *Estimation of project cost as per chosen technology*
  - *Preparation of RFP/Bidding documents as per estimate*
  - *Handholding in bidding process*
  - *Third party quality and quantity checking during execution of work*
  - *Any ancillary work required for the successful completion of the project*
- *IIT Kanpur has visited the site & collected the samples. As far as suitable technology is concerned, they have submitted a preliminary report. IIT-Kanpur suggested that out of 5 reductants tested for stabilisation only Iron Sulphate (FeSO<sub>4</sub>) has passed acceptable TCLP limit test and is also cost effective. Further, as per the report of the IIT-Kanpur, the actual volume of Chromium waste lying at the site is much higher (1,22,800 m<sup>3</sup>) in comparison to the volume reported in the earlier DPR of*

the CPCB (37,712 m<sup>3</sup>). In this regard, the Secretary, Environment has ordered to finalize the correct quantity of chromium dump after joint discussion between the CPCB and IIT Kanpur, to fix the final cost accordingly, and to seek prior approval of the budget from the competent authority.

- *Vide meeting dated 15.7.21 held by the Oversight Committee it was informed by the UPSIDA that adequate land area has been identified near the legacy dump for landfill site construction as the chromium waste has to be treated in the vicinity of the dump and a proposal has been sent to the DM, Kanpur Dehat for its resumption and allocation to the project free of cost. Accordingly, with regard to the resumption of land for creation of landfill site vide meeting dated 9.11.2021, DM, Kanpur Dehat informed that they received the first letter from UPSIDA on 20/10/2021 requesting for the resumption of 15 acres of land for the creation of landfill site. He further informed that the land, which is to be resumed for landfill site, was in the jurisdiction of Gaon Sabha. Recently, it has been notified as Nagar Panchayat area. However, the new local body is yet to be constituted. The Secretary, Urban Development clarified that The Collector has all the powers for land resumption whether the land is in the rural area or the urban area. The Committee directed the DM, Kanpur Dehat to clarify all his doubts in this regard with Secretary, Urban Development and by consulting the relevant Revenue Rules and ensure that a decision is taken within 3 weeks.*
- *As per the report of the IIT-Kanpur, the actual volume of Chromium waste lying at the site is much higher (1,22,800 m<sup>3</sup>) in comparison to the volume reported in the earlier DPR of the CPCB (37,712 m<sup>3</sup>). Vide meeting dated 9.11.2021 in O.A 985/2019 & 986/2019 the Committee directed the CPCB and the IIT Kanpur to carry out a joint inspection to ascertain the correct quantity of Chromium Dump as it has a direct bearing on the final cost of the project. But the report submitted to the UP Government is prepared by the IIT Kanpur with input from the CPCB. The Secretary, Department of Infrastructure and Industrial Development expressed difficulty in accepting this report and granting necessary approvals although a date for this meeting has been fixed. She also informed that the Department has already released Rs. 23 Cr in the ESCROW account of the DM, Kanpur Dehat. But this fund is not being utilized because of the above mentioned dispute in the estimation of volume. The Oversight Committee directed the CPCB and IIT Kanpur to complete the joint inspection report by 20/11/2021. The Committee also directed the Secretary, Infrastructure & Industrial Development Department, UP to ensure that the competent authority takes decision on this by 27/11/2021.*
- *Earlier the UPPCB had imposed the environmental compensation of Rs. 280.01 Cr on 6 defaulting industries. Now, 05 other defaulting units engaged in production of basic chrome sulphate, which were responsible for the illegal dumping of chrome waste*

on said site, has been identified by the UPPCB and show cause notices have been issued against them for the imposition of environmental compensation. After getting response from these 05 units and following due process of law, appropriate orders will be passed by the UPPCB. It was clarified by the UPPCB in the meeting that total EC will remain the same only their distribution amongst the parties will change.

**b) Environmental compensation on drains and STPs (details in Annexure 2a)**

- EC of Rs. 102 crore imposed for the period 1.07.2020 to 31.12.2020 on untapped drains @ 10 lakh per month
- EC of Rs.48 crore imposed for the period 1.11.2019 to 30.6.2020 on untapped drains @ 5 lakh per month
- EC of Rs.26.4 crore imposed for the period 1.07.2020 to 31.12.2020 on incomplete STP projects (44 no.)
- Notice sent to the Chief Secretary, UP on 3.2.2021 by the CPCB for ensuring deposition of above stated amount of environmental compensation.

**c) Status of Common Effluent Treatment Plants (CETPs) (details in Annexure 2b)**

- There are total 7 CETPs, out of which 5 are operational.
- Out of the operational CETPs, 3 are achieving norms while two are not.

**d) Status of STPs (Details in Annexure 2c) :** As far as Liquid Waste is concerned, the total Sewage generation in the State is 5500 MLD (80% water used) in 651 ULBs. Presently, there are 106 STPs with total installed capacity of 3276.07, out of which 101 STPs are operational and 05 are non-operational. The capacity utilization is 2728.44 MLD which is 83% of the installed capacity. In addition to the above, 37 STPs having total capacity of 887.06 MLD are under construction and 25 STPs having total capacity of 564.10 MLD are under tendering process. Upon completion of these STPs, the total sewage treatment capacity shall become 4727.23 MLD. Still a gap of 772.77 MLD would remain.

- Operational STP-101
- STP achieving norms-82
- STP not achieving norms-19
- STP not in operation-5
- STP under construction-62

**e) Status of the 20 MLD CETP Jajmau, 15 MLD STP Unnao and 5 MLD STP Unnao:**

### **20 MLD CETP Jajmau**

- *In regard to the progress in construction of the CETP in Jajmau, Kanpur, vide meeting dated 15.7.2021 held by the Oversight Committee, the UP Jal Nigam informed that a total progress of 30.11% has been achieved including the civil construction progress of 11.38% at site. Owing to the ongoing covid situations, the extension of time has been suggested by the Project Engineer and the contractor has been instructed to complete the project before 02.02.2022.*
- *All the operational Tannery units have installed PETP. At present PETP treated effluent of tanneries goes to the CETP of 36 MLD capacity (9 MLD Tannery Effluent and 27 MLD Domestic Effluent), operated by the UP Jal Nigam. This treated effluent is mixed with treated domestic effluent from the STP installed at Jajmau CETP area and is discharged through irrigation channel.*
- *For the Jajmau Tannery cluster, the NMCG has approved a 20 MLD CETP (dilution based) as per the NGT direction costing Rs. 554 Crore. The proposal was consented by the tannery association and the Government of U.P.*
- *The SPV has committed to contribute Rs. 25 crore and has proposed to bear the estimated cost of Rs. 137 Crore for modified PETP. Rest 392 Crores will be borne by the NMCG.*
- *SPV has allotted the work of construction of the CETP to M/s VA Tech Wa Bag Ltd. after finalizing the tender and proposed time of completion is March 2022.*

### **15 MLD STP Village-Dakari, Pargana-Hadaha, Unnao**

- *The State board has issued the Consent to Establish (CTE) to the U.P. Jal Nigam, Unnao for installation of 15 MLD capacity SBR technology based STP at Village-Dakari, Pargana-Hadaha, Tehsil and District-Unnao under the Namami Gange Programme. Presently, the STP is under construction and completion period of this STP is October, 2021 as per the information provided by the U.P. Jal Nigam, Unnao.*

### **5 MLD STP Village-KatariPeeperkheda, Gangaghat, Shuklaganj Unnao**

- *The State board has issued the Consent to Establish (CTE) to the U.P. Jal Nigam, Unnao for installation of 5 MLD capacity SBR technology based STP at Village-Katari-Peeperkheda, Gangaghat, Shuklaganj, Tehsil and District-Unnao under the Namami Gange Programme. So far, the construction work of the STP has not started due to land dispute. Proposed completion date of this STP was October, 2021.*
- f) Monitoring of water quality:** *The UPPCB is regularly monitoring the water quality of the river Ganga at 32 sampling points. As per the latest available report for the period Jan-May, 2021, water quality at 22 locations is critically polluted.*

Out of the 22 locations, at 8, water quality falls in 'category C' which means that water is suitable for drinking purpose after conventional treatment and disinfection while at 14 locations the water quality falls in 'category D' which suggests that water is not suitable for drinking or bathing purposes but only for propagation of wildlife and fisheries. Detailed monitoring report is attached as **Annexure 10**.

**Closing, till compliance, all establishments near river banks being run without necessary STPs and compliance of environmental norms:** During January 2021 to May 2021, show cause notices have been issued against 169 defaulter industries and closure order against 184 defaulter industries. During February 2021 to June 2021, EC of Rs 4.11 crores has been imposed against the defaulter industries. Out of 106 STPs, 11 STPs were found to be defaulting during the period of January, 2021 to May, 2021. Notices have been issued for compliance and Environmental compensation of Rs 26.25 Lacs has been imposed against the operators of 2 non-compliant STPs.

- h) The CPCB and the SPCBs may periodically undertake biological assessment of Ganga:** Biological assessment of Ganga has not yet started.
- i) Action against slaughter houses discharging waste into rivers:** 35 Slaughtering units are under operation. 25 units discharge their treated effluent as per norms on land. 10 Units discharge their treated effluent as per norms into different drains which ultimately meet either river Yamuna or Ganga through their tributaries.

### **3. Compliance report from the Dept. of Urban Development (Annexure 3)**

#### **a) Status of solid and other waste in and around Ganga**

- With regard to Ganga towns, 21 urban local bodies (ULBs) have been declared and certified as Open Defecation Free(ODF) towns. 12 ULBs have got ODF+ status and 5 as ODF++.
- There are 697 wards in 21 ULBs with facility of door to door collection of waste.
- Total waste generation in 21 towns is 3275 TPD out of which the total capacity of mechanized processing is 2650 TPD i.e 81 %, established in 4 major towns i.e. Kanpur, Varanasi, Prayagraj and Kannauj.
- Two plants of 140 TPD (Mirzapur-100TPD; Ballia-40TPD) were under arbitration which have been awarded in the favour of the Department of Urban Development. To make these plants functional, the re-construction work is under progress. It is expected to make these plants functional by March 2022.

- In addition, three windrows based mechanised plants (Farrukhabad/ Ghazipur/ Gangaghat – total 220 TPD) have been sanctioned and expected to be completed by March 2022. This will enable mechanized processing plant capacity to be around 3010 TPD i.e. 92 % against the total requirement of 3275 TPD.
- De-centralized scientific treatment of waste to be done.
- Material Recovery Facility (MRF) sanctioned in every ULB and construction work is under progress.
- 46 open dumps removed.
- In Swachh Sarvekshan 2020, the 3 Best Ganga Towns in different population range are from U.P i.e Varanasi, Kannauj and Bithoor
- Strict enforcement for plastic ban in the State. 126 tonnes of banned plastic seized in the ULBs along river Ganga and penalty of Rs.1.27 crore imposed. b) **Status of legacy waste around Ganga:** No legacy waste within 1 km from the banks of river Ganga. However, for accumulated legacy waste in Prayagraj and Kanpur, the bio remediation of the legacy waste is under progress. Disposal of all legacy waste in the State is proposed to be done by December, 2022. The updated status with regard to legacy waste in 17 Nagar Nigam is attached as Annexure 7. Legacy waste has been cleared off in Varanasi, Saharanpur and Gorakhpur.

**4. Compliance report from the Dept. Of Irrigation, Uttar Pradesh** (Details in Annexure 4, Annexure 5)

**a) Demarcation of floodplain zone:**

- Notification for identification of flood plain zone in Segment B Phase-1 from Bijnore to Kanpur issued on 04.09.2020 and permanent construction activities within 100 meter on both banks of river Ganga has been banned.
- 5491 No. of pillars have been constructed and fixed as flood plain zone boundary pillars.
- For Phase-II, identification of flood plain zone by the Central Water Commission is under process.
- The ecological flow as per notification dated 02.07.2021 in River Ganga from Bhimgoda Barrage (Haridwar), Bijnore Barrage and Narora Barrage is being complied.

**5. Compliance report from the State Ground Water Board, Uttar Pradesh (Annexure 9)**

**a) Steps for conservation of groundwater particularly with reference to critical, semi-critical or over-exploited areas**

- THE UTTAR PRADESH GROUND WATER (MANAGEMENT AND REGULATION) ACT, 2019 (U.P. Act No-13 Of 2019) Dated- 07, August 2019 and WATER (MANAGEMENT AND REGULATION)

*RULES, 2020 vide notification No.-158/76-3-2020-10GW-2014, dated 25-02-2020 for protecting, conserving, controlling and regulating ground water notified.*

- *GoI's –Jal Shakti Abhiyan" being implemented aiming at comprehensive, water management. in 'Over-exploited' and 'Critical' blocks/ cities.*
  - *GoI's –Jal Shakti Abhiyan-II" being launched on 22 March 2021 aiming at comprehensive, water management in whole country.*
  - *GoI's –Atal Bhujal Yojna" aiming at participatory comprehensive water management in 550 gram panchayats in 26 blocks of 10 districts of U.P. (20 blocks of 6 districts of Bundelkhand and 6 blocks of 4 district of Western U.P.) is implemented.*
  - *Similar to Atal Bhujal Yojna, government of U.P. also launched –Uttar Pradesh Atal Bhujal Yojna" in remaining 65 districts of U.P. aiming participatory comprehensive water management.*
- b) *As per Ground Water Resource Estimation, 2017, out of 820 blocks of Uttar Pradesh:*
- i. *82 blocks have been categorized as 'Over-Exploited' (where ground water extraction is >100%).*
  - ii. *47 as 'Critical' (where ground water extraction is >90 &<100%),*
  - iii. *151 as 'Semi- Critical'(where ground water extraction is >70 &<90%), and*
  - iv. *540 as 'Safe' (where ground water extraction is <70%).*
  - v. *Out of 10 Urban Agglomerates, 9 have been categorized as 'Over-exploited' and 1 as 'Critical'.*
- c) *The –Rajya Bhoojal Sanrakshan Mission" started from year 2017-18 to ensure convergence of the works of different departments in problematic areas so as to get significant effect on Ground water. In this Mission, all Over Exploited, Critical, Semi-Critical blocks and rest blocks of Bundelkhand and Vindhya regions (Total 272 blocks) are covered under this Mission, progress of some major works are given below (up to March, 2021)-*

<i>Check Dam</i>	<i>4742</i>	<i>2716</i>
<i>Pond Rejuvenation / Construction</i>	<i>91749</i>	<i>36191</i>
<i>Farm Pond</i>	<i>187065</i>	<i>171521</i>
<i>Distribution of Drip/ Sprinkler System</i>	<i>270684</i>	<i>63131</i>

- d) *The minor irrigation Department has constructed 5957 Check Dams and 789 ponds and target for the current*



year 2020-21 is construction of 183 Check Dams and 182 ponds.

#### **6. Restoration of water bodies**

- a) 07 Wetlands notified as Ramsar sites
- b) The Environment, Forest and Climate Change Department Government of Uttar Pradesh has identified 226 potential wetlands existing within 10 kms of the Ganga river and has prepared a project for Conserving and Sustainably Managing these Gangetic Floodplain Wetlands in the State, which has been sanctioned by NMCG on 16.10.2019.
- c) Uttar Pradesh State Wetland Authority will start the work as soon as fund will release.

#### **7. Afforestation and setting up of biodiversity parks**

- a) Status of Afforestation- Across the State- 22.59 Crore in 2019-20 and 25.87 Crore in 2020-21. Forest Survey of India, Dehradun has been assigned the task of monitoring of the survival of the seedlings planted in the year 2019.
- b) The Environment, Forest and Climate Change Department of Uttar Pradesh has identified the sites for development of Bio-diversity Park in 25 districts in the main stem Ganga and in 02 districts in Yamuna covering a total area of 3591.984 ha. The project proposals are being revised as per guideline of CPCB and will be implemented if NMCG approves the projects along with its funding.

### **VI. SUMMARY OF THE COMPLIANCE STATUS**

<b>S.No</b>	<b>Directions by Hon'ble NGT</b>	<b>Concerned Department</b>	<b>Compliance Status July, 2021</b>
1.	The State of UP may take steps for Remediating Chromium dump at Rania Kanpur, as Directed earlier vide orders dated 22.08.2019 and 15.11.2019	UPSIDA	<b>Not Complied</b> a) The lifting of Chromium dump has not started yet. Tenders were floated thrice by UPSIDA for shifting of hazardous waste to the nearby TSDF but only one bid was received which was rejected on the ground of being monopolistic and excessive. To resolve the issue scientifically, under instructions from the Government, IIT Kanpur was selected for the Project Management Consultancy (PMC).

			<p>b) <i>As per the preliminary report it will take 12 months for the remediation of chromium waste from the date the work is started but before that some formalities have to be completed. This entire process will consist of digging the chromium legacy waste from dumping site, creation of sanitary landfill in the nearby area, treatment and dumping of waste in landfill site and lastly plantation of saplings on the landfill site. However, the work will start only after the technology, volume and cost are finalized and the work is awarded through a competitive bidding process. He also informed that the PMC has suggested that land availability in the vicinity of the dump for creation of landfill sites is essential and precursor to the process.</i></p> <p><i>Accordingly, with regard to the resumption of land for creation of landfill site vide meeting dated 9.11.2021, DM, Kanpur Dehat informed that they received the first letter from UPSIDA on 20/10/2021 requesting for the resumption of 15 acres of land for the creation of landfill site. He further informed that the land, which is to be resumed for landfill site, was in the jurisdiction of Gaon Sabha. Recently, it has been notified as Nagar Panchayat area.</i></p> <p><i>However, the new local body is yet to be constituted. The Secretary, Urban Development clarified that The Collector has all the powers for land resumption whether the land is in the rural area or the urban area. The Committee directed the DM, Kanpur Dehat to clarify all his doubts in this regard with Secretary, Urban Development and by consulting the relevant Revenue Rules and ensure that a decision is taken within 3 weeks.</i></p> <p>c) <i>Further, as per the report of the IIT-Kanpur, the actual volume of Chromium waste lying at the site is much higher (1,22,800 m<sup>3</sup>) in comparison to the volume reported in the earlier DPR of the CPCB (37,712 m<sup>3</sup>). Moreover, as per the CPCB, the area of dump at the site is 37,000 m<sup>2</sup> while as per IIT Kanpur the area is 50,312 m<sup>2</sup>. A decision has been taken to ascertain</i></p>
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			<p>the correct quantity of Chromium Dump after discussion between the CPCB and IIT-Kanpur as it has a direct bearing on the final cost of the project. Thereafter, the prior budgetary approval will be obtained from the government. Vide meeting dated 9.11.2021, this discrepancy in reports of CPCB and IIT Kanpur was discussed. The Secretary, Infrastructure &amp; Industrial Development Department, UP informed that she has fixed a meeting on 16.11.2021 for taking decision on the report of the IIT Kanpur but it will be difficult to accept this report in the light of earlier report of the CPCB. Both expert agencies should put their heads together and come up with an agreed volume through a joint report, as directed in the last meeting of the Oversight Committee. It was decided that they will complete the joint report by 20.11.2021. The Secretary, Infrastructure &amp; Industrial Development Department, UP will ensure that competent authority takes decision on this by 27.11.2021</p> <p>d) Earlier the UPPCB had imposed the environmental compensation of Rs. 280.01 Cr on 6 defaulting industries. Now, 05 other defaulting units engaged in production of basic chrome sulphate, which were responsible for the illegal dumping of chrome waste on said site, has been identified by the UPPCB and show cause notices have been issued against them for the imposition of environmental compensation. After getting response from these 05 units and following due process of law, appropriate orders will be passed by the UPPCB. It was clarified by the UPPCB in the meeting that total EC will remain the same only their distribution amongst the parties will change.</p>
2.	Vide order dated 22.08.2019 the Tribunal stated that timely completion of all projects Relating to sewage Treatment be ensured i.e. by 31.06.2020 in respect of	U.P. Jal Nigam, Dept. of Urban Development , National Mission for Clean Ganga (NMCG)	<p><b>Partially Complied</b></p> <p><b>Status of Tapping of 86 Drains in Phase-I, Segment-B (Bijnor to Kanpur) and 215 Drains Phase-II (Kanpur to U.P. Border) as on 22.01.2021 is as follows:</b></p> <p><b>Status of Tapping of 86 Drains in Phase-I, Segment-B (Bijnor to Kanpur) and 215</b></p>

<p>ongoing projects and by 31.12.2020 in respect of work not yet started, failing which, compensation has to be paid apart from action against the Erring officers. (After 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further with regard to the sectors where STP and Sewerage Network works have not yet started, the States of UP, Jharkhand, Bihar and West Bengal have to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020)</p>		<p><b>Drains Phase-II (Kanpur to U.P. Border) as on 22.01.2021 is as follows:</b></p> <p><b>A. Status of 86 Drains in Phase-I, Segment-B</b></p> <p><b>(Bijnor to Kanpur)</b></p> <table border="1" data-bbox="812 596 1416 1217"> <tr> <td>Do not require tapping</td> <td>09</td> </tr> <tr> <td>Tapped</td> <td>34</td> </tr> <tr> <td>Partially tapped</td> <td>05</td> </tr> <tr> <td>Untapped</td> <td>38</td> </tr> <tr> <td>(i) To be tapped in project under construction- <b>24</b></td> <td></td> </tr> <tr> <td>(ii) To be tapped in sanctioned project -<b>10</b></td> <td></td> </tr> <tr> <td>(iii) To be tapped in Project submitted for approval- <b>04</b></td> <td></td> </tr> </table> <p><b>The revised timeline for tapping of these 24 drains is as follows:</b></p> <ol style="list-style-type: none"> <li><b>1. 01- Drain by Aug- 21</b></li> <li><b>2. 13- Drains by Sep-21</b></li> <li><b>3. 05- Drains by Oct-21</b></li> <li><b>4. 05 Drains in 24 months after availability of land for Moradabad STP. Matter is currently sub- judice at the Hon'ble High Court.</b></li> </ol> <p><b>B. Status of 215 drains in Phase II</b></p> <table border="1" data-bbox="812 1905 1422 2166"> <tr> <td>Do not require tapping</td> <td>14</td> </tr> <tr> <td>Tapped</td> <td>104</td> </tr> <tr> <td>Partially tapped</td> <td>01</td> </tr> <tr> <td>Untapped</td> <td>96</td> </tr> </table>	Do not require tapping	09	Tapped	34	Partially tapped	05	Untapped	38	(i) To be tapped in project under construction- <b>24</b>		(ii) To be tapped in sanctioned project - <b>10</b>		(iii) To be tapped in Project submitted for approval- <b>04</b>		Do not require tapping	14	Tapped	104	Partially tapped	01	Untapped	96
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			<p>The revised timeline for tapping of these 24 drains is as follows:</p> <p><b>(i) 11 Drains by Sep-21</b></p> <p><b>(ii) 06 Drains by Dec-21</b></p> <p><b>(iii) Tapping of 06 Drains of Trans Varuna region are being taken up by the Irrigation Deptt.</b></p> <p><b>Details of drains in Annexure 1a and 1b.</b></p> <p>Further, as per information from CPCB, EC of Rs. 71.40 crore imposed for the period July, 2020 to 21.12.2020 on untapped drains @ 10 lakh per month. On incomplete STP works (44 in no.), EC of Rs. 26.4 crore is imposed for the period July 2020-Jan 2021. No amount has been paid by the defaulter so far as the EC.</p> <p><b>Details of EC in Annexure 2a.</b></p>											
4.	Preventing discharge of industrial effluents in Ganga and its tributaries/drains by ensuring installation of proper functioning of ETPs/CETPs.	Dept. of Urban Development, U.P. Jal Nigam	<p><b>Partially Complied</b></p> <p>According to UPPCB, there are total 106 STPs</p> <table border="1"> <tr> <td>Operational STP</td> <td>101</td> </tr> <tr> <td>STP achieving norms</td> <td>82</td> </tr> <tr> <td>STP not achieving norms</td> <td>19</td> </tr> <tr> <td>STP not in operation</td> <td>5</td> </tr> <tr> <td>STP under construction</td> <td>62</td> </tr> </table>	Operational STP	101	STP achieving norms	82	STP not achieving norms	19	STP not in operation	5	STP under construction	62	
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			<p><b>Details of STP in Annexure 2c</b></p> <p>The State has 106 existing STPs out of which O &amp; M of 67 STPs are being taken up by UPJN. The status of 67 STPs is as follows:-</p> <p><b>1. Operational – 66 STPs.</b></p> <p><b>2. Not-operational - 01 STPs (at Banda, 4 MLD)</b></p> <p>LOA for rehab works at Banda STP was issued to M/s Verdhmanh Engineering Works Pvt., Delhi Ltd. on 25.11.2020, but work could not be started before as permission from Railway Deptt. was required for laying the rising main pipeline beneath the railway line. The permission has been given on 24.06.2021 and presently, the rehab work is in progress. <b>The STP will be made operational by August, 2021.</b></p> <p>Out of 66 operational STPs, 60 STPs are compliant and 06 STPs are non-compliant. Details of these 06 non-compliant STPs are as follows: -</p> <p>1. 03 STPs at Mathura (Masani 13.59 MLD, Trans Yamuna 16 MLD and Trans-yamuna-2 14.5 MLD) are undergoing rehabilitation under the Namami Gange Programme Hybrid Annuity Model project (HAM) and is proposed to be completed by Oct-2021. In addition to this, the above STPs are non-compliant due to ingress of untreated industrial effluent into the domestic sewage. As a result, the treated effluent parameters are higher than the prescribed standards. In this regard, Managing Director, UPJN has requested Member Secretary, UPPCB,</p> <p>Lucknow for taking adequate measures to stop the ingress of untreated industrial effluent into the domestic sewage vide his letter dated 03.06.2021.</p> <p>2. 02 STPs at Kanpur (Jajmau 130 MLD and Bingawan 210 MLD) are non-compliant. Rehab of 130 MLD STP is under progress in HAM Project under the Namami Gange and is likely to <b>be completed by Oct-21</b>. The COD of sewage reaching the 210 MLD STP at Bingawan is higher than the design parameters.</p>
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			<p>3. 01 STP at Sultanpur (Lolepur 05 MLD) is noncompliant as capacity upgradation is being done under the Namami Gange Programme which is proposed to be completed by Dec-21</p> <p><b>Upgradation of CETPs approved by the NMCG:</b></p> <ul style="list-style-type: none"> <li>• Mathura CETP of 6.5 MLD</li> <li>• Banthar 4.5 MLD</li> <li>• Site 2 of Unnao CETP of capacity 2.15 MLD</li> <li>• Jajmau Kanpur CETP 20 MLD (Mar,2022)</li> </ul> <ul style="list-style-type: none"> <li>➤ Stringent effluent norms notified for industrial activities in critically/severe polluted areas dated 27.02.2020 is being complied for setting up of new industries.</li> <li>➤ The Primary Effluent Treatment Plant outlet and inlet Effluent Quality standard for 3 CETPs of tannery sector have been notified on 2.11.2019 and are being complied.</li> <li>➤ Inlet Effluent Quality Standards for 5 CETPs of textile sectors have been notified on 7.12.2018.</li> <li>➤ Notification has been issued that all new molasses based distilleries including yeast manufacturing units/expansion project in existing molasses based distilleries including yeast manufacturing units shall achieve zero liquid discharge (ZLD by concentrating and incinerating the spent wash in Slope Boiler on 28.01.2020).</li> <li>➤ All GPI units have been directed to install OCEMS along with PTZ Camera with open access to UPPCB</li> <li>➤ UPPCB has also set up a control room at headquarters at Lucknow where ETPs of the GPIs are monitored remotely.</li> <li>➤ As per the latest report 977 GPIs have installed OCEMS and 126 GPIs have installed PTZ web camera also.</li> <li>➤ Regular monitoring of industries along with action against defaulter is being done time to time.</li> </ul> <p><b>Status of CETPs in the State:</b> There are total 7 CETPs</p> <table border="1" data-bbox="829 2145 1357 2346"> <tr> <td>Operational CETP</td> <td>5</td> </tr> <tr> <td>CETP achieving norms</td> <td>3</td> </tr> <tr> <td>CETP not achieving norms</td> <td>2</td> </tr> </table>	Operational CETP	5	CETP achieving norms	3	CETP not achieving norms	2
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			CETP non-operational	2
5.	<p>It was reported that in Jajmau 20 MLD work has started.</p> <p>However, in Banther, STP is at sanctioning stage and at Unnao at project formulation stage.</p> <p>Compensation in this regard to be calculated by CPCB. Details required with reference to the three STPs from UPPCB, U.P Jal Nigam and NMCG</p>	UPPCB/U.P Jal Nigam	<p><b><u>Partially Complied</u></b></p> <p><b><u>20 MLD CETP Jajmau</u></b></p> <ul style="list-style-type: none"> <li>➤ In regard to the progress in construction of the CETP in Jajmau, Kanpur, vide meeting dated 15.7.2021 held by the Oversight Committee, the UP Jal Nigam informed that a total progress of 30.11% has been achieved including the civil construction progress of 11.38% at site. Owing to the ongoing covid situations, the extension of time has been suggested by the Project Engineer and the contractor has been instructed to complete the project before 02.02.2022.</li> <li>➤ All the operational Tannery units have installed PETP. At present PETP treated effluent of tanneries goes to CETP of 36 MLD capacity (9 MLD Tannery Effluent and 27 MLD Domestic Effluent), operated by UP Jal Nigam. This treated effluent is mixed with treated domestic effluent from STP installed at Jajmau CETP area and is discharged through irrigation channel.</li> <li>➤ For Jajmau Tannery cluster, NMCG has approved 20 MLD CETP (dilution based) as per NGT direction worth Rs. 554 Crore. The proposal was consented by the tannery association and the Government of U.P.</li> <li>➤ The SPV has committed to contribute Rs. 25 crore and has proposed to bear the estimated cost of Rs. 137 Crore for modified PETP. Rest 392 Crores will be borne by NMCG.</li> <li>➤ The SPV has committed to contribute Rs. 25 crore and has proposed to bear the estimated cost of Rs. 137 Crore for modified PETP. Rest 392 Crores will be borne by NMCG.</li> </ul> <p><b><u>15 MLD STP Village-Dakari, ParganaHadaha, Unnao</u></b></p> <ul style="list-style-type: none"> <li>➤ The State board has issued Consent to Establish (CTE) to the U.P. Jal Nigam, Unnao for installation of 15MLD capacity SBR technology based STP at Village-Dakari, Pargana-Hadaha, Tehsil and District-Unnao under Namami Gange Programme. Presently, the STP is under construction and is expected to be complete by October, 2021 as per the information provided by the U.P. Jal Nigam, Unnao.</li> </ul>	



			<p><b><u>5 MLD STP Village-KatariPeeperkheda, Gangaghat, Shuklaganj Unnao</u></b></p> <p>➤ The State board has issued Consent to Establish (CTE) to U.P. Jal Nigam, Unnao for installation of 5 MLD capacity SBR technology based STP at Village-KatariPeeperkheda, Gangaghat, Shuklaganj, Tehsil and District-Unnao under the Namami Gange Programme. Presently construction work of STP is not started due to land dispute. Expected to be complete in October, 2021 as per the information provided by the U.P. Jal Nigam, Unnao.</p>
6.	Utilization of treated sewage, use of sludge as a manure and septage management.	U.P Jal Nigam	<p><b>Partially Complied</b></p> <p>A project of Rs. 160 Crores has been sanctioned for covering all the 57 AMRUT towns in State with population more than 1 lakh. Detailed Status of FSSTP under AMRUT programme is annexed herewith (Annexure-1c)</p> <p><b>Work is in progress in 56 towns while it is complete in Unnao.</b></p> <p>➤ The State's policy for use of treated water is being notified</p> <p>➤ Total sewage generation is around 5500 MLD (80 % of water used). The State has 104 STPs with installed capacity of 3200MLD against which the capacity utilization is 2248 MLD (68 %).</p> <p>➤ At present, nearly 410 MLD treated water is being used in agriculture.</p> <p>➤ The State government is planning to get the treated water utilized in thermal power plants.</p> <p>➤ The State has promulgated the Septage policy on 31.10.2019.</p> <p>➤ State Mission for Clean Ganga, UP has informed vide letter dated 7.12.2019 that the State is implementing projects of tertiary treatment and supply of treated water to Indian Oil Corporatin Ltd., Mathura and Panki Power Plant in Kanpur.</p>
7.	Demarcation of flood plain zones and preventing encroachments thereof	Dept. of Irrigation, U.P	<p><b>Partially Complied</b></p> <p>a) Notification for identification of the flood plain zone in Segment B Phase-1 from Bijnore to Kanpur issued on 04.09.2020 and permanent construction activities within 100 meter from both banks of river Ganga has been banned.</p> <p>b) 5491 No. Pillars have been Constructed and fixed as flood plain zone boundary pillars</p>

			<p>c) For Phase-II, identification of flood plain zone by the Central Water Commission is under process.</p> <p>d) The ecological flow as per the notification dated 02.07.2021 in River Ganga from Bhimgoda Barrage (Haridwar), Bijnore Barrage and Narora Barrage is being complied.</p> <p><b>Details in Annexure 4.</b></p>																				
8.	Maintenance of e-flow	Dept. of Irrigation, U.P.	<p><b>Partially Complied</b></p> <table border="1"> <thead> <tr> <th>River</th> <th>Critically Polluted River Stretch</th> <th>Possibility of maintaining E-flow</th> <th>Timeline</th> </tr> </thead> <tbody> <tr> <td>Hindon</td> <td>Saharanpur to Ghaziabad</td> <td>E-flow study being carried out by IIT Roorkee</td> <td>12 Months</td> </tr> <tr> <td>Yamuna</td> <td>Azgarpur to Etawah, Shahpur tp Prayagraj</td> <td>E-flow will be studied and decided by Central Water Commission.</td> <td>12 Months</td> </tr> <tr> <td>Ganga</td> <td>Kannauj to Varanasi</td> <td>E-flow from Kannauj to Unnao is maintained from Narora Barrage and Kanpur Barrage as per directions of Central Water Commission 24 cumec - Nov. to May 48 cumec - June to Oct.</td> <td>-</td> </tr> <tr> <td></td> <td></td> <td>E-flow from Unnao to Varanasi will be studied &amp; decided by Central Water Commission.</td> <td>12 Months</td> </tr> </tbody> </table>	River	Critically Polluted River Stretch	Possibility of maintaining E-flow	Timeline	Hindon	Saharanpur to Ghaziabad	E-flow study being carried out by IIT Roorkee	12 Months	Yamuna	Azgarpur to Etawah, Shahpur tp Prayagraj	E-flow will be studied and decided by Central Water Commission.	12 Months	Ganga	Kannauj to Varanasi	E-flow from Kannauj to Unnao is maintained from Narora Barrage and Kanpur Barrage as per directions of Central Water Commission 24 cumec - Nov. to May 48 cumec - June to Oct.	-			E-flow from Unnao to Varanasi will be studied & decided by Central Water Commission.	12 Months
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			Ramgan ga	Moradaba d to Kannauj	E-flow has been decided and notification issued on 5.2.2021	-
			Betwa	Hamirpur to Wagpura	E-flow study will be carried out by IIT Delhi or other agency	12 Months
			Ghaghra	Barhalgan j to Deoria	E-flow has been decided and notification has been issued on 2.3.2021	-
			Rapti	Domingar h to Rajghat	E-flow has been decided and notification has been issued on 2.3.2021	-
			Saryu	Ayodhya to Elafatganj	E-flow been decided and notification issued on 1.3.2021	-
			<b>Details in Annexure 5.</b>			
9.	Preventing dumping of solid and other waste in and around Ganga	Dept. of Urban Development	<b>Partially Complied</b> a) With regard to Ganga towns, 21 ULBs have been declared ODF. 12 ULBs have got given ODF+ status and 5 ODF++. b) There are 697 wards in 21 ULBs with facility of door to door collection of waste. c) Total waste generation in 21 towns is 3275 TPD. The total capacity of mechanized processing is 2650 TPD i.e 81 %, established in 4 major towns i.e. Kanpur, Varanasi, Prayagraj and Kannauj. d) Two plants of 140 TPD (Mirzapur-100TPD; Ballia-40TPD) were under arbitration which has been awarded in the favour of Department. Further to make these plants functional, the reconstruction work is required for which the work is under progress. It is expected to make these plants functional by March 2022. e) In addition, three windrows based mechanised plants (Farrukhabad/			

			<p>Ghazipur/ Gangaghat – total 220 TPD) have been sanctioned and expected to be complete by March 2022.</p> <p>f) This will enable mechanized processing plant capacity to be around 3010 TPD i.e. 92 % against the total 3275 TPD.</p> <p>g) De-centralized scientific treatment of waste to be done.</p> <p>h) MRF sanctioned in every ULB and construction work is under progress.</p> <p>i) Total 46 numbers of open dumps as reported in Quality Council of India survey report dated 09- 01-2019, have been removed.</p> <p>j) There is no legacy waste site situated within 1 KM from the banks of river Ganga.</p> <p>k) Bio-remediation of legacy waste in Kanpur (15 Lac MT), Prayagraj (5 Lac MT), Ghaziabad (2.5 Lac MT), Bareilly (5 Lac MT), Aligarh (0.6 Lac MT), Moradabad (2.5 Lac MT) is in progress</p>
10.	Clearing old legacy waste dump sites	Dept.of Urban Development , U.P Jal Nigam	<p><b>Complied</b></p> <p>No legacy waste within 1 km from the banks of river Ganga.</p> <p>Out of 17 Nagar Nigams, legacy waste has been cleared off in Gorakhpur, Saharanpur and Varanasi. However, for accumulated legacy waste in other areas including Prayagraj, and Kanpur the bio remediation of the legacy waste is under progress. The updated status of the dump sites is attached herewith as (Annexure7)</p> <p>Disposal of Legacy waste in the State is proposed to be done by December, 2022.</p>
11.	Preventing and regulating illegal sand mining	Mining Department	<p><b>Partially Complied</b></p> <p>Enforcement (Feb,2020-upto Dec,2020)</p> <p>Number of raids = 14335</p> <p>Number of FIR lodged = 532</p> <p>Number of complaint lodged = 1718</p> <p>Compounding amount = 60.73 crore</p> <p>Integrated Mining Surveillance System (IMSS) rolled out in the State. Geo fencing and PTZ cameras installed in mining areas.</p> <p>310 weigh bridges installed in mining areas and integrated with State Command Centre.</p>

12.	Steps for conservation of groundwater particularly with reference to critical, semi-critical or over-exploited areas	District Administration/ CGWA	<p><b>Partially Complied</b></p> <ul style="list-style-type: none"> <li>• THE UTTAR PRADESH GROUND WATER (MANAGEMENT AND REGULATION) ACT, 2019 (U.P. Act No-13 Of 2019) Dated- 07, August 2019 And WATER (MANAGEMENT AND REGULATION) RULES, 2020 vide notification No.-158/76-3-2020- 10GW-2014, dated 25-02-2020 for protecting, conserving, controlling and regulating ground water notified.</li> <li>• GoI's –Jal Shakti Abhiyan   being implemented aiming at comprehensive, water management. in ‘Over-exploited’ and ‘Critical’ blocks/ cities</li> <li>• GoI's –Jal Shakti Abhiyan-III   being launched on 22 March 2021 aiming at comprehensive, water management in whole country</li> <li>• GoI's –Atal Bhujal Yojna   aiming at participatory comprehensive water management in 550 gram panchayats in 26 blocks of 10 districts of U.P. (20 blocks of 6 districts of Bundelkhand and 6 blocks of 4 district of Western U.P.) is implemented. Similar to Atal Bhujal Yojna, government of U.P. also launched –Uttar Pradesh Atal Bhujal Yojna   in remaining 65 districts of U.P. aiming participatory comprehensive water management.</li> </ul> <p>e) As per Ground Water Resource Estimation, 2017, out of 820 blocks of Uttar Pradesh :</p> <ul style="list-style-type: none"> <li>vi. 82 blocks have been categorized as ‘Over-Exploited’ (where ground water extraction is &gt;100%).</li> <li>vii. 47 as ‘Critical’ (where ground water extraction is &gt;90 &amp; &lt;100%).</li> <li>viii. 151 as ‘Semi-Critical’ (where ground water extraction is &gt;70 &amp; &lt;90%).</li> <li>ix. 540 as ‘Safe’ (where ground water extraction is &lt;70%).</li> <li>x. Out of 10 Urban Agglomerates, 9 have been categorized as ‘Overexploited’ and 1 as ‘Critical’.</li> </ul> <p>f) The “Rajya Bhoojal Sanrakshan Mission” started from year 2017-18 to ensure convergence of the works of different departments in problematic areas so as to get significant effect on Ground water. In this Mission, all Over Exploited, Critical, Semi-Critical blocks and rest blocks of Bundelkhand and Vindhyan regions (Total 272 blocks) are covered under this Mission, progress of</p>
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			<p>some major works are given below (up to March, 2021)-</p> <table border="1"> <thead> <tr> <th></th> <th>Target</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>Check Dam</td> <td>4742</td> <td>2716</td> </tr> <tr> <td>Pond Rejuvenation/ Construction</td> <td>91749</td> <td>36191</td> </tr> <tr> <td>Farm Pond</td> <td>187065</td> <td>171521</td> </tr> <tr> <td>Distribution of Drip/ Sprinkler System</td> <td>270684</td> <td>63131</td> </tr> </tbody> </table> <p>The Minor Irrigation Dept. had constructed 5884 check dams and 779 ponds and the target for 2020-21 is construction of 183 check dams and 116 ponds.</p>		Target	Progress	Check Dam	4742	2716	Pond Rejuvenation/ Construction	91749	36191	Farm Pond	187065	171521	Distribution of Drip/ Sprinkler System	270684	63131
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Farm Pond	187065	171521																
Distribution of Drip/ Sprinkler System	270684	63131																
13.	Restoration of water bodies.	District Administration	<p><b>Partially Complied</b></p> <p>➤ State has 7 wetlands listed as Ramsar Sites of International importance. The Environment, Forest and Climate Change Dept. of Govt. of UP has identified 226 potential wetlands existing within 10 kms of Ganga river and prepared a project for conserving and sustainably managing these Gangetic Floodplain wetlands in the state. This project has been sanctioned by the NMCG.</p>															
14.	Monitoring and displaying of water quality	CPCB/UPPC B	<p><b>Complied</b></p> <p>UPPCB is regularly monitoring the water quality of river Ganga at 32 sampling points. As per the latest available report for the period JanMay,2021, water quality at 22 locations is critically polluted. Out of the 22 locations, at 8, water quality falls in _category C' which means that water is suitable for drinking purpose after conventional treatment and disinfection while at 14 locations the water quality falls in _category D' which suggests that water is not suitable for drinking or bathing purposes but only for propagation of wildlife and fisheries. Detailed monitoring report attached as <b>Annexure 10.</b></p>															

15.	Closing, till compliance, all establishments near river banks being run without necessary STPs and compliance of environmental norms.	UPPCB	<p><b>Partially Complied</b></p> <p>During January 2021 to May 2021, Show cause notices issued against 169 defaulter industries and closure order against 184 defaulter industries. During February 2021 to June 2021, EC of Rs 4.11 crores was imposed against the defaulter industries. Out of 106 STPs, 11 STPs have been found defaulting during January, 2021 to May, 2021. Notices have been issued for compliance and Environmental compensation of Rs 26.25 Lacs has been imposed against the operators of 2 noncompliant STPs. No EC amount has been realized so far from these defaulters.</p>
16.	Public awareness and involvement for prevention and control of pollution of Ganga.	Dept. of Urban Development	<p><b>Not Complied</b></p> <p>Public awareness Programmes could not be conducted due to covid-19 pandemic.</p>
17.	<p>Afforestation and setting up of biodiversity parks.</p> <p>CPCB may take further action to finalise and circulate Guidelines for Biodiversity parks expeditiously which may be complied with by the concerned States and status of compliance included in the reports to be filed before this Tribunal.</p>	Dept. of Environment, Forest and Climate Change, UP.	<p><b>Partially Complied</b></p> <p>Project on Biodiversity Parks with estimated total cost 32381.755 lakhs submitted to the NMCG. The NMCG showed its limitation to fund the project and also made certain observations regarding the location of identified sites and costs involved through letter dated 13.05.2020.</p> <p>In July, 2020 the State planted 25 crore seedlings and the entire exercise was coordinated by Department of Environment, Forest and Climate Change, Government of Uttar Pradesh</p> <p>During the Van Mahotsav, 2021, the State government has targeted for plantation of 30 crore seedlings. As on 8.7.2021, 27.92 crore seedlings have been planted.</p> <p>The Environment, Forest and Climate Change Dept. of Uttar Pradesh has identified the sites for development of Bio-diversity Park in 25 districts in the main stream of Ganga and in 2 districts in Yamuna covering total area of 3591.984 hectares. The project proposal is being revised as per the guidelines of the CPCB and will be implemented if NMCG approves the projects along with its funding.</p>

18.	<i>CPCB and SPCBs may periodically undertake biological assessment of Ganga. NMCG and States concerned may depict biological diversity of Ganga in public domain</i>	<i>CPCB/UPPCB/ U.P Jal Nigam</i>	<b>Partially Complied</b>  <i>Water quality report of Ganga available on the UPPCB website. Biological assessment of Ganga has not yet started.</i>
19.	<i>Slaughter houses discharging waste into rivers</i>	<i>UPPCB</i>	<b>Complied</b>  <i>35 Slaughtering units are under operation. 25 units discharge their treated effluent as per norms on land. 10 Units discharge their treated effluent as per norms into different drains which ultimately meets either river Yamuna/Ganga through tributary rivers</i>
20.	<i>Meetings at the level of Chief Secretary in this case</i>	<i>Chief Secretary, UP</i>	<b>Partially Complied</b>  <i>Meeting held on 2.12.2020. No further progress reported.</i>  <i>(MoM attached as Annexure 8 )</i>

## **VII. RECOMMENDATIONS BY THE OVERSIGHT COMMITTEE**

1. *CPCB and IIT Kanpur may be directed to conduct a joint inspection and determine the volume of the chromium waste scientifically for its remediation so that once this process is complete, the site is completely free from this hazardous waste.*
2. *The Chief Secretary, UP may be directed to personally supervise the project on monthly basis and ensure that all the formalities are completed at the earliest so that the actual work of scientific disposal of chromium dump is started without any further delay and completed in the shortest possible time. The Chief Secretary, UP may also be directed to submit a monthly progress report in this regard to the Oversight Committee for submission to the Hon'ble NGT.*
3. *There are mechanisms available to recover EC from the defaulter industries which are in operation. For closed down units when efforts are made to recover EC as arrear of land revenue, several legal and other complications arises and EC remains unrecovered. So there is an urgent need to develop a mechanism to recover the EC from the closed units. Attention of the Central Government may be drawn towards it so that by way of amendment in law effective mechanism is introduced to*



*recover EC as arrear of land revenue or by any other effective mode to facilitate the recovery from the closed units also.*

4. *Vide order dated 14.07.2020 in O.A. No.-985/2019, the Tribunal had directed the State of UP to pay environmental compensation of Rs. 10 crores for damage to the environment for permitting discharge of untreated sewage containing toxic Chromium into the river Ganga directly. The State of UP was given the liberty to recover the amount from the erring officers apart from taking action against the persons responsible. The U. P Jal Nigam was held liable to pay a sum of Rs. 1 crore for releasing untreated large quantity sewage containing toxic Chromium in the river Ganga. The UPPCB was also held liable to pay a sum of Rs. 1 crore for failing in their responsibilities towards keeping the river Ganga clean. These amounts were to be deposited with the CPCB within one month and the compliance had to be overseen by the Chief Secretary, UP. None of the amounts have been deposited till date. The Chief Secretary may be directed to get the said amount deposited without any further delay and also explain the reasons for noncompliance so far.*
5. *In compliance of the direction of the Hon'ble NGT vide order dated 14.07.2020 in O.A.985/2019 to issue strict directions to ensure that no authority allows discharge of polluted sewage or polluted effluents directly into a water channel or stream even during the monsoon season, the CPCB and the UPPCB have issued directions under section 33A of the Water (Prevention and Control of Pollution) Act, 1974. The UPPCB may be directed to effectively enforce these directions by using digital technology at polluting points and clusters.*
6. *The Hon'ble NGT had directed to complete the ongoing sewerage network by 1.07.2020 to stop discharge of untreated sewage in any drain connected to the river Ganga or its tributaries. In cases of noncompliance environmental compensation of Rs. 10 lakhs per month is to be imposed by the CPCB. Till date, 38 drains out of total 86 drains in Phase I and 96 drains out of total 215 drains in Phase II are untapped. Accordingly, the CPCB has imposed EC of Rs.150 crores and issued notices. Similarly, in respect of 44 incomplete STPs, the CPCB has imposed an EC of Rs.26.4 crores for the period 1.7.2020 to 31.12.2020. Till date, no amount has been deposited. It is recommended that the Chief Secretary, UP should be made responsible for ensuring that these works are completed speedily on priority and for the deposition of environmental compensation within a month of receiving the demand.*
7. *The CPCB has installed 36 real time monitoring stations all across the country out of which 21 are in Uttar Pradesh as part of the Online Continuous Effluent Monitoring System(OCEMS). The number of stations in Ganga is 15, on its tributaries 5 and 1 is on a drain. A central control room has been established at UPPCB HQs to do 24x7 monitoring of pollution data relating to these stations. The system proved very effective in monitoring*

*pollution in the river Ganga during the Kumbh and was widely appreciated. The Committee feels that such stations should be established in other left out pollution pockets in the river Ganga, its tributaries and drains so that all the major polluting sources are monitored on 24x7 basis. The UPPCB may be directed to identify the number of such stations and work out the tentative cost of setting them up along with likely sources of funding within one month. The online monitoring stations will overcome the challenges of manual monitoring and make the entire system transparent. This Committee recommends that the UPPCB may be allowed to utilise EC for this purpose. The oversight committee should have open access to the OCEMS.*

8. *The progress of setting up of the FSTPs is extremely slow. The concerned authorities must ensure that timelines for various activities are fixed and implemented strictly. The monthly progress of it be monitored by the Chief Secretary, UP in his monthly review meeting on Environmental issues.*
9. *The State Pollution Control Board should ensure compulsory installation of Online Continuous Effluent Monitoring System (OCEMS) in all industrial units along with Pan-tilt Zoom Web Camera with open access to this Committee. Moreover, consent to operate shall be provided only after such compliance.*
10. *The Irrigation Department should coordinate with Forest Department of the State to identify vacant areas /flood planes on the banks of river Ganga, its tributaries and drains which may be developed as Green Belts. An action plan regarding this may be prepared by the Irrigation Department in convergence with the schemes of the Forest Department , Uttar Pradesh and implement the same in the next monsoon season.*
11. *The Irrigation Department, Uttar Pradesh and the Central Water Commission need to expedite remaining works related to the identification and demarcation of floodplain zones. Proper coordination at the field level between the Irrigation and Revenue Department for correction of records to execute the demarcation work is essential. The Chief Secretary should ensure coordination between the two departments so that floodplains are jointly demarcated, revenue records corrected accordingly, encroachments removed and pillars are fixed.*
12. *The State government must ensure active involvement of local people, NGOs and professional agencies in cleaning and maintenance of ghats. The ULBs should launch awareness campaign of the local people every quarter to sensitise them about the need to preserve and improve the environment by keeping the rivers and their surroundings (ghats etc.) clean. A report on the action taken with documentary evidences to be submitted to the Committee. Penalty to be imposed on ULBs for non-compliance. Correction missing??*
13. *In order to prevent disposal of dead bodies into the river Ganga and its tributaries provision of electric crematoria in rural areas is necessary. The existing scheme of construction of crematoria in villages handled by the Panchayati Raj Department needs to*

*be strengthened. Before this, a mass advocacy campaign for weaning away people from traditional open funeral system and motivating them to accept electrical crematoria needs to be taken up by the State Government through urban and rural local bodies.*

14. *The Committee recommends banning of idol immersion in Ganga and its tributaries in Uttar Pradesh. Directions need to be issued to concerned department for creation of temporary artificial ponds (as done in NCR-Delhi region for preventing pollution in river Yamuna) for idol immersion during traditional festivals like Ganesh Chaturthi and Durga Puja specifying prior permission of District Administration and strict timelines pertaining to religious days only.*
15. *The Committee recommends steps to be taken for ground water recharge by digging of ponds, construction of check dams and establishing drain network to tap excess runoff during rainfall. Essentiality of rainwater harvesting structure in every house in the urban areas should be enforced effectively by the Development authorities and its progress should be monitored by the Housing Department from the highest level.*
16. *The Committee also recommends replication of successful waste management models such as that of Vengurla town in Sindhudurg district, Maharashtra in small towns of Uttar Pradesh. This town has converted a landfill into a waste management park, generates revenue from waste and has paved way for Sustainable Development.*
17. *In order to restrict and regulate waste into rivers, the committee recommends use of floating barriers as being used on Cooum River in Chennai.*
18. *The Committee feels that along with establishing new STPs/CETPs, every effort should be made to improve the efficacy and functioning of the existing STPs/CETPs. They need to be continuously monitored on a 24x7 basis. All the STPs in the State should be equipped with SCADA, connected with a central control room, receiving data 24x7, their performance analysed on day to day basis, problem areas like maintenance issues be addressed without any delay and accountability be fixed for non-performance/suboptimal performance. The Committee appreciates the One Operator One City scheme followed by UP, which will certainly help in fixing the responsibility and taking corrective action.*
19. *Use of bio-plastics/bio-degradable in every sector viz. domestic and industrial is a viable solution to prevent rivers from choking and warding off adverse implications on biodiversity. The State government may promote reusable bags of jute or cloth along with bio-plastics/degradable through well thought out macro and micro level plans. The State may be directed to develop an action plan in this regard and submit the same to the Hon'ble Tribunal within six months.*

20. *In this particular matter, the oversight committee is deeply concerned that the progress on ground is far from satisfactory and the promised timelines for completing the action keep on getting shifted. The committee finds that a number of problems hindering the progress are coordination problems among various departments. Such issues can easily be resolved if there is a regular monthly meeting at the level of the Chief Secretary as laid down in the monitoring framework submitted by the State Govt. before the Hon'ble NGT. The Chief Secretary may be directed to hold the monthly monitoring meeting regularly and share its minutes with this committee in so far as they concern the orders/directions of the Hon'ble NGT."*

### **Report of Comptroller and Auditor General (CAG) 2017:**

19. As noted earlier in para 2 above that the Hon'ble Supreme Court referred to the report of CAG dated 10.10.2006 for the year ended 2000 on deficiencies in performance of projects for Ganga cleaning. In Thirty-ninth report of CAG dated 19.12.2017 on Rejuvenation of river Ganga (Namami Gange)<sup>19</sup> deficiencies in terms availability and utilisation of funds, implementation of Projects, inadequacy of human resources, inadequacy of monitoring and evaluation have been noted and it has been suggested that more rigorous and serious execution of Namami Gange project is required. The executive summary and recommendations of the report is as follows:

#### ***"EXECUTIVE SUMMARY:***

*The Ganga is the National River of India. For thousands of years, the River Ganga along with her tributaries has provided material, spiritual and cultural sustenance to millions of people living in the Ganga river basin. The river has been facing threats due to population pressures, extensive and unplanned urbanization, industrialization, expansion of agriculture, destruction of forests, abstraction of water for irrigation and industry, lack of proper investment in water quality infrastructure and governance problems. Government of India has taken various initiatives since the mid 1980's to address the issues affecting the River Ganga and its tributaries. Government approved (May 2015) the Integrated Ganga*

<sup>19</sup> [https://cag.gov.in/cag\\_old/sites/default/files/audit\\_report\\_files/Report\\_No.39\\_of\\_2017\\_-\\_Performance\\_Audit\\_on\\_Ministry\\_of\\_Water\\_Resources%2C\\_River\\_Development\\_%26\\_Ganga\\_Rejuvenation\\_Union\\_Government.pdf](https://cag.gov.in/cag_old/sites/default/files/audit_report_files/Report_No.39_of_2017_-_Performance_Audit_on_Ministry_of_Water_Resources%2C_River_Development_%26_Ganga_Rejuvenation_Union_Government.pdf)

*Conservation Mission namely, Namami Gange as an umbrella programme with the aim of integrating previous and currently ongoing initiatives by enhancing efficiency, extracting synergies and supplementing them with more comprehensive and better coordinated interventions.*

*We undertook a Performance Audit of the Rejuvenation of River Ganga (Namami Gange) to assess the adequacy of estimation, availability and utilisation of funds, planning and implementation of various schemes/projects, adequacy of human resources and effectiveness of monitoring and evaluation mechanisms.*

*We sampled 87 projects (73 ongoing, 13 completed and one abandoned project) for audit scrutiny which constituted sanctioned cost of ₹ 7,992.34 crore. Of the 87 projects selected for audit, 50 projects were sanctioned after 01 April 2014. The 87 projects also included all the 11 institutional projects, five afforestation and one biodiversity project.*

### **Financial Management**

*Only eight to 63 per cent of the funds were utilised during 2014-15 to 2016-17, as compared to Revised Estimate. Funds amounting to ₹ 2,133.76 crore, ₹ 422.13 crore and ₹ 59.28 crore were lying unutilised with National Mission for Clean Ganga, various State Programme Management Groups and Executing Agencies/ Central Public Sector Undertakings respectively as on 31 March 2017. (Paragraphs 2.2.1 & 2.2.5)*

*State Programme Management Groups of Uttar Pradesh and West Bengal did not conduct their internal audit as per prescribed frequency (quarterly) during 2014-17. Internal audit was not conducted at all in respect of State Programme Management Groups of Bihar and Uttarakhand. (Paragraph 2.4)*

*A corpus of ₹198.14 crore (as of 31 March 2017) was available in the Clean Ganga Fund. However, National Mission for Clean Ganga could not utilize any amount out of the Clean Ganga Fund and the entire amount was lying in banks due to nonfinalization of action plan. (Paragraph 2.6.1)*

### **Planning**

*National Mission for Clean Ganga could not finalise the long-term action plans even after more than six and half years of signing of agreement with the consortium of Indian Institutes of Technology. As a result, National Mission for Clean Ganga does not have a river basin management plan even after a lapse of more than eight years of National Ganga River Basin Authority notification. (Paragraph 3.3)*

*Out of 154 Detailed Project Reports pertaining to 2014-15 to 2016-17, only 71 Detailed Project Reports were approved. Of these 71 Detailed Project Reports, 70 were approved after delays ranging from 26 to 1,140 days. Out of remaining 83 Detailed Project Reports, 54 were pending at National Mission of Clean Ganga level for a period ranging from 120 to 780 days. (Paragraph 3.4)*

*River Conservation Zones were not identified in the States of Uttar Pradesh, Bihar, Jharkhand and West Bengal, till May 2017. In Uttarakhand the identification was under progress. (Paragraph 3.8)*

### **Pollution Abatement and Ghat Development**

*As per the target dates, award for the work of all the Sewage Treatment Plants was to be completed by September 2016. National Mission for Clean Ganga is yet to finalise and approve Detailed Project Reports for projects totalling 1,397 MLD capacity as of August 2017. (Paragraph 4.2.1)*

*Out of 46 Sewage Treatment Plants, Interception & Diversion projects and Canal works costing ₹ 5,111.36 crore, there were delays in 26 projects costing ₹ 2,710.14 crore due to delay in execution of projects, non-availability of land, slow progress of work by contractors and under-utilisation of Sewage Treatment Plants. Projects relating to Ghats and Crematoria works suffered from non-obtaining of requisite clearances. (Paragraphs 4.4 & 4.5)*

### **Rural Sanitation**

*Against the total funds of ₹ 951.11 crore released by National Mission for Clean Ganga and State Governments for activities relating to construction of Individual Household Latrines, Information, Education and Communication and Solid Liquid Waste Management, the five States namely Bihar, Jharkhand, Uttarakhand, Uttar Pradesh and West Bengal could utilise a sum of ₹ 490.15 crore only. (Paragraph 5.3)*

*Except Uttarakhand, the other four States namely Bihar, Jharkhand, Uttar Pradesh and West Bengal could not achieve the target of construction of 100 per cent Individual Household Latrines as of 31 March 2017. (Paragraph 5.4)*

*Solid Liquid Waste Management activities were not taken up in any of the identified districts of the States of Uttar Pradesh, Bihar, Jharkhand and West Bengal. In Uttarakhand work relating to Solid Liquid Waste Management in two out of 132 Gram Panchayats were completed and were in progress in 11 Gram Panchayats as of March 2017. (Paragraph 5.6)*

*There were discrepancies in the data reported under Management Information System and basic records maintained by Gram Panchayats in 12 test-checked districts of Uttar Pradesh and Jharkhand. (Paragraph 5.7.2)*

### **Conservation of Flora & Fauna and Maintenance of Ecological Flow**

*In Bihar and Jharkhand, no interventions for Agriculture and Urban Landscape were undertaken in the identified districts/divisions. In Bihar, conservation and support activities were also not undertaken. In Uttarakhand, shortfall under natural landscape, agricultural*

landscape, urban landscape and conservation interventions were noticed. (Paragraph 6.3.2)

National Mission for Clean Ganga did not identify places of discontinuity of water flow due to engineered diversion or storage and did not initiate any remedial action thereof, as required under the notification of October 2016. (Paragraph 6.5)

### **Human Resource Management**

There was overall shortage of manpower, ranging from 44 to 65 per cent during 2014- 15 to 2016-17 in National Mission for Clean Ganga. In SPMGs, the overall shortage ranged between 20 to 89 per cent. National Mission for Clean Ganga did not initiate any proposal for strengthening the human resources of State Programme Management Groups. (Paragraph 7.2)

### **Monitoring and Evaluation**

Monitoring Bodies/ Committees such as Governing Body, High Level Task Force, Empowered Task Force and Governing Council did not meet as per required frequency. (Paragraph 9.2)

The mandate of establishment of 'Ganga Monitoring Centre' was still under conceptualization and planning phase at NMCG as of July 2017. (Paragraph 9.4)

Implementation of Bhuvan Ganga Web-portal to enable planning, execution and monitoring of investment projects as well as providing platform for central repository of all data through GIS mapping, was slow. (Paragraph 9.5)

National Mission for Clean Ganga did not develop any mechanism to take appropriate remedial action on the information shared by the public on the Bhuvan Ganga App. (Paragraph 9.6)

Against an amount of ₹ 198.48 crore sanctioned to Central Pollution Control Board for three projects on monitoring and evaluation, expenditure of ₹ 14.77 crore (7.44 per cent) only was incurred as of March 2017. (Paragraph 9.7)

Against 5,016 compliance verifications required to be conducted by Central Pollution Control Board in respect of 988 Grossly Polluting Industries, only 3,163 compliance verifications were conducted during 2011-17. Against the 120 mandatory adequacy assessments required to be conducted in respect of five identified Common Effluent Treatment Plants, only 17 were carried out as of August 2017. Against the mandatory 560 inspections to be carried out for performance evaluation of 67 Sewage Treatment Plants, only 177 were carried out as of August 2017. (Paragraph 9.7.1)

Central Pollution Control Board could deploy only 36 Automatic Water Quality Monitoring Systems as against 113 sites identified along the River Ganga for continuous receipt of water quality monitoring on real-time basis. (Paragraph 9.7.3)

*In six cities<sup>20</sup> of Uttar Pradesh, Bihar and West Bengal, Dissolved Oxygen declined from 2012-13 levels. Biochemical Oxygen Demand was higher than the prescribed limit in the three towns (Kanpur, Allahabad and Varanasi) of Uttar Pradesh. During 2016-17, Total Coliform levels in all the cities of Uttar Pradesh, Bihar and West Bengal was very high; ranging between six<sup>21</sup> to 334<sup>22</sup> times higher than the prescribed levels. Specific parameters for water quality monitoring of the river Ganga have not been prescribed by National Mission for Clean Ganga. (Paragraph 9.8)*

**RECOMMENDATIONS:**

*We recommend that*

- i. NMCG may prepare Annual Action Plan, align Budget Estimates based on Annual Action Plan and take appropriate action to regularly review actual expenditure vis-à-vis budget allocation.*
- ii. NMCG may ensure preparation and timely submission of UCs/ consolidated Financial Statements by SPMGs, for regular monitoring of the expenditure.*
- iii. NMCG may ensure Internal Audit of all the SPMGs as per the prescribed frequency.*
- iv. MoWR, RD&GR may release subsequent grants to NMCG, after taking into account the unspent balances available with NMCG/ SPMG/ EAs etc. at the end of the financial year.*
- v. NMCG may formulate the action plan for augmentation and utilization of Clean Ganga Fund.*
- vi. NMCG may finalize Ganga River Basin Management Plan for implementation of long-term intervention on Ganga Rejuvenation on priority and implement it in a time bound manner.*
- vii. NMCG may ensure appraisal of DPRs as envisaged in NGRBA framework in time bound manner.*
- viii. NMCG may identify and declare River Conservation Zones on priority, in order to conserve the River Ganga from encroachment and construction activities.*
- ix. NMCG may address the capacity gaps of sewerages pertaining to all towns and villages comprehensively and plan sewage systems, STPs, Interception and Diversion works accordingly in a time bound manner.*
- x. NMCG/ SPMGs may synchronize Interception and Diversion Projects with setting up of Sewage Treatment Plants and their*

<sup>20</sup> Kanpur, Varanasi (downstream), Patna, Munger, Gayespur and Budge Budge

<sup>21</sup> Patna

<sup>22</sup> Gayespur



*operationalization for ensuring that no untreated sewage flows into the River Ganga.*

- xi. NMCG, SPMGs in consultation with the State Government authorities and Executing Agencies may make tripartite agreements for making land available before awarding the contracts. xii. NMCG, in consultation with MoDW&S, may ensure the optimum utilisation of available funds with the State Governments.*
- xiii. NMCG, in consultation with MoDW&S, may ensure more realistic planning, data integrity and strict monitoring for achievement targets.*
- xiv. NMCG and MoDW&S may ensure the reliability of the data reported under MIS by cross checking with monthly physical/ financial reports submitted by all Swachh Bharat Mission (Gramin) Project Districts.*
- xv. NMCG may identify threats and implement programmes /schemes to maintain the Ganga river ecology and conserve flora and fauna in sustainable and time bound manner.*
- xvi. NMCG may on priority address the concerns of Aviral Dhara by identifying the discontinuity of flow of the River Ganga water due to engineering diversion or storage so as to determine and maintain the ecological flow.*
- xvii. NMCG may frame recruitment rules for filling-up the vacancies and increase the sanctioned strength for effectively implementing the projects both at NMCG and SPMG levels.*
- xviii. NMCG may have regular meetings for monitoring of Ganga Rejuvenation Programmes, make recommendations and actionable points and follow up scrupulously.*
- xix. NMCG may make all efforts to expedite the work already assigned to CPCB on monitoring of pollution, inventorization of crucial parameters of pollution, surveillance on the River Ganga and strengthening of regulators.*
- xx. NMCG may expedite the setting up of Ganga Monitoring Centres as envisaged in River Ganga (Rejuvenation, Protection and Management) Authorities Order (2016).*
- xxi. NMCG may use geo-spatial data of National Remote Sensing Centre for better monitoring.”*

**Final Report on Environmental and Social Audit (December, 2020) of NMCG:**

20. In NMCG's final report on Environmental and Social Audit<sup>23</sup> (December, 2020) again such deficiencies have been noted and recommendations made. This report examines the execution of projects relating to sewerage and STPs with reference to monitoring, plantation, granting CTO and others. Deficiencies observed include untreated sewage, Drains, Rural sanitation, encroachment of FPZs, E flows, depiction of Water quality in terms of FC and FS etc. Executive summary of the said report is as follows:

**“EXECUTIVE SUMMARY:**

*GANGA BASIN is the largest river basin in India in terms of the catchment area and constitutes, almost one-fourth of the country's land mass, near about one-third of country's water resources and supports more than 40 percent of country's population. The delta of the Ganga basin is one of the largest in the world, which is known by Sundarbans. It is the 20th longest river in Asia. The Ganga basin extends over an area of 1,086,000 kms. Drainage of the River traverses through 11 states of the country (Uttar Pradesh, Madhya Pradesh, Rajasthan, Bihar, West Bengal, Uttarakhand, Jharkhand, Haryana, Chhattisgarh, Himachal Pradesh and Delhi), where largely covered states are Uttar Pradesh (28.02%), Bihar (10.86%), West Bengal (8.3%), Uttarakhand (6.15%) and Jharkhand (5.85%). The current focus of World Bank funded National Ganga River Basin Projects (NGRBP) under National Mission for Clean Ganga (NMCG) is on five basin states namely Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal.*

*Government of India has launched “Namami Gange” an Integrated Conservative Mission programme in the year 2014. The Namami Gange Programme is an umbrella programme of the Department of Water Resources, River Development, & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India. The programme covers the previously sanctioned ongoing projects as well as the projects in new components with multi sector mandate to address both water quality and water quantity issues. The programme aims at integrating previous & currently ongoing initiatives by enhancing efficiency, extracting synergies and supplementing them with more comprehensive and better coordinated interventions. The programme structure attempts to bring all stakeholders on one platform to take a holistic approach towards the task of Ganga cleaning and rejuvenation. Namami Gange Programme has been segregated into two different components:*

<sup>23</sup> [https://nmcg.nic.in/writereaddata/fileupload/23\\_NMCG\\_FINAL\\_FOLLOW-UP\\_E&S-Audit-Report\\_March2021\\_f1\\_ES%20.pdf](https://nmcg.nic.in/writereaddata/fileupload/23_NMCG_FINAL_FOLLOW-UP_E&S-Audit-Report_March2021_f1_ES%20.pdf)

- *Component A: Pertains to ongoing projects of cleaning of river Ganga & its tributaries, including World Bank Assisted NGRBA programme having remaining central liabilities.*
- *Component B: Pertains to new initiatives to be undertaken in 5 major sectors i.e. Infrastructure Development (Sewage Treatment, River Front Development, and Industrial Waste Water Treatment & Solid Waste Management), Institutional Development, Ecological Sustainability, Research & Development and Communication & Public Outreach.*

*At the Central level, National Mission for Clean Ganga (NMCG) was constituted as an authority to ensure implementation of programmes. At the State level, State Mission for Clean Ganga (SMCGs) of Uttar Pradesh, Uttarakhand, Bihar and West Bengal were set-up as registered societies. In Jharkhand, a dedicated Nodal Cell within the Department of Urban Development and Housing was set up. At the local level, specific Executing Agencies (EAs) are selected for implementation of various activities, including infrastructure investments under the Namami Gange Programme.*

*LEA Associates South Asia Private Limited (LASA), New Delhi has been appointed as the Environmental and Social Audit Consultant for carrying out the E&S Audit of sub-projects under NMCG. Accordingly, LASA has visited the designated project sites in five basin states. The findings of the audit are presented in detail, in this Audit Report.”*

### **Analysis and further directions:**

21. As observed in the earlier orders of this Tribunal including the last order dated 08.02.2021, progress in control of pollution of Ganga leaves much to be desired. There does not seem to be any significant improvement over the compliance status noted in the order dated 08.02.2021 quoted above. Table 4 of the report of NMCG, quoted earlier, shows that gap in sewage generation and treatment is about **46%**. It shows that only **68%** of the available STP capacity is utilized. Treatment capacity is about **55%** only, out of which **32%** is un-utilized. Table 5 shows that out of 128 STPs, only 102 are operational out of which **83 are non-compliant**. Non-compliance for Fecal coliform component is 74. Compliance thus appears to be about **20%** only. Table 7 dealing with the status of CETPs shows that **all the CETPs are non-compliant**. Status of

remediation of drains meeting river Ganga shows that all the drains have not yet been remediated in any of the concerned States. While in Uttarakhand, 9 out of 13 drains are said to have been taken up for treatment and tendering work has been done, in UP out of 459 drains, work has been done only in 42. In Bihar, out of 416 drains in-situ bioremediation is done for 89 drains. 42 drains are discharging directly into Ganga and 111 drains are discharging into the tributaries of Ganga. 83 drains are discharging in low-lying areas. In Jharkhand, only tendering is said to be under process and interim steps have been taken only for four drains. In West Bengal, steps have been taken for 41 drains and no steps have yet been taken for 50. With regard to sewerage infrastructure, all necessary steps have not yet been taken as per requirements of the Water Act and as per directions of the Hon'ble Supreme Court in *Paryavaran Suraksha* (Supra). In Uttarakhand, the matter is pending at the stage of DPRs. In UP, letter of award for 131 towns has been issued. Some work has been allotted while other work is at tender stage. In Bihar, DPRs are awaiting sanction. In Jharkhand also, the work is at tender stage. In West Bengal, some plants are under construction and some have been commissioned. With regard to Industrial Pollution Management, in Table 1 statement, it is mentioned that CETPs are to be upgraded and other steps taken.

22. On the subject of e-flow, Srinagar HEP (GVK) and Pashulok Barrage do not comply with the e-flow norms and many other projects have been found to be non-compliant in Uttarakhand. Information on the subject about UP is not complete. While it is stated that data is not being provided by the Kanpur Barrage Project Authority on the ground that drinking water supply is a priority. In Jharkhand, there is no issue of e-flow. Flood plain demarcation issue has also not been finalized. In Uttarakhand, the matter

is pending for approval, in UP demarcation of flood plains is to be notified at most of the places. In Bihar, the issue remains un-resolved. In Jharkhand, demarcation has yet not been done. In West Bengal also, action remains to be taken. Much remains to be done on the subject of setting up of bio-diversity parks. The issue is still at planning stage in UP and in other States also no substantial progress is reported. NMCG is providing funds to the State Ganga Committees and also directly to the District Ganga Committees.

**Conclusion:**

23. Thus, it is clear that challenge of cleaning Ganga remains inspite of monitoring by the Hon'ble Supreme Court and by this Tribunal for the last 36 years. Though, initiatives at the level of Central Government have been taken by way of Ganga Action Plans I & II and thereafter, setting up of NMCG, pollution of Ganga remains unabated. We note:

- i. **No data showing reduction in pollution load and progressive improvement provided in terms of preventing discharge of sewage and other effluents and discharge of liquid and solid waste from different sources as a result of steps for treatment of sewage/effluents before discharge into Ganga directly or through various tributaries/drains.**
- ii. Various projects are planned but not fully executed.
- iii. Timelines are breached without accountability and adverse consequences. Encroachment of flood plains also remains a challenge. Uncontrolled continuous unscientific river bed mining aggravates the situation.
- iv. Public awareness programmes undertaken are not shown to be adequate.

- v. Directions of this Tribunal requiring the Chief Secretaries of the concerned States to remedy the situation remain un-complied in most of the States. In short, the ownership and responsibility remain lacking.
- vi. On being asked, Shri Mathuria fairly stated that even when failures are noticed and established, matter of taking action is left to the States. States have never taken any meaningful action.
- vii. Not even a single case of misappropriation has been filed nor any action is shown to have been taken for non-compliance. Thus, the situation remains disappointing.
- viii. Level of Fecal coliform very high. 4619.96 million litres per day of sewage is being discharged into main Ganga river. CETPs are non-compliant.
- ix. Flood plain zones are encroached as Ganga States are not having demarcation of FPZ.
- x. E-flow and its maintenance at critical locations, particularly in summers, downstream of Narora to border of UP and Bihar are not given.
- xi. Tributaries are still pouring degraded water into Ganga.
- xii. States are still caught up in issues of locating sites for STPs and unending prolonged tendering processes.
- xiii. There is no ownership and accountability of States on their responsibility to keep water quality at Ganga stretch in their State at least of bathing level.
- xiv. There is no assurance on maintaining E flows, ensuring stoppage of encroachment even for future, control of industrial pollution control at individual and CETP level, water quality in terms of fecal coliform

and fecal streptococcus as per MoEF laid down criteria for bathing waters.

**24. We have already noted the reports of CAG (2017) and report of internal audit of NMCG itself (2020) noting deficiencies in monitoring and execution of Namami Gange which need remedial action in the light thereof.**

**Directions:**

25. We are thus of the view that time has come when accountability needs to be fixed for proper and timely utilization of funds allocated and timely performance of constitutional obligation of ensuring clean environment, including clean water of the rivers by meeting of the targets in taking steps. Failure of monitoring and fixing accountability only results in wastage of public funds, continued pollution and resultant deaths and diseases. There appears to be need to consider, at the highest level in the hierarchy of the concerned administration, structural changes in functioning of the NMCG in terms of fixing accountability for maintaining the timelines and exploring management strategies so as to achieve the targets within foreseeable time. Performance parameters and timelines need to be clearly defined and performance audit conducted. The same may include Sewage treatment, tackling encroachments of FPZ, E flows at critical locations, remedying non-compliant CETPs and other issues, including those specified in para 21 of the order dated 18.12.2019, quoted above in para 9 of this order.

26. Standard DPR and tender process SOPs need to be in place. Further, there is need for due investigation about the funds allocated and utilized in terms of achieving the result of reducing pollution load. To the extent failure, causes for the same and persons responsible needs to be identified

and made appropriately accountable. A mechanism needs to be worked out to be operative on continuous basis in this regard of identifying those responsible for failure in performance. Without disciplinary and quality control, there may be little chance of success of the laudable mission. In-house review mechanism is required to be strong which at present does not appear to be. If it is found that agencies employed by NMCG for executing its pollution abatement and control plan cannot adequately deliver, structural changes need to be considered by assigning the work to an appropriate agency – Governmental, Private or Hybrid, who can be held accountable in terms of performance and achieving the targets. In short, performance needs to be evaluated and accountability fixed. Quarterly report giving the details of the funds allotted and progress achieved in terms of reduction in pollution load and other parameters may be placed on the website of NMCG so as to enable enhanced community participation and support. Compensation as directed in the last order may now be positively collected by the CPCB and the NMCG within two months. In case of non-compliance, coercive measures be taken including initiating prosecution against the defaulters under Section 26 of the NGT Act, 2010. NMCG and CPCB may file their report of further progress as on 31.3.2022 by 15.4.2022 which may also be simultaneously uploaded on their respective websites. Report may state the progress in qualitative as well as quantitative terms under different heads as per para 21 of the order dated 18.12. 2019 preferably State-wise in tabular form with remarks.

27. Needless to say, the mission undertaken by the Central Government is under the Environment (Protection) Act, 1986, with reference to List 1, Entry 14 of Schedule 7 of the Constitution read with Article 253 to give effect to International Obligations. There is no lack of legislative/ administrative authority in the Central Government for any decision on



the subject. There is also equal responsibility of the States under Articles 48A, 51 and 51A and also of the Local Bodies and District Magistrates under Articles 243G and 243W read with 11<sup>th</sup> and 12<sup>th</sup> Schedules of the Constitutions. Further, obligations of public authorities also flows from “Public Trust Doctrine” and the fact that clean environment is part of Right to Life under Article 21 of the Constitution.

List for further consideration on April 28, 2022.

A copy of this order be forwarded to CPCB, NMCG and MoJS by e-mail for compliance. A copy of this order be also forwarded to Executive Chairmen, Legal Services Authorities of Uttarakhand, U.P., Jharkhand, Bihar and West Bengal by e-mail.

A copy of this order be forwarded to the Hon’ble Supreme Court in terms of directions of the Hon’ble Supreme Court vide order dated 29.10.2014, *(2015) 12 SCC 764* Para 20.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Dr. Nagin Nanda, EM

November 23, 2021  
Original Application No. 200/2014  
SN

Speed-post/E-mailF.No. B- 19123/WQM-II/Legal/NGT-2/CPCB/2020-21 **6377** Dated: 16.09.2021

To,

Principal Secretary,  
Urban Development & Municipal Affairs  
Nagarayan, Sector-I, Block-DF-8, Bidhan Nagar,  
Kolkata-700064

**Subject: Environmental Compensation and present status of untapped drains and incomplete STPs in compliance to Hon'ble NGT orders dated 7/22<sup>nd</sup> Aug 2019, 12/18<sup>th</sup> Dec 2019, 13<sup>th</sup> Aug 2020 and 8<sup>th</sup> Feb 2021 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014**

**Reference:**

1. Hon'ble NGT orders dated 7/22<sup>nd</sup> Aug 2019, 12/18<sup>th</sup> Dec 2019, 13<sup>th</sup> Aug 2020 and 8<sup>th</sup> Feb 2021 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014
2. CPCB letter dated 03<sup>rd</sup> Feb 2021

Sir,

Kind reference is invited to above referred Hon'ble NGT orders and CPCB letter dated 03<sup>rd</sup> Feb 2021 on the above mentioned subject.

An inventory of untapped drains/ incomplete STP projects was prepared based on information received from concerned state authorities and accordingly environmental compensation was calculated in compliance to Hon'ble NGT orders dated 7/22<sup>nd</sup> Aug 2019, 12/18<sup>th</sup> Dec 2019 and 13<sup>th</sup> Aug 2020 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014 and the same was communicated vide CPCB letter dated 03<sup>rd</sup> Feb 2021 (copy enclosed). However, response to the letter dated 03<sup>rd</sup> Feb 2021 is still awaited.

As per information available with CPCB, there are 56 drains inventorized by state agencies in your state, with 26 drains having provision of interception, diversion & treatment.

You are therefore requested to reconfirm/update the inventory of drains confluenting with river Ganga & its tributaries in your state and also their tapping and treatment through STPs in the enclosed format. EC may also be deposited to CPCB as per above referred Hon'ble NGT orders.

Yours faithfully,

Encl.: As above

*A.K. Vidyarthi*  
16/09/21

(A.K. Vidyarthi)

Copy to:

Director General,

National Mission for Clean Ganga  
First Floor, Major Dhyan Chand Stadium,  
New Delhi, 110002

Additional Director &amp; Divisional Head, WQM-II

Email: [akvidyarthi@gmail.com](mailto:akvidyarthi@gmail.com)

cc M.S. W.B.

o/c

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
निर्गत... *N.Simh* .....  
दिनांक... 20/09/2021

(*Mega Chauhan*)  
WQM-II

Speed-post/E-mailF.No. B- 19123/WQM-II/Legal/NGT-2/CPCB/2020-21 **6376** Dated: 16.09.2021

To,  
Principal Secretary  
Urban Development Department  
43/6, Mata Mandir Road, Dharampur  
Dehradun-248001

**Subject: Environmental Compensation and present status of untapped drains and incomplete STPs in compliance to Hon'ble NGT orders dated 7/22<sup>nd</sup> Aug 2019, 12/18<sup>th</sup> Dec 2019, 13<sup>th</sup> Aug 2020 and 8<sup>th</sup> Feb 2021 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014**

**Reference:**

1. Hon'ble NGT orders dated 7/22<sup>nd</sup> Aug 2019, 12/18<sup>th</sup> Dec 2019, 13<sup>th</sup> Aug 2020 and 8<sup>th</sup> Feb 2021 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014
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As per information available with CPCB, there are 138 drains inventorized by state agencies in your state, with 127 drains having provision of interception, diversion & treatment.

You are therefore requested to reconfirm/update the inventory of drains confluenting with river Ganga & its tributaries in your state and also their tapping and treatment through STPs in the enclosed format. EC may also be deposited to CPCB as per above referred Hon'ble NGT orders.

Yours faithfully,

Encl.: As above

*A.K. Vidyarthi*  
16/09/21

(A.K. Vidyarthi)

Additional Director &amp; Divisional Head, WQM-II

Email: [akvidyarthi@gmail.com](mailto:akvidyarthi@gmail.com)

Copy to:

Director General,

National Mission for Clean Ganga

First Floor, Major Dhyan Chand Stadium,

New Delhi, 110002

cc M.S. U.K.P.C.B.

o/c

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
दिनांक 16/09/21  
दिनांक 20/9/2021



Speed-post/E-mailF.No. B- 19123/WQM-II/Legal/NGT-2/CPCB/2020-21 **6375** Dated: 16.09.2021

To,

Principal Secretary  
Urban Development Department (UDD)  
824, Babu Bhawan, Lucknow - 226001

**Subject: Environmental Compensation and present status of untapped drains and incomplete STPs in compliance to Hon'ble NGT orders dated 7/22<sup>nd</sup> Aug 2019, 12/18<sup>th</sup> Dec 2019, 13<sup>th</sup> Aug 2020 and 8<sup>th</sup> Feb 2021 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014**

**Reference:**

1. Hon'ble NGT orders dated 7/22<sup>nd</sup> Aug 2019, 12/18<sup>th</sup> Dec 2019, 13<sup>th</sup> Aug 2020 and 8<sup>th</sup> Feb 2021 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014
2. CPCB letter dated 03<sup>rd</sup> Feb 2021

Sir,

Kind reference is invited to above referred Hon'ble NGT orders and CPCB letter dated 03<sup>rd</sup> Feb 2021 on the above mentioned subject.

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As per information available with CPCB, there are 301 drains inventorized by state agencies in your state, with 116 drains having provision of interception, diversion & treatment.

You are therefore requested to reconfirm/update the inventory of drains confluenting with river Ganga & its tributaries in your state and also their tapping and treatment through STPs in the enclosed format. EC may also be deposited to CPCB as per above referred Hon'ble NGT orders.

Yours faithfully,

Encl.: As above

*Ajayarshi*  
16/09/21

(A.K. Vidyarthi)

Copy to:

Director General,

National Mission for Clean Ganga  
First Floor, Major Dhyan Chand Stadium,  
New Delhi, 110002

Additional Director &amp; Divisional Head, WQM-II

Email: [akvidyarthi@gmail.com](mailto:akvidyarthi@gmail.com)

cc: M.S. U.P. P.C.B.

OK

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
निर्गत... N/mg  
दिनांक 20/09/2021

*(Megha Chauhan)*  
WQM-II

Speed-post/E-mail

F.No. B- 19123/WQM-II/Legal/NGT-2/CPCB/2020-21-6374 Dated: 16.09.2021

To,

The Principal Secretary  
Urban Development and Housing Department (UD&HD)  
Vikas Bhawan, Bailey Road, Patna - 800 001

**Subject:** Environmental Compensation and present status of untapped drains and incomplete STPs in compliance to Hon'ble NGT orders dated 7/22<sup>nd</sup> Aug 2019, 12/18<sup>th</sup> Dec 2019, 13<sup>th</sup> Aug 2020 and 8<sup>th</sup> Feb 2021 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014

**Reference:**

1. Hon'ble NGT orders dated 7/22<sup>nd</sup> Aug 2019, 12/18<sup>th</sup> Dec 2019, 13<sup>th</sup> Aug 2020 and 8<sup>th</sup> Feb 2021 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014
2. CPCB letter dated 03<sup>rd</sup> Feb 2021

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As per information available with CPCB, there are 130 drains inventorized by state agencies in your state, with 79 drains having provision of interception, diversion & treatment.

You are therefore requested to reconfirm/update the inventory of drains confluencing with river Ganga & its tributaries in your state and also their tapping and treatment through STPs in the enclosed format. EC may also be deposited to CPCB as per above referred Hon'ble NGT orders.

Yours faithfully,

Encl.: As above

*A.K. Vidyarthi*  
16/09/21

(A.K. Vidyarthi)

Copy to:

Director General,

National Mission for Clean Ganga

First Floor, Major Dhyan Chand Stadium,

New Delhi, 110002

Additional Director &amp; Divisional Head, WQM-II

Email: [akvidyarthi@gmail.com](mailto:akvidyarthi@gmail.com)

cc. M.S. Bihari. P.C.B

o/c

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
नियंत्रित N.Singh  
दिनांक 20/09/2021

(Mega Chauhan)  
WQM-II

**SUMMARY OF UTTARAKHAND DRAINS FOR EC CALCULATION**

<b>EC Calculation Period</b>		<b>01.11.2019 to 30.06.2020</b>	<b>01.07.2020 to 31.01.2022</b>
1. Drains discharging into River Ganga and its tributaries	:	166	166
2. Tapped Drains	:	120	120
3. Untapped Drains	:	47	47
4. Untapped Drains not considered for EC (Storm water/Dry/STP Outlet)	:	12	12
5. Drains where interim measure taken during 01.11.2019 to 30.06.2020	:	09	-
6. No. of untapped drains considered for EC calculation	:	26	35
7. Calculated EC = No. of drains × @ 05 (01.11.2019 to 30.06.2020) and 10 (01.07.2020 to 31.01.2022) Lakhs/Month/Drain	:	26 Drains x Rs.5 Lakhs x 08 Months = Rs.1,040 Lakhs	35 Drains x Rs.10 Lakhs x 19 Months = Rs.6,650 Lakhs

**\*\* Total EC from 01.11.2019 to 31.01.2022 = Rs (1040 + 6650) Lakhs = Rs 7690 Lakhs**

**Note-**

- Relevant list of drains along with EC calculation is enclosed.
- Discrepancies, if any regarding drains information and EC calculation may kindly be communicated to CPCB within 7 days.

**SUMMARY OF UTTARAKHAND STPs FOR EC CALCULATION****EC Calculation Period: 01.07.2020 till 31.01.2022**

<b>1. Total no. of STPs</b>	<b>:</b>	<b>89</b>
<b>2. Operational STPs</b>	<b>:</b>	<b>64</b>
<b>3. Non-operational STPs</b>	<b>:</b>	<b>1</b>
<b>4. Under Construction/under-trial STPs</b>	<b>:</b>	<b>7</b>
<b>5. Under Tendering/DPR/Proposed STPs</b>	<b>:</b>	<b>17</b>
<b>6. No. of STPs considered for EC calculation (Sl. No. 3 +4+5)</b>	<b>:</b>	<b>25 (1 +7 +17)</b>
<b>7. Calculated EC = No. of STPs× @10 lakhs/month/STP (Since 01.07.2020till 31.01.2022)</b>	<b>:</b>	<b>25 STPs x 10 Lakhs x 19 months = Rs 4750 Lakhs</b>

**Note:**

- a) Relevant list of STPs is enclosed.
- b) EC may be deposited in favour of CPCB, Account no. 532702050000164 (Bank: Union of India, I.P. Extension Branch, Vikas Marg Extension, Delhi, IFSC; UBIN0553271) within one month from the date of issue of this letter as per Hon'ble NGT order.

<b>Status of Drains for EC Calculation as on 31.01.2022, Uttarakhand</b>							
<b>S.No</b>	<b>Drains</b>	<b>Status of Drain (S-Sewage, SW-Storm water, D-Dry, SO- STP Outlet)</b>	<b>Tapping Status (T-Tapped/ UT-Untapped/NI- No Information/BOD for SO)</b>	<b>Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)</b>	<b>EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)</b>	<b>EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)</b>	<b>Total EC Calculated (in Lakhs)</b>
1	Manav Kalyan Ashram Drain,Badrinath	S	T	No	NA	NA	0
2	Iron Bridge to Mandir Drain,Badrinath	S	T	No	NA	NA	0
3	BSNL Drain,Badrinath	S	T	No	NA	NA	0
4	Raturi Drain,Badrinath	S	T	No	NA	NA	0
5	Pindadaan Ghaat Drain,Badrinath	S	T	No	NA	NA	0
6	Bamani Drain,Badrinath	S	T	No	NA	NA	0
7	Nav Ganga Drain,Joshimath	S	UT	No	40	190	230
8	Gandhi Nagar Drain,Joshimath	S	T	No	NA	NA	0
9	Tehsil Nala,Joshimath	S	UT	No	40	190	230
10	Dronagiri Nala,Joshimath	S	UT	No	40	190	230
11	Kamet Lodge Nala,Joshimath	S	UT	No	40	190	230
12	Ravi Gram Drain,Joshimath	S	UT	No	40	190	230
13	Pokhri Bend Drain,Chamoli-Gopeshwar	S	UT	<b>Yes</b>	NA	190	190
14	Kothiyalsain Drain,Chamoli-Gopeshwar	S	T	<b>Yes</b>	NA	NA	0
15	Chamoli Bazar Drain,Chamoli-Gopeshwar	S	T	No	NA	NA	0
16	Chamoli Alaknanda Ghaat Drain,Chamoli-Gopeshwar	S	T	No	NA	NA	0
17	Chamoli Bridge Drain,Chamoli-Gopeshwar	S	T	No	NA	NA	0
18	Chamoli Old Suspension Bridge Drain,Chamoli-Gopeshwar	S	T	No	NA	NA	0
19	Baitarni Drain,Chamoli-Gopeshwar	S	T	No	NA	NA	0
20	Stadium Drain,Chamoli-Gopeshwar	S	UT	No	40	190	230
21	Leesa Bend Drain,Chamoli-Gopeshwar	S	UT	No	40	190	230
22	Alkapuri Drain,Chamoli-Gopeshwar	S	UT	No	40	190	230
23	Water tank nala,Nandprayag	S	T	<b>Yes</b>	NA	NA	0
24	Sangam Road Drain,Nandprayag	S	T	No	NA	NA	0
25	Forest Office Drain,Nandprayag	S	T	No	NA	NA	0



## 43679/2022/LAW-HO

26	Police Chowki Drain,Karanprayag	S	T	No	NA	NA	0
27	SBI ATM Drain,Karanprayag	S	T	No	NA	NA	0
28	Saraswati Shishu Mandir Drain,Karanprayag	S	T	No	NA	NA	0
29	Subhash Nagar Drain,Karanprayag	S	T	No	NA	NA	0
30	Ward No. 1 Drain,Karanprayag	S	T	No	NA	NA	0
31	Ward No. 3 Drain,Karanprayag	S	T	No	NA	NA	0
32	Naya Pul Drain,Karanprayag	S	UT	No	40	190	230
33	Beleni Nala,Rudraprayag	S	T	<b>Yes</b>	NA	NA	0
34	Anoop Negi Nala,Rudraprayag	S	UT	No	40	190	230
35	Rudra complex Nala,Rudraprayag	S	T	No	NA	NA	0
36	Bus Stand Nala,Rudraprayag	S	T	No	NA	NA	0
37	State Bank Nala,Rudraprayag	S	T	No	NA	NA	0
38	Masjid Nala,Rudraprayag	S	T	No	NA	NA	0
39	Steel Bridge Nala,Rudraprayag	S	T	No	NA	NA	0
40	Syndicate Bank Nala,Rudraprayag	S	T	No	NA	NA	0
41	Near new Bridge Drain,Kirtinagar	S	T	No	NA	NA	0
42	Near main Market Temple Drain,Kirtinagar	S	T	No	NA	NA	0
43	Tiwari Mohalla Drain,Srinagar	S	T	No	NA	NA	0
44	Kothar Nala,Srinagar	S	T	No	NA	NA	0
45	New Bus Station Nala,Srinagar	S	T	No	NA	NA	0
46	Convent School Drain,Srinagar	S	T	No	NA	NA	0
47	Keshav Rai Math Drain,Srinagar	S	T	No	NA	NA	0
48	Police Station Drain,Srinagar	S	T	No	NA	NA	0
49	Balmiki Temple Nala,Srinagar	S	T	No	NA	NA	0
50	Dam Colony Drain,Srinagar	S	T	No	NA	NA	0
51	SSB Drain,Srinagar	S	T	No	NA	NA	0
52	Kedar Ghat Drain,Srinagar	S	T	No	NA	NA	0
53	Pragati Vihar Drain,Srinagar	S	T	No	NA	NA	0
54	Hanuman Mandir Drain,Srinagar	S	T	No	NA	NA	0
55	Jal Colony Drain,Srinagar	S	T	No	NA	NA	0
56	Irrigation Colony Nala,Srinagar	S	T	No	NA	NA	0
57	Mahadev Temple Drain,Srinagar	S	T	No	NA	NA	0
58	Gas Godown Drain,Srinagar	S	T	No	NA	NA	0
59	Bhakiyana Nala,Srinagar	S	T	No	NA	NA	0
60	Uphalda Mohalla Drain,Srinagar	S	UT	No	40	190	230
61	Shakti Vihar,Srinagar	S	T	No	NA	NA	0
62	Taulia Nala,Srikot	S	T	<b>Yes</b>	NA	NA	0
63	Junior High School Nala,Srikot	S	T	<b>Yes</b>	NA	NA	0
64	Tiloth Nalla,Uttarkashi	S	T	No	NA	NA	0

65	Tambakhani Drain, Uttarkashi	S	T	No	NA	NA	0
66	Collectorate Drain, Uttarkashi	S	T	No	NA	NA	0
67	Valmiki Vasti Drain, Uttarkashi	S	T	No	NA	NA	0
68	Kailash Ashram Drain, Uttarkashi	S	UT	No	40	190	230
69	Nagar palika nala, Uttarkashi	S	T	No	NA	NA	0
70	Post Office, Uttarkashi	S	T	No	NA	NA	0
71	Shanta Nala, Devprayag	<b>SW</b>	UT	No	NA	NA	0
72	Bah Bazar, Devprayag	<b>SW</b>	UT	No	NA	NA	0
73	Saraswati Nala (From Sulabh), Devprayag	S	T	No	NA	NA	0
74	Sangam Bazar 1, Devprayag	S	T	No	NA	NA	0
75	Sangam Bazar 2, Devprayag	S	T	No	NA	NA	0
76	Koudiyala Nala, Koudiyala	<b>SW</b>	UT	No	NA	NA	0
77	Kothari Tirath Niwas nala, Tapovan (Rishikesh)	S	T	No	NA	NA	0
78	Sri Ram Ashram nala, Tapovan (Rishikesh)	S	T	No	NA	NA	0
79	Lupin herbal center nala, Tapovan (Rishikesh)	S	T	No	NA	NA	0
80	Sachha dham nala, Tapovan (Rishikesh)	S	T	No	NA	NA	0
81	Kailashanand nala, Tapovan (Rishikesh)	S	T	No	NA	NA	0
82	Vanprasath Ashram nala, Swargasrham (Rishikesh)	S	T	No	NA	NA	0
83	Near milan telecome nala, Swargasrham (Rishikesh)	S	T	No	NA	NA	0
84	Near Geeta Bhawan, Gali no-3 nala, Swargasrham (Rishikesh)	S	T	No	NA	NA	0
85	Near Kirmola village, Swargasrham (Rishikesh)	S	T	No	NA	NA	0
86	Near Parmarth niketan nala, Swargasrham (Rishikesh)	S	T	No	NA	NA	0
87	Near Shanta Bhawan nala, Swargasrham (Rishikesh)	S	T	No	NA	NA	0
88	Near Geeta bhawan PNB, Swargasrham (Rishikesh)	S	T	No	NA	NA	0
89	Near Handicraft emporium, Swargasrham (Rishikesh)	S	T	No	NA	NA	0
90	Near Geeta bhawan Gali no.-1, Swargasrham (Rishikesh)	S	T	No	NA	NA	0

91	Near Ravi Daily Needs nala,Swargasrham (Rishikesh)	S	T	No	NA	NA	0
92	Near Ganga Hair dresser nala,Swargasrham (Rishikesh)	S	T	No	NA	NA	0
93	Near Laxman Jhula SPS nala,Swargasrham (Rishikesh)	S	T	No	NA	NA	0
94	Back side of Choti wala hotel nala,Swargasrham (Rishikesh)	S	T	No	NA	NA	0
95	Near Shumani Bhawan nala,Swargasrham (Rishikesh)	S	T	No	NA	NA	0
96	Near Chouhan hotel nala,Swargasrham (Rishikesh)	S	T	No	NA	NA	0
97	Near Baraha manjil Bhawan nala,Swargasrham (Rishikesh)	<b>D</b>	UT	No	NA	NA	0
98	Near Laxaman Jhula nala,Swargasrham (Rishikesh)	S	T	No	NA	NA	0
99	Near Narayan Kunj nala,Swargasrham (Rishikesh)	S	T	No	NA	NA	0
100	Near Laxman Jhula PO nala,Swargasrham (Rishikesh)	S	T	No	NA	NA	0
101	Chandeshwar Nala,Muni Ki Reti (Rishikesh)	S	T	<b>Yes</b>	NA	NA	0
102	Samsan ghat Nala,Muni Ki Reti (Rishikesh)	S	T	<b>Yes</b>	NA	NA	0
103	Dhalwala Nala,Muni Ki Reti (Rishikesh)	S	T	<b>Yes</b>	NA	NA	0
104	Darshan Maha Vidhalya Nala,Muni Ki Reti (Rishikesh)	<b>D</b>	UT	No	NA	NA	0
105	Pracheen Hanuman Mandir nala,Muni Ki Reti (Rishikesh)	S	T	No	NA	NA	0
106	Sarwajanik Sochalya nala,Muni Ki Reti (Rishikesh)	S	T	No	NA	NA	0
107	Asian Gems and Handicraft,Muni Ki Reti (Rishikesh)	S	T	No	NA	NA	0
108	Police Guest House nala,Muni Ki Reti (Rishikesh)	<b>D</b>	UT	No	NA	NA	0
109	Shivanand Bhawan nala,Muni Ki Reti (Rishikesh)	S	T	No	NA	NA	0
110	PWD Guest House nala,Muni Ki Reti (Rishikesh)	<b>D</b>	UT	No	NA	NA	0
111	Nav Ghat nala,Muni Ki Reti (Rishikesh)	S	T	No	NA	NA	0

112	Omkanand public Ghat nala,Muni Ki Reti (Rishikesh)	S	T	No	NA	NA	0
113	Khara sroat nala (Monsoon nala),Muni Ki Reti (Rishikesh)	S	T	No	NA	NA	0
114	Ganga resort nala,Muni Ki Reti (Rishikesh)	S	T	No	NA	NA	0
115	Muni Ki Reti parking nala,Muni Ki Reti (Rishikesh)	S	T	No	NA	NA	0
116	Swarg Ashram Drain,Rishikesh	D	UT	No	NA	NA	0
117	Triveni Drain/Saraswati Nala,Rishikesh	S	T	No	NA	NA	0
118	Lakkar Ghat STP Drain,Rishikesh	SO	BOD <10 mg/l	No	NA	NA	0
119	IDPL STP Drain,Rishikesh	SO	BOD >10 mg/l	No	40	190	230
120	PWD nala,Rishikesh	S	T	No	NA	NA	0
121	Bangali Basti Nala,Rishikesh	S	T	No	NA	NA	0
122	Sai Ghat Nala,Rishikesh	S	UT	No	40	190	230
123	.Jagjeetpur STP Drain,Haridwar	SO	BOD <10 mg/l	No	NA	NA	0
124	Kassavan Drain,Haridwar	S	T	No	NA	NA	0
125	Pandey Wala Drain,Haridwar	S	T	No	NA	NA	0
126	.Matra Sadan Drain,Haridwar	S	T	No	NA	NA	0
127	Rawlirao Drain,Haridwar	S	UT	No	40	190	230
128	Loknath Nala,Haridwar	S	T	No	NA	NA	0
129	Saptsarovar Nala,Haridwar	S	T	No	NA	NA	0
130	Bheemgoda Nala,Haridwar	S	T	No	NA	NA	0
131	Karoli Nala,Haridwar	S	T	No	NA	NA	0
132	Railway Nala,Haridwar	S	T	No	NA	NA	0
133	Karnwal Nala,Haridwar	S	T	No	NA	NA	0
134	Kangra Mandir Nala,Haridwar	S	T	No	NA	NA	0
135	Nai Sota Nala,Haridwar	S	T	No	NA	NA	0
136	Nago ki Haweli Nala,Haridwar	S	T	No	NA	NA	0
137	Kushaghat Nala,Haridwar	S	T	No	NA	NA	0
138	Laltarao Nala,Haridwar	S	T	No	NA	NA	0
139	Mayapur Nala,Haridwar	S	T	No	NA	NA	0
140	PWD Nala & Tanki No.-6 Nala,Haridwar	S	T	No	NA	NA	0
141	Devpura Nala,Haridwar	S	T	No	NA	NA	0
142	Awass Vikas Nala,Haridwar	S	T	No	NA	NA	0
143	Lal Mandir Nala,Haridwar	S	T	No	NA	NA	0
144	Latowali Nala,Haridwar	S	T	No	NA	NA	0
145	Kasai Nala,Haridwar	S	NI	NI	40	190	230
146	Suryodya Nala*,Haridwar	S	T	No	NA	NA	0

147	Ramrakha Park Nala,Haridwar	S	UT	No	40	190	230
148	Nala Saperabasti,Raiwala	S	UT	No	40	190	230
149	Nala near BSF Camp,Raiwala	S	UT	No	40	190	230
150	Rispana,Dehradun	S	UT	No	40	190	230
151	Bindal,Dehradun	S	UT	No	40	190	230
152	Lakshar Drain,Laksar (Haridwar)	S	UT	No	40	190	230
153	Drain No. 1,Kichha (Haldwani)	S	UT	No	40	190	230
154	Badi Mohalla,Kichha (Haldwani)	S	UT	No	40	190	230
155	Bankhandi Mandir Nala (Left),Kichha (Haldwani)	S	UT	No	40	190	230
156	Bankhandi Mandir Nala (Right),Kichha (Haldwani)	S	UT	No	40	190	230
157	Shiv Mandir wala Nala (Left),Kichha (Haldwani)	S	UT	No	40	190	230
158	Shiv Mandir wala Nala (Right),Kichha (Haldwani)	S	UT	No	40	190	230
159	Belijudi Nala,Kashipur	S	UT	No	40	190	230
160	Kalash Mandap Nala,Kashipur	S	UT	No	40	190	230
161	Laxmipur minor Nala,Kashipur	S	UT	No	40	190	230
162	Gabia Nala,Kashipur	S	UT	No	40	190	230
163	Ice Factory Nala,Kashipur	S	UT	No	40	190	230
164	Mukundpur Nala,Kashipur	S	UT	No	40	190	230
165	Ghoga Nala,Kashipur	S	UT	No	40	190	230
166	Ukrouli drain,Sitarganj	S	UT	No	40	190	230
<b>Amount in Lakh Rs.</b>					<b>1440</b>	<b>7030</b>	<b>8470</b>
<b>Total Amounts in Lakh (Rs.)</b>					<b>8470</b>		

\* Drain list is provided by State Authorities (UKPCB, UK Jal Sansthan, UK Pey Jal Nigam etc.)

Abbreviation: S-Sewage, SW- Storm water, D- Dry, SO- STP Outlet, NI- No Information, NA- Not Applicable

Calculation of EC for under-construction/trial/not completed/non-operational/proposed STPs in Uttarakhand (Febraury 2022)											
S.No.	Name of STP	Physical Status	No. of STPs	Design ed Capacity (MLD)	Ganga front Town	Technology	STP operati ng agency	Operational Status		EC calculate d @Rs. 10 Lakh per month (Duratio n 01.07.20 20 to 31.1.202 2)	EC calculate d @Rs. 10 lakh per month (Duratio n 01.07.20 20 to 31.1.202 2)
								As on 30.6.2020	As on 31.1.2022		
1	Gangotri	Commision ed	1	1	Gangotri	SBR	UKPJN	Operation al	Operation al	No	
2	Badrinath 1.0 MLD STP	Commision ed	1	1	Badrinath	SBR	UKPJN	Operation al	Non - Operation al	No	
3	Badrinath 0.01MLD STP	Commision ed	1	0.01	Badrinath	MBBR	UKPJN	Operation al	Operation al	No	
4	Badrinath 0.26 MLD STP	Commision ed	1	0.26	Badrinath	SBR	UKPJN	Operation al	Non - Operation al	No	
5	Old Suspension bridge	Commision ed	1	0.05	Chamoli-Gopeshwa r	Electrogulation	UKJS	Operation al	Operation al	No	

6	Chamoli Ghat	Commision ed	1	0.76	Chamoli-Gopeshwar	Electrogulation	UKJS	Operational	Operational	No	
7	Vivekanand Colony STP (Leesa Bend)	Commision ed	1	1.19	Chamoli-Gopeshwar	Electrogulation	UKJS	Operational	Operational	No	
8	Pokhri Bend STP	Commision ed	1	1.25	Chamoli-Gopeshwar	Electrocoagulation	UKJS	Operational	Operational	No	
9	Deen Dayal Uppadyay Park	Commision ed	1	1.12	Chamoli-Gopeshwar	Electrocoagulation	UKJS	Operational	Operational	No	
10	Joshimath 1.08 MLD	Commision ed	1	1.08	Joshimath	SBR	UKJS	Operational	Operational	No	
11	Forest Nala STP	Commision ed	1	0.1	Nandprayag	Electro-coagulation (Physioc-Chemical)	UKJS	Operational	Operational	No	
12	Sangam Nala STP	Commision ed	1	0.05	Nandprayag	Electro-coagulation (Physioc-Chemical)	UKJS	Operational	Operational	No	
13	Near Police Chowki STP 01	Commision ed	1	0.05	Karanprayag	Electro-coagulation (Physioc-Chemical)	UKJS	Operational	Operational	No	

14	Old Bridge STP 02	Commision ed	1	0.1	Karanpray ag	Electro-coagulation (Physioc-Chemical)	UKPJN	Operation al	Operation al	No	
15	Near Ward 1 & 3 STP 05	Commision ed	1	0.1	Karanpray ag	Electro-coagulation (Physioc-Chemical)	UKPJN	Operation al	Operation al	No	
16	BRO Bridge STP 04	Commision ed	1	0.05	Karanpray ag	Elcetrocoagulat ion	UKPJN	Operation al	Non-operation al	Yes	190
17	Subhash Nagar STP 03	Commision ed	1	0.05	Karanpray ag	Electrocogulati on with polymer dosing	UKJS	Operation al	Operation al	No	
18	Near SBI Bank STP	Commision ed	1	0.1	Rudrapray ag	Electro-coagulation (Physioc-Chemical)	UKPJN	Operation al	Operation al	No	
19	Near Dart Pull STP	Commision ed	1	0.075	Rudrapray ag	Electro-coagulation (Physioc-Chemical)	UKPJN	Operation al	Operation al	No	
20	Army Bend (Rudra Complex) STP 02	Commision ed	1	0.1	Rudrapray ag	Electro-coagulation (Physioc-Chemical)	UKPJN	Operation al	Operation al	No	



21	Anoop Negi Memorial School STP	Commision ed	1	0.075	Rudrapray ag	Electro-coagulation (Physioc-Chemical)	UKPJN	Operation al	Non-operation al	No	
22	Near Steel Bridge	Commision ed	1	0.125	Rudrapray ag	Electrocogulati on with polymer dosing	UKJS	Operation al	Operation al	No	
23	Baleni Road	Commision ed	1	0.05	Rudrapray ag	Electrocoagulat io	UKPJN	Operation al	Operation al	No	
24	Gyansu	Commision ed	1	2	Uttarkashi	MBBR	UJS	Operation al	Operation al	No	
25	Tekla STP	Commision ed	1	0.03	Uttarkashi	Biodigester	UKPJN	Operation al	Operation al	No	
26	Tehri	Commision ed	1	5	Tehri	ASP	UKJS	Operation al	Operation al	No	
27	0.075 MLD STP Srikot	Commision ed	1	0.075	Srikot	Modified MBBR	UKPJN	Operation al	Operation al	No	
28	0.05 MLD STP Srikot	Commision ed	1	0.05	Srikot	Modified MBBR	UKPJN	Operation al	Operation al	No	
29	Srinagar	Commision ed	1	3.5	Srinagar	FAB	UKJS	Operation al	Operation al	No	
30	Srinagar	Commision ed	1	1	Srinagar	SBR	UKJS	Operation al	Operation al	No	
31	Kirti Nagar	Commision ed	1	0.05	Kirti Nagar	MBBR	UKJS	Operation al	Operation al	No	
32	Kirtinagar	Commision ed	1	0.01	Kirti Nagar	FAB-PVA Gel Based	UKJS	Operation al	Operation al	No	

33	Bah Bazar Devprayag	Commision ed	1	1.49	Devprayag	SBT (Soil Bio-technology)	UKJS	Operation al	Operation al	No	
34	Sangam Bazar Devprayag	Commision ed	1	0.15	Devprayag	SBR	UKPJN	Operation al	Operation al	No	
35	Shanti Bazar Devprayag	Commision ed	1	0.075	Devprayag	SBR	UKPJN	Operation al	Operation al	No	
36	Tapovan	Commision ed	1	3.5	Rishikesh	SBR	UKJS	Operation al	Operation al	No	
37	Lakkarghat, Rishikesh	Commision ed	1	26	Rishikesh	SBR	UKPJN	Operation al	Operation al	No	
38	Muni ki Reti	Commision ed	1	5	Rishikesh	MBBR	UKPJN	Operation al	Operation al	No	
39	Chandreshwar STP	Commision ed	1	7.5	Rishikesh	MBBR	UKPJN	Operation al	Operation al	No	
40	Swarg Ashram Rishikesh	Commision ed	1	3	Rishikesh	SBR	UKPJN	Operation al	Operation al	No	
41	Rishikesh, IDPL	Commision ed	1	14	Rishikesh	ASP	IDPL	Operation al	Operation al	No	
42	Jagjeetpur, Haridwar (27 MLD)	Commision ed	1	27	Haridwar	SBR	UKJS	Operation al	Operation al	No	
43	Jagjeetpur Haridwar (68 MLD)	Commision ed	1	68	Haridwar	SBR	UKJS	Operation al	Operation al	No	
44	Jagjeetpur, Haridwar (18 MLD)	Commision ed	1	18	Haridwar	ASP	UKJS	Operation al	Operation al	No	
45	Sarai, Jawalapur STP (14 MLD)	Commision ed	1	14	Haridwar	SBR	UKPJN	Operation al	Operation al	No	
46	Sarai, Jawalapur STP	Commision ed	1	18	Haridwar	SBR	UKJS	Operation al	Operation al	No	

47	Old Mothrowala	Commision ed	1	20	Dehradun	SBR	UKPJN	Operation al	Operation al	No	
48	New Mothrowala	Commision ed	1	20	Dehradun	SBR	UKJS	Operation al	Operation al	No	
49	Kargi	Commision ed	1	68	Dehradun	SBR	UKJS	Operation al	Operation al	No	
50	Jakhan	Commision ed	1	1	Dehradun	SBR	UKJS	Operation al	Operation al	No	
51	Salawala	Commision ed	1	0.71	Dehradun	SBR	UKJS	Operation al	Operation al	No	
52	Vijay Colony	Commision ed	1	0.42	Dehradun	SBR	UKJS	Operation al	Operation al	No	
53	Indira Nagar	Commision ed	1	5	Dehradun	SBR	UKJS	Operation al	Operation al	No	
54	Marwari	Non-commision ed	1	2.7	Joshimath	NA	UKPJN	Under constructi on	Under constructi on	Yes	190
55	Kolagarh	Non-commision ed	1	3	Dehradun	NA	UKPJN	Under constructi on	Under constructi on	Yes	190
56	Kulari Sarai	Commision ed	1	0.9	Mussoorie	NA	UJS	Operation al	No informatio n	No	
57	Landaur North	Commision ed	1	0.8	Mussoorie	NA	UJS	Operation al	No informatio n	No	
58	Landaur South	Commision ed	1	1.3	Mussoorie	NA	UJS	Operation al	No informatio n	No	

59	Bhatta Fall	Commision ed	1	3.12	Mussoorie	NA	UJS	Operational	No information	No	
60	Happy Vally	Commision ed	1	1.2	Mussoorie	NA	UJS	Operational	No information	No	
61	Harinagar	Commision ed	1	0.45	Nanital	NA	UJS	Operational	No information	No	
62	Krishnapur	Commision ed	1	0.8	Nanital	NA	UJS	Operational	No information	No	
63	Roosi	Commision ed	1	10	Nanital	NA	UJS	Operational	No information	No	
64	Bhimtal	Commision ed	1	1.25	Bhimtal	NA	UJS	Operational	No information	No	
65	Bakh, Almora	Commision ed	1	2	Almora	NA	UJS	Operational	No information	No	
66	Pithoragarh Z-1	Commision ed	1	5	Pithoragarh	NA	UKPJN	Operational	No information	No	
67	Pithoragarh Z-2	Commision ed	1	1.25	Pithoragarh	NA	UKPJN	Operational	No information	No	

68	Ramnagar STP-1	Non-commissioned	1	1.5	Ramanagar	NA	UKPJN	Under Trial from Jan 2021	No information	Yes	190
69	Ramnagar STP-2	Non-commissioned	1	7	Ramanagar	NA	UKPJN	Under construction	No information	Yes	190
70	Indira Nagar	Non-commissioned	1	28	Haldwani	NA	UKPJN	Under construction	No information	Yes	190
71	Kashipur	Non-commissioned	1	18	Kashipur	NA	UKPJN	Under construction	No information	Yes	190
72	Narayan Nagar	Non-commissioned	1	0.45	Nanital	NA	UKPJN	Under construction	No information	Yes	190
73	Mussorie STP 1	Non-commissioned	1	0.7	Mussoorie	NA	NA	Proposed	No information	Yes	190
74	Mussorie STP 2	Non-commissioned	1	1.1	Mussoorie	NA	NA	Proposed	No information	Yes	190
75	Mussorie STP 3	Non-commissioned	1	0.7	Mussoorie	NA	NA	Proposed	No information	Yes	190
76	Mussorie STP 4	Non-commissioned	1	0.7	Mussoorie	NA	NA	Proposed	No information	Yes	190

77	Mussorie STP 5	Non-commissioned	1	0.05	Mussoorie	NA	NA	Proposed	No information	Yes	190
78	Kashipur	Non-commissioned	1	10	Kashipur	NA	NA	DPR Phase	No information	Yes	190
79	Bazpur	Non-commissioned	1	8.5	Kashipur	NA	NA	DPR Phase	No information	Yes	190
80	Mukandpur	Non-commissioned	1	0.31	Kashipur	NA	NA	DPR Phase	No information	Yes	190
81	Beljuri	Non-commissioned	1	0.31	Kashipur	NA	NA	DPR Phase	No information	Yes	190
82	Gulariya	Non-commissioned	1	0.14	Kashipur	NA	NA	DPR Phase	No information	Yes	190
83	Jaspur Khurd	Non-commissioned	1	1.55	Kashipur	NA	NA	DPR Phase	No information	Yes	190
84	Hempur Ismail	Non-commissioned	1	0.7	Kashipur	NA	NA	DPR Phase	No information	Yes	190
85	Sitarganj	Non-commissioned	1	2	Sitarganj	NA	NA	DPR Phase	No information	Yes	190

86	Kiccha	Non-commissioned	1	2	Kiccha	NA	NA	DPR Phase	No information	Yes	190
87	Rudrapur	Non-commissioned	1	26	Rudrapur	NA	NA	DPR Phase	No information	Yes	190
88	Rusi Village	Non-commissioned	1	18	Nanital	NA	NA	DPR Phase	No information	Yes	190
89	Rudrapur	Non-commissioned	1	18	Rudrapur	NA	NA	DPR Phase	No information	Yes	190
Abbreviations :											
UKPJN: Uttarakhan Pey Jal Nigam,											
UJS: Uttarakhand Jal Sansthan											
ASP - Activated Sludge Process											
FAB - Fluidised Aerobic Bio-Reactor											
MBBR - Mixed Bed Biofilm Reactor											
SBR - Sequence Batch Reactor											
SBT - Soil Bio technology											
NA - Not Available											

**SUMMARY OF UTTAR PRADESH DRAINS FOR EC CALCULATION**

<b>EC Calculation Period</b>		<b>01.11.2019 to 30.06.2020</b>	<b>01.07.2020 to 31.01.2022</b>
1. Drains discharging into River Ganga and its tributaries	:	333	333
2. Tapped Drains	:	69	69
3. Untapped Drains	:	264	264
4. Untapped Drains not considered for EC (Dry, STP Outlet, 2 <sup>nd</sup> Order drain, Canal)	:	44	44
5. Drains where interim measure taken during 01.11.2019 to 30.06.2020	:	00	-
6. No. of untapped drains considered for EC calculation	:	220	220
7. Calculated EC = No. of drains × @ 05 (01.11.2019 to 30.06.2020) and 10 (01.07.2020 to 31.01.2022) Lakhs/Month/Drain	:	220 Drains x Rs.5 Lakhs x 08 Months = Rs.8,800 Lakhs	220 Drains x Rs.10 Lakhs x 19 Months = Rs. 41,800 Lakhs

**\*\* Total EC from 01.11.2019 to 31.01.2022 = Rs (8800+41800) Lakhs = Rs 50,600 Lakhs**

**Note-**

- a) Relevant list of drains along with EC calculation is enclosed.
- b) Discrepancies, if any regarding drains information and EC calculation may kindly be communicated to CPCB within 7 days.



**SUMMARY OF UTTAR PRADESH STPs FOR EC CALCULATION**

**EC Calculation Period: 01.07.2020 to 31.01.2022**

<b>1. Total no. of STPs</b>	<b>:</b>	<b>171</b>
<b>2. Operational STPs</b>	<b>:</b>	<b>103</b>
<b>3. Non-operational STPs</b>	<b>:</b>	<b>04</b>
<b>4. Under Construction/ under-trial STPs</b>	<b>:</b>	<b>43</b>
<b>5. Under Tendering/DPR/ Proposed STPs</b>	<b>:</b>	<b>21</b>
<b>6. No. of STPs to be considered for EC calculation (Sl. No. 3+4+5)</b>	<b>:</b>	<b>68 (04+43+21)</b>
<b>7. Calculated EC = No. of STPs× @10 lakhs/month/STP (Since 01.07.2020 to 31.01.2022)</b>	<b>:</b>	<b>68 STPs x 10 Lakhs x 19 months = Rs. 12920 lakhs</b>

**Note:**

- a) Relevant list of STPs is enclosed.
- b) EC may be deposited in favour of CPCB, Account no. 532702050000164 (Bank: Union of India, I.P. Extension Branch, Vikas Marg Extension, Delhi, IFSC; UBIN0553271) within one month from the date of issue of this letter as per Hon'ble NGT order.

<b>Status of Drains for EC Calculation as on 31.01.2022, Uttar Pradesh</b>							
<b>Sr. No</b>	<b>Drains</b>	<b>Status of Drain (S-Sewage, SO-Storm water, D-Dry, SO- STP Outlet,2nd OD-2nd Order drain, C-Canal)</b>	<b>Tapping Status (T-Tapped/ UT-Untapped/NI- No Information)</b>	<b>Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)</b>	<b>EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)</b>	<b>EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)</b>	<b>Total EC Calculated (in Lakhs)</b>
1	Hemraj Drain, Bijnor	S	UT	No	40	190	230
2	Chhoiya Drain, Bijnor	S	UT	No	40	190	230
3	Bagad River, Gajrola	S	UT	No	40	190	230
4	Garh Drain, Garh	S	UT	No	40	190	230
5	Fuldhera Drain, Garh	D	UT	No	NA	NA	0
6	Anupshahar STP Drain-1, Anupshahar	S	UT	No	40	190	230
7	Anupshahar STP Drain-2, Anupshahar	SO	UT	No	NA	NA	0
8	Rampur Drain, Rampur	S	UT	No	40	190	230
9	Punsi Drain, Seohara	S	UT	No	40	190	230
10	Vivekanand drain left, Moradabad	D	UT	No	NA	NA	0
11	Nawabpura Drain1, Moradabad	S	T	No	NA	NA	0
12	Nawabpura Drain2, Moradabad	S	T	No	NA	NA	0
13	Vivekanand drain right, Moradabad	S	UT	No	40	190	230
14	Moksh Dham drain, Moradabad	S	UT	No	40	190	230
15	TDI City drain, Moradabad	S	UT	No	40	190	230
16	MIT drain, Moradabad	S	UT	No	40	190	230
17	Chakkar Ka Milak drain, Moradabad	S	UT	No	40	190	230
18	Jigar Colony drain, Moradabad	S	T	No	NA	NA	0
19	Jhabbu Ka Nala, Moradabad	S	UT	No	40	190	230
20	Barbalan Drain, Moradabad	S	T	No	NA	NA	0
21	Kudaghar Drain, Moradabad	S	T	No	NA	NA	0
22	Jama Masjid Left Drain, Moradabad	S	T	No	NA	NA	0
23	Jama Masjid Right Drain, Moradabad	S	T	No	NA	NA	0
24	Ghosiyar Drain-, Moradabad	S	T	No	NA	NA	0
25	Lalbagh Drain, Moradabad	S	T	No	NA	NA	0
26	Daheria drain, Moradabad	S	UT	No	40	190	230

27	Kathghar Railway St. drain, Moradabad	S	UT	No	40	190	230
28	Prabhat nagar drain, Moradabad	S	UT	No	40	190	230
29	Karula drain, Moradabad	S	UT	No	40	190	230
30	Sugar mill Nalla, Khatauli	S	UT	No	40	190	230
31	Saini Drain, Meerut	S	UT	No	40	190	230
32	AbuNallah-1, Meerut	S	UT	No	40	190	230
33	AbuNallah-2, Meerut	S	UT	No	40	190	230
34	Slaughter House/Odean Nallah, Meerut	S	UT	No	40	190	230
35	Chhoiya Drain, Hapur	S	UT	No	40	190	230
36	Hapur Drain, Hapur	S	UT	No	40	190	230
37	Hapur City Drain, Hapur	S	UT	No	40	190	230
38	Kadarabad Drain, Modinagar	S	UT	No	40	190	230
39	Gulaothi Drain, Gulaothi	S	UT	No	40	190	230
40	Maman Road Nalla (Bulandshahar 1), Bulandshahar	S	UT	No	40	190	230
41	DM Colony Drain, Bulandshahar	S	UT	No	40	190	230
42	Aadil Nala, Bulandshahar	S	UT	No	40	190	230
43	Chandbhari Nala (Bulandshahar 2), Bulandshahar	S	UT	No	40	190	230
44	Cheel ghat, Bulandshahar	S	UT	No	40	190	230
45	Nishal Ghat Drain, Bulandshahar	S	UT	No	40	190	230
46	Kasai Bada/ Adil Nagar, Bulandshahar	S	UT	No	40	190	230
47	Faisalabad/ Bridge Dhameda, Bulandshahar	S	UT	No	40	190	230
48	Behind Shanidev Mandir, Bulandshahar	S	UT	No	40	190	230
49	Devipura, Bulandshahar	S	UT	No	40	190	230
50	Behind Chamunda Mandir, Bulandshahar	S	UT	No	40	190	230
51	Neem Nala, Kasganj	S	UT	No	40	190	230
52	Kasganj Drain, Kasganj	S	UT	No	40	190	230
53	Bhairoghat drain/Tokaghat Nala, Farrukhabad	S	UT	No	40	190	230
54	Dhinapur drain, Farrukhabad	S	UT	No	40	190	230
55	Hathikhana Nala-Fatehgarh, Farrukhabad	S	UT	No	40	190	230
56	Bargadiya Ghat drain, Farrukhabad	S	UT	No	40	190	230
57	Cantt Nalla, Farrukhabad	S	UT	No	40	190	230

58	Permiya Nala, Kanpur	S	UT	No	40	190	230
59	Ranighat drain, Kanpur	S	UT	No	40	190	230
60	Sisamau Nala, Kanpur	S	T	No	NA	NA	0
61	TEFCO Nala, Kanpur	S	T	No	NA	NA	0
62	Parmath drain, Kanpur	S	T	No	NA	NA	0
63	Muir drain, Kanpur	S	UT	No	40	190	230
64	Police Line drain, Kanpur	S	T	No	NA	NA	0
65	Jail drain, Kanpur	S	T	No	NA	NA	0
66	Golaghat Nala, Kanpur	S	UT	No	40	190	230
67	Bhagwatdas Nala/Guptarghat Nala, Kanpur	S	UT	No	40	190	230
68	Satti Chaura, Kanpur	S	UT	No	40	190	230
69	Dabka Nalla-1, Kanpur	S	T	No	NA	NA	0
70	Dabka Nalla-2, Kanpur	S	T	No	NA	NA	0
71	Dabka Nalla-3, Kanpur	S	T	No	NA	NA	0
72	Shetla Bazar, Kanpur	S	UT	No	40	190	230
73	Budhiyaghat Drain, Kanpur	S	T	No	NA	NA	0
74	Wazidpur Nalla, Kanpur	S	T	No	NA	NA	0
75	Airforce Nala, Kanpur	S	T	No	NA	NA	0
76	City Jail/Dakary Drain, Unnao	S	UT	No	40	190	230
77	Loni Drain, Unnao	S	UT	No	40	190	230
78	Ahiyari/ NTPC drain, Raebareli	S	UT	No	40	190	230
79	Rasulabad Drain-1, Prayagraj	S	UT	No	40	190	230
80	Rasulabad Drain-2, Prayagraj	S	T	No	NA	NA	0
81	Rasulabad Drain-3, Prayagraj	S	T	No	NA	NA	0
82	Rasulabad Drain-4, Prayagraj	S	UT	No	40	190	230
83	Sadananda Ashram Drain, Prayagraj	S	UT	No	40	190	230
84	Nehru Drain, Prayagraj	S	UT	No	40	190	230
85	Kodar Drain, Prayagraj	S	UT	No	40	190	230
86	Pongaghat Drain, Prayagraj	S	T	No	NA	NA	0
87	Solari Drain, Prayagraj	S	UT	No	40	190	230
88	Mavaiya Drain, Prayagraj	S	UT	No	40	190	230
89	Chuhara Mandir Drain-1, Prayagraj	S	T	No	NA	NA	0
90	Chuhara Mandir Drain-2, Prayagraj	S	UT	No	40	190	230

91	Mehndauri Drain, Prayagraj	S	UT	No	40	190	230
92	Jhusi Drain--, Prayagraj	S	UT	No	40	190	230
93	Chhatnag Drain -, Prayagraj	S	UT	No	40	190	230
94	Mannaiya/Muglaha Drain, Prayagraj	S	UT	No	40	190	230
95	Ghore Saheed Drain, Mirzapur	S	UT	No	40	190	230
96	Khandwa Drain, Mirzapur	S	UT	No	40	190	230
97	Chorwa Drain, Mirzapur	S	UT	No	40	190	230
98	Chunar Tikaur Drain, Chunar/Mirzapur	S	UT	No	40	190	230
99	Nagwa/ Asi Drain, Varanasi	S	UT	No	40	190	230
100	Ramnagar Drain, Varanasi	S	UT	No	40	190	230
101	Varuna Drain, Varanasi	S	UT	No	40	190	230
102	Shivala Drain, Varanasi	S	T	No	NA	NA	0
103	Khirkiya/ Rajghat Nala, Varanasi	S	UT	No	40	190	230
104	Mugal Sari/ Local/ Ganda Nala, Chandauli	S	UT	No	40	190	230
105	Industrial Drain, Ghazipur	S	UT	No	40	190	230
106	Devraniya Drain, Bareilly	S	UT	No	40	190	230
107	Chawari/Chaubari Drain, Bareilly	S	UT	No	40	190	230
108	Nakatiya Drain, Bareilly	S	UT	No	40	190	230
109	Patta Nala, Kannauj	S	UT	No	40	190	230
110	Adanga Nalla, Kannauj	S	T	No	NA	NA	0
111	Tammi Nalla, Kannauj	S	UT	No	40	190	230
112	Panki Thermal Power Plant, Drain, Kanpur	S	UT	No	40	190	230
113	ICI Drain-I, Kanpur	S	UT	No	40	190	230
114	Ganda Nalla, Kanpur	S	UT	No	40	190	230
115	COD Nalla, Kanpur	S	T	No	NA	NA	0
116	Halwa Khanda Nalla, Kanpur	S	UT	No	40	190	230
117	Ratanpur Nalla, Kanpur	S	UT	No	40	190	230
118	Arail Drain -, Prayagraj	S	UT	No	40	190	230
119	Sasurkhaderi Drain, Prayagraj	S	UT	No	40	190	230
120	Chauri Drain, Bhadohi	S	UT	No	40	190	230
121	Barbaspur Drain, Bhadohi	S	UT	No	40	190	230
122	Lohandi Drain, Lohandi/Mirzapur	S	UT	No	40	190	230
123	Patengra Drain, Mirzapur/Chunar	S	UT	No	40	190	230

124	Malhaiya Drain, Mirzapur/Chunar	S	UT	No	40	190	230
125	Parashuram ghat, Mirzapur/Chunar	S	UT	No	40	190	230
126	Gangeshwar Nishad Park, Mirzapur/Chunar	S	UT	No	40	190	230
127	Post Office South Drain, Mirzapur/Chunar	D	UT	No	NA	NA	0
128	Post Office North Drain, Mirzapur/Chunar	D	UT	No	NA	NA	0
129	Santoshi Mata Mandir, Mirzapur/Chunar	D	UT	No	NA	NA	0
130	Chunar Tekur North Drain, Mirzapur/Chunar	S	UT	No	40	190	230
131	Bhiamganj West Drain, Mirzapur/Chunar	S	UT	No	40	190	230
132	Bhiamganj East Drain, Mirzapur/Chunar	D	UT	No	NA	NA	0
133	Dargah Sharif Drain, Mirzapur/Chunar	S	UT	No	40	190	230
134	Tammalganj Drain, Mirzapur/Chunar	D	UT	No	NA	NA	0
135	Gundara Drain, Mirzapur/Chunar	S	T	No	NA	NA	0
136	Balughat Pakka Drain, Mirzapur/Chunar	S	T	No	NA	NA	0
137	Balughat Kaccha Drain, Mirzapur/Chunar	S	UT	No	40	190	230
138	Deewanghat Old Drain, Mirzapur/Chunar	S	T	No	NA	NA	0
139	Deewan ghat New Drain, Mirzapur/Chunar	2nd OD	UT	No	NA	NA	0
140	Baswariya Drain, Mirzapur/Chunar	S	UT	No	40	190	230
141	Narghat Drain, Mirzapur/Chunar	S	T	No	NA	NA	0
142	Koniya ghat Drain, Mirzapur/Chunar	S	T	No	NA	NA	0
143	Sundarghat Drain, Mirzapur/Chunar	S	T	No	NA	NA	0
144	Oliyar Drain, Mirzapur/Chunar	S	T	No	NA	NA	0
145	Kachahari Drain, Mirzapur/Chunar	S	T	No	NA	NA	0
146	Morchaghar Draidewann, Mirzapur/Chunar	S	UT	No	40	190	230
147	Irrigation Colony Drain, Mirzapur/Chunar	S	UT	No	40	190	230
148	District Judge Drain, Mirzapur/Chunar	2nd OD	UT	No	NA	NA	0
149	Barahimiliya Drain, Mirzapur/Chunar	S	UT	No	40	190	230
150	Public Club Drain, Mirzapur/Chunar	S	UT	No	40	190	230
151	Lift Canal Drain, Mirzapur/Chunar	S	NI	No	40	190	230
152	Hanuman Ghat Drain, Mirzapur/Chunar	S	UT	No	40	190	230
153	Balaji Temple Drain, Mirzapur/Chunar	S	UT	No	40	190	230
154	Bisunderpur Drain, Mirzapur/Chunar	S	UT	No	40	190	230
155	Kanshiram Awas Drain, Mirzapur/Chunar	S	UT	No	40	190	230
156	Chaura Mata Drain, Mirzapur/Chunar	D	UT	No	NA	NA	0

157	Balughat Drain, Chunar, Mirzapur/Chunar	S	UT	No	40	190	230
158	Belbeer Ghat Drain, Mirzapur/Chunar	S	UT	No	40	190	230
159	Bharatpur Trimohani, Chunar/ Mirzapur	S	UT	No	40	190	230
160	Bharatpur Kabristan Drain, Mirzapur	S	UT	No	40	190	230
161	Saiddupur Drain, Mirzapur	S	UT	No	40	190	230
162	Pashuchikitsalaya Drain, Mirzapur	S	UT	No	40	190	230
163	Nagar Plika Drain, Mirzapur	S	UT	No	40	190	230
164	Pared Ground Drain, Mirzapur	S	UT	No	40	190	230
165	Tekur Nagar Drain-1, Mirzapur	S	UT	No	40	190	230
166	Tekur Nagar Drain -2, Mirzapur	S	UT	No	40	190	230
167	Tekur Nagar Drain -3, Mirzapur	D	UT	No	NA	NA	0
168	Lalita Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
169	Jalasen Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
170	Manikarnika Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
171	Sankatha Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
172	Mehta Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
173	Ram Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
174	Panchganga, Varanasi/Ramnagar	S	T	No	NA	NA	0
175	Brahma Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
176	Lal Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
177	Trilochan Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
178	Bhaisasur Drain, Varanasi/Ramnagar	S	T	No	NA	NA	0
179	Baluaghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
180	Shakti Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
181	Salotri Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
182	Hanuman Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
183	Samne Ghat Drain, Varanasi/Ramnagar	S	UT	No	40	190	230
184	Nakhi Drain, Varanasi/Ramnagar	S	UT	No	40	190	230
185	Harishchandra Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
186	Mansarovar Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
187	Pandey Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
188	Dr. Rajender Prasad Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0
189	Meer Ghat, Varanasi/Ramnagar	S	T	No	NA	NA	0

190	Teliya Bag Drain, Varanasi/Ramnagar	S	UT	No	40	190	230
191	Railway Drain, Chandauli/ Mughalsarai	S	UT	No	40	190	230
192	Jauhanganj, Ghazipur/ Saidpur	S	UT	No	40	190	230
193	Rangmahal Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
194	Malhiya Basti, Ghazipur/ Saidpur	S	UT	No	40	190	230
195	Mahavir Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
196	Sangat Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
197	Pakka Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
198	Budhe Mahadev Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
199	Kot Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
200	Kanpuimai Drain, Ghazipur/ Saidpur	S	UT	No	40	190	230
201	Kankarwa, Ghazipur/ Saidpur	S	UT	No	40	190	230
202	Gorwa Drain, Ghazipur/ Saidpur	S	UT	No	40	190	230
203	Baba Mahadev(Adarsh Bazar Drain) and , Ghazipur/ Saidpur	S	UT	No	40	190	230
204	Bada Mahadeva (Gora Bazar) drain, Ghazipur/ Saidpur	S	UT	No	40	190	230
205	Pear Nagar, Ghazipur/ Saidpur	S	UT	No	40	190	230
206	Khirki Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
207	DM Banglo, Ghazipur/ Saidpur	S	UT	No	40	190	230
208	Afim Factory Colony, Ghazipur/ Saidpur	D	UT	No	NA	NA	0
209	Sai Mandir, Ghazipur/ Saidpur	2nd OD	UT	No	NA	NA	0
210	Naupura, Ghazipur/ Saidpur	2nd OD	UT	No	NA	NA	0
211	Dadri Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
212	Collector Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
213	Maksud Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
214	Gola Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
215	Stimer Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
216	Chetnat Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
217	Anzahi Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
218	Theri Bazar, Ghazipur/ Saidpur	S	UT	No	40	190	230
219	Posta Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
220	Mugalpura, Ghazipur/ Saidpur	S	UT	No	40	190	230
221	Budhava Mahadeva, Ghazipur/ Saidpur	S	UT	No	40	190	230



222	Rui Mandi Drain, Ghazipur/ Saidpur	S	UT	No	40	190	230
223	Samshan Ghat, Ghazipur/ Saidpur	S	UT	No	40	190	230
224	Mahala Basti, Ghazipur/ Saidpur	2nd OD	UT	No	NA	NA	0
225	Harizen Basti, Ghazipur/ Saidpur	S	UT	No	40	190	230
226	Katahal drain, Ballia	S	UT	No	40	190	230
227	Tambeshear Mandir to Mitthanpur, Fatehpur	S	UT	No	40	190	230
228	Navabag to Lodhiganj, Fatehpur	S	UT	No	40	190	230
229	Joniha Chauraha to Jhaupur, Fatehpur	S	UT	No	40	190	230
230	Padva Nala/(Muraibagh) Shankar Nagar, Dalmau/Raebareli	S	UT	No	40	190	230
231	Bada Math - Chhota Math ke bich ka Nala/(Sherandajpur), Dalmau/Raebareli	D	UT	No	NA	NA	0
232	Busda Ghat ka Nala/(Sherandajpur), Dalmau/Raebareli	D	UT	No	NA	NA	0
233	Shukla Ghat ka Nala/(Sherandajpur), Dalmau/Raebareli	D	UT	No	NA	NA	0
234	Pathvari Ghat ka Nala/(Tikaitganj), Dalmau/Raebareli	S	UT	No	40	190	230
235	Soarakh Ghat Muroop Nala/(Tikaitganj), Dalmau/Raebareli	S	UT	No	40	190	230
236	Muskatpal Nala, Dalmau/Raebareli	S	UT	No	40	190	230
237	Shivala Ghat Nala, Dalmau/Raebareli	S	T	No	NA	NA	0
238	Raja Tiloi Ghat Nala/Mo. sherndajpur(Deen shah Gaora Ghat), Dalmau/Raebareli	D	UT	No	NA	NA	0
239	Ganda Nala Raiyapur, Kunda/ Pratapgarh	C	UT	NI	NA	NA	0
240	Taar Nala Babaganj, Kunda/ Pratapgarh	S	UT	No	40	190	230
241	Ganda Nala Baraipur, Kunda/ Pratapgarh	C	UT	NI	NA	NA	0
242	Pakka Nala, Manikpur	S	UT	No	40	190	230
243	Raja Hela Nala, Manikpur	S	UT	No	40	190	230
244	Prathmik Vidyalaya, Manikpur	D	UT	No	NA	NA	0
245	Mallahan Tola, Manikpur	S	UT	No	40	190	230
246	Post office Nala, Manikpur	D	UT	No	NA	NA	0
247	Karela Bagh Drain, Prayagraj	S	UT	No	40	190	230
248	Main Ghaghar Nala, Prayagraj	S	UT	No	40	190	230

249	Ghaghar Nala 1-A / Sadiyapur Drain, Prayagraj	S	UT	No	40	190	230
250	Ghaghar Nala 1-A1, Prayagraj	S	UT	No	40	190	230
251	Ghaghar Nala 1-B, Prayagraj	S	UT	No	40	190	230
252	Dariyabad Kakahraghat Drain Meerapur, Prayagraj	D	UT	No	NA	NA	0
253	Dariyabad Pipalghat Drain, Prayagraj	D	UT	No	NA	NA	0
254	Dariyabad Jogighat Drain Meerapur, Prayagraj	D	UT	No	NA	NA	0
255	Chachar Nala, Prayagraj	D	UT	No	NA	NA	0
256	Emergency Outfall Drain, Prayagraj	D	UT	No	NA	NA	0
257	Drain at Gate No. 9, Prayagraj	D	UT	No	NA	NA	0
258	Drain at Gate No. 13, Prayagraj	D	UT	No	NA	NA	0
259	Fort Drain No. 1, Prayagraj	D	UT	No	NA	NA	0
260	Fort Drain No. 2, Prayagraj	S	UT	No	40	190	230
261	Morigate Nala, Prayagraj	S	T	No	NA	NA	0
262	Drains Of Daraganj Area, Prayagraj	S	T	No	NA	NA	0
263	Jondhwal drain / chuhara mandir -1, Prayagraj	S	T	No	NA	NA	0
264	Jondhwal Rasulabad Drain, Murdaghat (same as chuhara mandir-1), Prayagraj	S	T	No	NA	NA	0
265	Shankarghat Colony Drain (Near Phaphamau Bridge), Prayagraj	S	UT	No	40	190	230
266	Unchwagarhi Drain No. 1, Prayagraj	S	UT	No	40	190	230
267	Unchwagarhi Drain No. 2, Prayagraj	2nd OD	UT	No	NA	NA	0
268	Beligaon Drain, Prayagraj	S	UT	No	40	190	230
269	Mumfordganj Drain, Prayagraj	S	T	No	NA	NA	0
270	Shivkuti Drain No. 1, Prayagraj	S	UT	No	40	190	230
271	Shivkuti Drain No. 2, Prayagraj	2nd OD	UT	No	NA	NA	0
272	Shivkuti Drain No. 3, Prayagraj	S	UT	No	40	190	230
273	Shivkuti Drain No. 4, Prayagraj	S	UT	No	40	190	230
274	Shivkuti Drain No. 5, Prayagraj	S	UT	No	40	190	230
275	Shivkuti Drain No. 6, Prayagraj	2nd OD	UT	No	NA	NA	0
276	Shivkuti Drain No. 7 (East), Prayagraj	2nd OD	UT	No	NA	NA	0
277	Chilla Drain, Prayagraj	D	UT	No	NA	NA	0

278	Govindpur Colony Drain (Purani Basti), Prayagraj	2nd OD	UT	No	NA	NA	0
279	Govindpur Colony Drain No. 1, Prayagraj	2nd OD	UT	No	NA	NA	0
280	Govindpur Colony Drain No. 2, Prayagraj	2nd OD	UT	No	NA	NA	0
281	Govindpur Colony Drain No. 3, Prayagraj	2nd OD	UT	No	NA	NA	0
282	Govindpur Colony Drain No. 4, Prayagraj	2nd OD	UT	No	NA	NA	0
283	Allenganj Nala / Buxi Bund Nala, Prayagraj	S	T	No	NA	NA	0
284	Nehru Park Nala, Prayagraj	S	UT	No	40	190	230
285	Rasulabad Puccaghat Drain, Prayagraj	S	T	No	NA	NA	0
286	Mawaiya Drain, Prayagraj	S	NI	No	40	190	230
287	Mahewa Ghat Drain no. 1, Prayagraj	S	UT	No	40	190	230
288	Mahewa Ghat Drain no. 2, Prayagraj	D	UT	No	NA	NA	0
289	Arail Drain No. 2 (Kharkauni drain), Prayagraj	S	UT	No	40	190	230
290	Sachcha Baba Ashram Drain, Prayagraj	S	UT	No	40	190	230
291	A.D.A. Colony Nala / Jwaladevi, Prayagraj	S	UT	No	40	190	230
292	Jondhwal Ghat Drain/Chhuhara Mandir, Prayagraj	S	UT	No	40	190	230
293	Rajapur Nala, Prayagraj	S	UT	No	40	190	230
294	Tv Tower Nala, Prayagraj	S	UT	No	40	190	230
295	Sadar Bazar Nala, Prayagraj	S	UT	No	40	190	230
296	Muirabad (Ganesh Nagar) Nala, Prayagraj	S	UT	No	40	190	230
297	Nayapurwa Drain, Prayagraj	S	UT	No	40	190	230
298	Co-Operative Nala, Prayagraj	S	UT	No	40	190	230
299	Basna Nala , Prayagraj	S	UT	No	40	190	230
300	Shantipuram Nala, Prayagraj	2nd OD	UT	No	NA	NA	0
301	Indira Awas Nala / Jai Gurudev Ashram Nala, Prayagraj	S	UT	No	40	190	230
302	8 small drains at different locations in Jhushi area, Prayagraj	S	UT	No	40	190	230
303	Lotey Haren Nala /Chhatnag, Prayagraj	S	UT	No	40	190	230
304	Shastri Bridge Nala (03 small drains), Jhushi, Prayagraj	S	UT	No	40	190	230
305	Rajpura Nala, Bhadohi	S	NI	No	40	190	230
306	Mamdopur Nala, Bhadohi	S	UT	No	40	190	230

307	Nagarpur, Chunar	S	NI	No	40	190	230
308	Teakaur Nagarpur, Chunar	S	NI	No	40	190	230
309	Tekaur Basti South, Chunar	S	UT	No	40	190	230
310	Badali, Mirzapur	S	T	No	NA	NA	0
311	Rambhag Ghat Drain, Ramnagar/Varanasi	S	T	No	NA	NA	0
312	Teliya Drain, Varanasi	S	UT	No	40	190	230
313	Phulwariya Drain, Varanasi	S	UT	No	40	190	230
314	Sadar Bazar Drain, Varanasi	S	T	No	NA	NA	0
315	Raja Bazar Drain, Varanasi	S	T	No	NA	NA	0
316	Nakkhighat Drain, Varanasi	S	T	No	NA	NA	0
317	Narokhar Drain, Varanasi	S	UT	No	40	190	230
318	Sarang Talab Drain, Varanasi	S	UT	No	40	190	230
319	Nai Basti, Varanasi	S	UT	No	40	190	230
320	Central Jail Drain, Varanasi	S	UT	No	40	190	230
321	Ordely Bazar Drain, Varanasi	S	UT	No	40	190	230
322	Chamrautha Drain, Varanasi	S	UT	No	40	190	230
323	Khajury Colony Drain, Varanasi	S	UT	No	40	190	230
324	Banaras Drain No.-5, Varanasi	S	UT	No	40	190	230
325	Hukulganj Drain, Varanasi	S	UT	No	40	190	230
326	BIDA Drain	S	UT	No	40	190	230
327	Rooma Drain	S	UT	No	40	190	230
328	Bairagia Drain	S	UT	No	40	190	230
329	Shivpur Drain	S	UT	No	40	190	230
330	Rajghat Drain (Small)	S	UT	No	40	190	230
331	Gola Ghat Drain	S	T	No	NA	NA	0
332	Durga Drain/ Daniyal Drain/ Lohtha Drain*	S	UT	No	40	190	230
333	Purana Pul Drain	S	UT	No	40	190	230
<b>Amount in Lakhs (Rs.)</b>					<b>8800</b>	<b>41800</b>	<b>50600</b>
<b>Total Amounts in Lakh (Rs.)</b>					<b>50600</b>		

\* Drain list is provided by State Authorities

Abbreviation: S-Sewage, 2nd OD- 2nd order drain, D- Dry, SO- STP Outlet, C-Canal, NI- No Information, NA- Not Applicable

Calculation of EC for under-construction/trial /not-completed/non-operational/proposed STPs in Uttar Pradesh (February 2022)											
S.No	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated (Yes/No)	EC calculated @Rs. 10 lakh per month (Duration 01.07.2020 to 31.01.2022)
								As on 30.06.2020	As on 31.01.2022		
1	Bijnor	Commissioned	1	24	Bijnor	UASB	UPJN	Operational	Operational	No	
2	Brajghat STP	Commissioned	1	3	Garhmukteshwar	UASB	UPJN	Operational	Operational	No	
3	Garh STP	Commissioned	1	6	Garhmukteshwar	UASB	UPJN	Operational	Operational	No	
4	Narora NAPS Township STP	Commissioned	1	2.27	Narora	ASP	Narora Atomic Power Station (NAPS)	Operational	Operational	No	
5	Narora Town	Commissioned	1	4	Narora	SBR	UPJN	Operational	Operational	No	
6	1.5 MLD Anupsahar STP (Zone A)	Commissioned	1	1.5	Anupshahr	MBBR	UPJN	Operational	Operational	No	
7	0.81 MLD Anupsahar	Commissioned	1	0.81	Anupshahr	WSP	UPJN	Operational	Operational	No	

	STP (Zone A)											
8	1.75 MLD Anupsahar STP 2, Zone B	Commissioned	1	1.75	Anupshahr	WSP (5 WSP in series)	UPJN	Operational	Operational	No		
9	1 MLD Anupsahar STP 2, Zone B	Commissioned	1	1	Anupshahr	MBBR	UPJN	Operational	Operational	No		
10	2.7 MLD Fatehgarh	Commissioned	1	2.7	Farrukhabad	OP	UPJN	Operational	Operational	No		
11	Kannauj, Jalalpur Amra	Commissioned	1	13	Kannauj	SBR	UPJN	Operational	Operational	No		
12	Jajmau, Kanpur	Commissioned	1	130	Kanpur	ASP	UPJN	Operational	Operational	No		
13	Jajmau, Kanpur	Commissioned	1	43	Kanpur	ASP	UPJN	Operational	Operational	No		
14	Jajmau, Kanpur	Commissioned	1	5	Kanpur	UASB	UPJN	No information	Operational	No		
15	Bingawan STP, Kanpur	Commissioned	1	210	Kanpur	UASB	UPJN	No information	Operational	No		
16	Sajari STP, Kanpur	Commissioned	1	42	Kanpur	ASP	UPJN	No information	Operational	No		
17	Bithoor STP	Commissioned	1	0.08	Kanpur	Constructe d wetland	UPJN	No information	Operational	No		
18	32 KLD FSTP, Nandauli Village	Commissioned	1	0.032	Unnao	FSTP	NA	No information	Non-operational	Yes		190

19	Salori 29 MLD Prayagraj	Commissioned	1	29	Prayagraj	FAB	UPJN	Operational	Operational	No		
20	Salori (Bakshi Bandh) 14 MLD Prayagraj	Commissioned	1	14	Prayagraj	SBR	UPJN	Operational	Operational	No		
21	Rajapur, Prayagraj	Commissioned	1	60	Prayagraj	UASB	UPJN	Operational	Operational	No		
22	Pongaghat, Prayagraj	Commissioned	1	10	Prayagraj	Bio Tower & ASP	UPJN	Operational	Operational	No		
23	Kodra, Prayagraj	Commissioned	1	25	Prayagraj	Bio Tower & ASP	UPJN	Operational	Operational	No		
24	Naini Prayagraj	Commissioned	1	80	Prayagraj	ASP	UPJN	Operational	Operational	No		
25	Numayadahi STP, Prayagraj	Commissioned	1	50	Prayagraj	Bio tower & ASP	UPJN	Operational	Operational	No		
26	Mirzapur (Pakka Pokhra)	Commissioned	1	14	Mirzapur	UASB	UPJN	Operational	Operational	No		
27	Vindhayach al Taxi Stand,	Commissioned	1	4	Mirzapur	WSP/OP	UPJN	Operational	Operational	No		
28	Dinapur	Commissioned	1	80	Varanasi	TF & ASP	UPJN	Operational	Operational	No		
29	Dinapur	Commissioned	1	140	Varanasi	ASP	UPJN	Operational	Operational	No		
30	Bhagwanpur BHU	Commissioned	1	9.8	Varanasi	ASP	UPJN	Operational	Operational	No		
31	Goithaha	Commissioned	1	120	Varanasi	SBR	UPJN	Operational	Operational	No		
32	BLW ( former	Commissioned	1	12	Varanasi	ASP	BLW, Varanasi	Operational	Operational	No		

	known as DLW)											
33	10.445 MLD STP near Tixi Tempel / Etawah	Commissioned	1	10.445	Etawah	NA	Yamuna Pollution Control Unit, UP Jal Nigam, Agra	Operational	No information	No		
34	13.5MLD STP at Mauja Umrain / Etawah	Commissioned	1	13.5	Etawah	NA	Nagar Palika Parishad, Etawah	Operational	No information	No		
35	03 MLD STP / Firozabad	Commissioned	1	3	Firozabad	NA	Jal Kal	Operational	No information	No		
36	1.6 MLD Saifai/ Etawah	Commissioned	1	1.6	Etawah	NA	UPJN	Operational	No information	No		
37	23 MLD STP at Mauja Odenya, Padaria / Mainpuri	Commissioned	1	23.0	Mainpuri	NA	Nagar Palika Parishad	Operational	No information	No		
38	3.42 MLD Near Divyang kendra/ Karvi Chitrakoot town	Commissioned	1	3.42	Chitrakoot	NA	UPJN	Operational	No information	No		
39	S.T.P. (15 MLD), Jharkhandi, Maherwa ki Bari / Gorakhpur	Commissioned	1	15	Gorakhpur	NA	UPJN	Operational	No information	No		
40	S.T.P. (30MLD) Opp. Manyavar Kanshiram Shahri Garib Awas Yojna,	Commissioned	1	30	Gorakhpur	NA	UPJN	Operational	No information	No		



	Deoria bypass Road / Gorakhpur											
41	STP, Mahilpur Road / Saharanpur	Commissioned	1	38	Saharanpur	NA	Jal Kal	Operational	No information	No		
42	6.5 MLD Awas vikas Parishad STP / Lucknow	Commissioned	1	6.5	Lucknow	NA	U.P. Awas vikas Parishad	Operational	No information	No		
43	37.5 MLD Awas vikas Parishad STP / Lucknow	Commissioned	1	37.5	Lucknow	NA	U.P. Awas vikas Parishad	Operational	No information	No		
44	STP, Bharwara / Lucknow	Commissioned	1	345	Lucknow	NA	UPJN	Operational	No information	No		
45	STP, Daulatganj-1 / Lucknow	Commissioned	1	14	Lucknow	NA	UPJN	Operational	No information	No		
46	STP, Daulatganj-2 / Lucknow	Commissioned	1	42	Lucknow	NA	UPJN	Operational	No information	No		
47	56 MLD, Trans Hindon (Indirapuram), Ghaziabad	Commissioned	1	56	Ghaziabad	NA	Nagar Nigam	Operational	No information	No		
48	74 MLD, S.B.R., Indirapuram, Ghaziabad	Commissioned	1	74	Ghaziabad	NA	UPJN	Operational	No information	No		
49	56 MLD, Indirapuram, (GDA), Ghaziabad	Commissioned	1	56	Ghaziabad	NA	GDA	Operational	No information	No		
50	56 MLD, S.B.R., Dudahaida	Commissioned	1	56	Ghaziabad	NA	GDA	Operational	No information	No		

	Vijay Nagar, Ghaziabad											
51	56 MLD, S.B.R., Morty, Ghaziabad	Commissioned	1	56	Ghaziabad	NA	GDA	Operational	No information	No		
52	70 MLD, U.A.S.B.R. Dudahaida Vijay Nagar, Ghaziabad	Commissioned	1	70	Ghaziabad	NA	Nagar Nigam	Operational	No information	No		
53	3 MLD Pilkhaun / Ghaziabad	Commissioned	1	3	Ghaziabad	NA	UPJN	Operational	No information	No		
54	5 MLD Tronica City, Loni / Ghaziabad	Commissioned	1	5	Ghaziabad	NA	UPSIDC	Operational	No information	No		
55	56 MLD, S.B.R. Govindpuram, Ghaziabad	Commissioned	1	56	Ghaziabad	NA	GDA	Operational	No information	No		
56	78 MLD, Dhadhupura, Agra	Commissioned	1	78	Agra	NA	UPJN	Operational	No information	No		
57	2.25 MLD, Budi ka Nagla, Agra	Commissioned	1	2.25	Agra	NA	UPJN	Operational	No information	No		
58	10 MLD, Peelakhar, Agra	Commissioned	1	10	Agra	NA	UPJN	Operational	No information	No		
59	12 MLD, Devri Road, (Bhimnagri), Agra	Commissioned	1	12	Agra	NA	UPJN	Operational	No information	No		
60	14 MLD, Jaganpur, Sikandarpur, Agra	Commissioned	1	14	Agra	NA	UPJN	Operational	No information	No		

61	40 MLD, Sadarban, Bichhpuri, Agra	Commissioned	1	40	Agra	NA	UPJN	Operational	No information	No		
62	24 MLD, Dhadhupura (New), Agra	Commissioned	1	24	Agra	NA	UPJN	Operational	No information	No		
63	36 MLD Sadarwan (Bichpuri) New, Agra	Commissioned	1	36	Agra	NA	ADA	Operational	No information	No		
64	4.50 MLD, Kalindi Vihar, Agra	Commissioned	1	4.5	Agra	NA	ADA	Operational	No information	No		
65	03 MLD, Pandav Nagar, Meerut	Commissioned	1	3	Meerut	NA	MDA	Operational	No information	No		
66	07 MLD, Pallavpuram-1, Meerut	Commissioned	1	7	Meerut	NA	MDA	Operational	No information	No		
67	10 MLD, Lohiya Nagar, Meerut	Commissioned	1	10	Meerut	NA	MDA	Operational	No information	No		
68	15 MLD, Shatabdinagar, Meerut	Commissioned	1	15	Meerut	NA	MDA	Operational	No information	No		
69	11 MLD, Pallavpuram-2, Meerut	Commissioned	1	11	Meerut	NA	MDA	Operational	No information	No		
70	15 MLD, Vedvyaspuri Meerut	Commissioned	1	15	Meerut	NA	MDA	Operational	No information	No		
71	06 MLD, Rakshapuram, Meerut	Commissioned	1	6	Meerut	NA	MDA	Operational	No information	No		
72	06 MLD, Shradhapuri-1, Meerut	Commissioned	1	6	Meerut	NA	MDA	Operational	No information	No		

73	06 MLD Sainik Vihar, Meerut	Commissioned	1	6	Meerut	NA	MDA	Operational	No information	No		
74	5 MLD Modipuram Tiraha, Meerut	Commissioned	1	5	Meerut	NA	UPJN	Operational	No information	No		
75	07 MLD, Sports Goods Complex, Meerut	Commissioned	1	7	Meerut	NA	MDA	Operational	No information	No		
76	10 MLD, Ganga Nagar, Meerut	Commissioned	1	10	Meerut	NA	MDA	Operational	No information	No		
77	72 MLD Garh road (Jagriti vihar), Meerut	Commissioned	1	72	Meerut	NA	UPJN	Operational	No information	No		
78	06 MLD, Shradhapuri- Phase-2, Meerut	Commissioned	1	6	Meerut	NA	MDA	Operational	No information	No		
79	32.5 MLD Nagar Palika Parishad, Muzaffarnagar	Commissioned	1	32.5	Muzaffarnagar	NA	Nagar Palika Parishad, Muzaffarnag ar	Operational	No information	No		
80	12 MLD, Ayodhya	Commissioned	1	12	Ayodhya	NA	UPJN	Operational	No information	No		
81	13.59 MLD, Masani, Mathura	Commissioned	1	13.59	Mathura	NA	Nagar Palika Parishad	Operational	No information	No		
82	14.5 MLD, Trans-yamuna, Jamunapar, Mathura	Commissioned	1	14.5	Mathura	NA	Nagar Palika Parishad	Operational	No information	No		
83	08 MLD, Near 100 Bed Hospital Vrindavan, Mathura	Commissioned	1	8	Mathura	NA	UPJN	Operational	No information	No		

84	04 MLD, Vrindavan Near Pagal Baba Mandir, Mathura	Commissioned	1	4	Mathura	NA	Nagar Palika Parishad	Operational	No information	No		
85	16 MLD, Trans Yamuna, Laxmi Nagar, Mathura	Commissioned	1	16	Mathura	NA	UPJN	Operational	No information	No		
86	2.76 MLD Goverdhan, Mathura	Commissioned	1	2.76	Mathura	NA	Nagar Palika Parishad	Operational	No information	No		
87	33 MLD, Sector-54, Noida	Commissioned	1	33	Noida	NA	Noida Authority	Operational	No information	No		
88	25 MLD, Sector-50, Noida	Commissioned	1	25	Noida	NA	Noida Authority	Operational	No information	No		
89	35 MLD, Sector-123, Noida	Commissioned	1	35	Noida	NA	Noida Authority	Operational	No information	No		
90	50 MLD, Sector-168, Noida	Commissioned	1	50	Noida	NA	Noida Authority	Operational	No information	No		
91	2.0 MLD STP, Vill- Badalpur / Greater Noida	Commissioned	1	2	Noida	NA	Greater Noida Authority	Operational	No information	No		
92	ECO tech -2 / Greater Noida	Commissioned	1	15	Noida	NA	Greater Noida Authority	Operational	No information	No		
93	ECO tech -3 / Greater Noida	Commissioned	1	20	Noida	NA	Greater Noida Authority	Operational	No information	No		
94	137 MLD, Kasana, GreaterNoida	Commissioned	1	137	Noida	NA	Greater Noida Authority	Operational	No information	No		

95	34 MLD, Sector -50 Noida	Commissioned	1	34	Noida	NA	Noida Authority	Operational	No information	No		
96	54 MLD, Sector- 54, Noida	Commissioned	1	54	Noida	NA	Noida Authority	Operational	No information	No		
97	58 MLD Moradabad	Commissioned	1	58	Moradabad	NA	UPJN	Operational	No information	No		
98	15 MLD Pehrigaon / Rampur	Commissioned	1	15	Rampur	NA	UPJN	Operational	No information	No		
99	14 MLD Benzirpur/ Rampur	Commissioned	1	14	Rampur	NA	UPJN	Operational	No information	No		
100	5 MLD Rampur	Commissioned	1	5	Rampur	NA	UPJN	Operational	No information	No		
101	5 MLD Hathia Nala / Sultanpur	Commissioned	1	5	Sultanpur	NA	UPJN	Operational	No information	No		
102	56 MLD, Bapudham, Ghaziabad	Commissioned	1	56	Ghaziabad	NA	GDA	Operational	No information	No		
103	20 MLD Moradabad	Commissioned	1	20	Moradabad	NA	UPJN	Operational	No information	No		
104	Loni	Commissioned	1	30	Kanpur	NA	NA	Non operational	No information	Yes		190
105	Kanwara Road-Banda (Oxidation Pond)	Commissioned	1	4	Banda	NA	NA	Non operational	No- information	Yes		190
106	Chunar	Commissioned	1	0.01	Mirzapur	NA	NA	Under Constructio n	Non- operational	Yes		190
107	STP Farrukhaba d	Non Commisione d	1	0.032	Farrukhabad	NA	NA	Under Costruction	Under Costruction	Yes		190

108	STP Farrukhabad	Non Commissioned	1	39	Farrukhabad	NA	NA	No information	Proposed	Yes	190
109	Phaphamau , Prayagraj	Non Commissioned	1	14	Prayagraj	NA	NA	Under Construction	Under Costruction	Yes	190
110	STP Fatehgarh	Non Commissioned	1	22.5	Fatehgarh	NA	NA	No information	Proposed	Yes	190
111	Ramanna	Commissioned	1	50	Varanasi	NA	NA	Under Construction	Operational	No	
112	Ramnagar	Non Commissioned	1	10	Varanasi	NA	NA	Under Construction	Under Trial	Yes	190
113	Rae Bareilly	Non Commissioned	1	18	Raebarelli	NA	NA	Under Construction	Under Costruction	Yes	190
114	STP Baniyapur	Non Commissioned	1	15	Kanpur	NA	NA	Under Construction	Under Construction	Yes	190
115	STP Pankha	Non Commissioned	1	30	Kanpur	NA	NA	Under Costruction	Under Costruction	Yes	190
116	20 MLD STP Chaubari Drain,	Non Commissioned	1	20	Bareilly	NA	NA	Under Construction	Under Construction	Yes	190
117	42 MLD STP, Harunagla	Non Commissioned	1	42	Bareilly	NA	NA	Under Construction	Under Construction	Yes	190

118	01 MLD STP Tatarpur Village	Non Commissioned	1	1	Bareilly	NA	NA	Under Construction	Under Construction	Yes	190
119	35 MLD STP Sarai Talfi	Non Commissioned	1	35	Bareilly	NA	NA	Under Construction	Under Construction	Yes	190
120	Shuklaganj-05 MLD STP, Unnao	Non Commissioned	1	5	Unnao	NA	NA	Under Construction	Under Construction	Yes	190
121	Dakari-15 MLD, STP	Non Commissioned	1	15	Unnao	NA	NA	Under Construction	Under Construction	Yes	190
122	16 MLD STP, Jhunsi	Non Commissioned	1	16	Prayagraj	NA	NA	Under Construction	Under Construction	Yes	190
123	42 MLD STP, Naini 2	Non Commissioned	1	42	Prayagraj	NA	NA	Under Construction	Under Construction	Yes	190
124	8.5 MLD, New STP, Bisunderpur Drain	Non Commissioned	1	8.5	Mirzapur	NA	NA	<b>Tender cancelled in October 2019. Revised by NMCG in May 2020</b>	Proposed	Yes	190
125	8.5 MLD, New STP, Pakka Pokhra	Non Commissioned	1	8.5	Mirzapur	NA	NA	<b>Tender cancelled in October 2019. Revised by NMCG in May 2020</b>	Proposed	Yes	190
126	7 MLD, STP,	Non Commissioned	1	7	Mirzapur	NA	NA	Under Construction	Under Construction	Yes	190



	Vindhyachal											
127	Ghazipur-21 MLD STP, Jamuna Deva-Mau-Road	Non Commissioned	1	21	Ghazipur	NA	NA	No information	Construction yet to start	Yes		190
128	Ballia-19.6 MLD STP,	Non Commissioned	1	19.6	Ballia	NA	NA	Under construction	Under construction	Yes		190
129	Baghpat	Non Commissioned	1	14	Baghpat	NA	NA	Under Construction	No information	Yes		190
130	Etawah	Non Commissioned	1	21	Etawah	NA	NA	Under Construction	No information	Yes		190
131	Jaunpur	Non Commissioned	1	30	Jaunpur	NA	NA	Under Construction	No information	Yes		190
132	Kasganj	Non Commissioned	1	15	Kasganj	NA	NA	Under Construction	No information	Yes		190
133	Lucknow (2 nos.)	Non Commissioned	2	40	Lucknow (2 nos.)	NA	NA	Under Construction	No information	Yes		380
134	Mathura	Non Commissioned	1	30	Mathura	NA	NA	Under Construction	No information	Yes		190
135	Meerut	Non Commissioned	1	220	Meerut	NA	NA	Under Construction	No information	Yes		190
136	Moradabad	Non Commissioned	1	25	Moradabad	NA	NA	Under Construction	No information	Yes		190

137	Muzaffarnagar - (Budhana)	Non Commisioned	1	10	Muzaffarnagar - (Budhana)	NA	NA	Under Construction	No information	Yes	190	
138	Muzzafarnagar (2 Nos.)	Non Commisioned	2	54.5	Muzzafarnagar (2 Nos.)	NA	NA	Under Construction	No information	Yes	380	
139	Sultanpur (3 nos.)	Non Commisioned	3	17	Sultanpur (3 nos.)	NA	NA	Under Construction	No information	Yes	570	
140	Aligarh	Non Commisioned	1	45	Aligarh	NA	NA	Under Construction	No information	Yes	190	
141	Bulandshahar	Non Commisioned	1	40	Bulandshahar	NA	NA	Under Construction	No information	Yes	190	
142	Etah	Non Commisioned	1	24	Etah	NA	NA	Under Construction	No information	Yes	190	
143	Hapur	Non Commisioned	1	30	Hapur	NA	NA	Under Construction	No information	Yes	190	
144	Modinagar	Non Commisioned	1	20	Modinagar	NA	NA	Under Construction	No information	Yes	190	
145	Firozabad	Non Commisioned	1	67	Firozabad	NA	NA	Under Construction	No information	Yes	190	
146	Lucknow	Non Commisioned	1	120	Lucknow	NA	NA	Under Construction	No information	Yes	190	
147	Pratapgarh	Non Commisioned	1	8.95	Pratapgarh	NA	NA	Under Construction	No information	Yes	190	

148	Jhansi	Non Commissioned	1	26	Jhansi	NA	NA	Under Construction	No information	Yes	190
149	Chunar	Non Commissioned	1	2		NA	NA	Under Construction	No information	Yes	190
150	<b>Bithoor STP</b>	Non Commissioned	1	<b>2.4</b>		NA	NA	Under Construction	No information	Yes	190
151	Agra (13nos.)	Non Commissioned	13	175.38		NA	NA	Under tendering	No information	Yes	2470
152	<b>Shahjahanpur</b>	Non Commissioned	<b>1</b>	<b>40</b>		NA	NA	To be completed within 24 months after the issuance of letter of Authorization	No information	Yes	190
153	Azamgarh	Non Commissioned	1	8		NA	NA	Under Tendering process	No information	Yes	190
154	<b>Shahjahanpur</b>	Non Commissioned	<b>1</b>	<b>40</b>		NA	NA	Under tendering	No information	Yes	190
155	Fatehgarh (as per UPPCB)	Non Commissioned	1	5		NA	NA	Revised Estimate to be approved by NMCG not included in SMCG list	No information	Yes	190

Abbreviations:  
GDA= Ghaziabad Development Authority  
MDA=Meerut Development Authority

UPJN-Uttar pradesh Jal Nigam  
ADA-Agra Development Authority  
BLW-Banaras Locomotive Work  
UPSIDC- Uttar Pradesh State Industrial Development Corporation  
ASP - Activated Sludge Process  
SBR - Sequence Batch Reactor  
MBBR - Mixed Bed Biofilm Reactor  
FSTP- Faecal Sludge Treatment Plant  
FAB - Fluidised Aerobic Bio-Reactor  
OP- Oxidation Pond  
TF - Trickling filter  
WSP- Waste Stabilization Pond  
NA - Not Available

**SUMMARY OF BIHAR DRAINS FOR EC CALCULATION**

<b>EC Calculation Period</b>		<b>01.11.2019 to 30.06.2020</b>	<b>01.07.2020 to 31.01.2022</b>
1. Drains discharging into River Ganga and its tributaries	:	262	262
2. Tapped Drains	:	00	00
3. Untapped Drains	:	262	262
4. Untapped Drains not considered for EC (Dry, 2 <sup>nd</sup> Order, Not discharging into river Ganga/tributaries.)	:	12	12
5. Drains where interim measure taken during 01.11.2019 to 30.06.2020	:	02	-
6. No. of untapped drains considered for EC calculation	:	248	250
7. Calculated EC = No. of drains × @ 05 (01.11.2019 to 30.06.2020) and 10 (01.07.2020 to 31.01.2022) Lakhs/Month/Drain	:	248 Drains x Rs.5 Lakhs x 08 Months = Rs.9,920 Lakhs	250 Drains x Rs.10 Lakhs x 19 Months = Rs.47,500 Lakhs

**\*\* Total EC from 01.11.2019 to 31.01.2022 = Rs (9,920 + 47,500) Lakhs = Rs 57,420 Lakhs**

**Note-**

- a) Relevant list of drains along with EC calculation is enclosed.
- b) Discrepancies, if any regarding drains information and EC calculation may kindly be communicated to CPCB within 7 days.

**SUMMARY OF BIHAR STPs FOR EC CALCULATION****EC Calculation Period: 01.01.2021 to 30.11.2021**

<b>1. Total no. of STPs</b>	<b>:</b>	<b>52</b>
<b>2. Operational STPs</b>	<b>:</b>	<b>03</b>
<b>3. Non-operational STPs</b>	<b>:</b>	<b>2</b>
<b>4. Under Construction/ under-trial STPs</b>	<b>:</b>	<b>21</b>
<b>5. Under Tendering/DPR/Proposed STPs</b>	<b>:</b>	<b>26</b>
<b>6. No. of STPs considered for EC calculation (Sl. No. 3 +4+5)</b>	<b>:</b>	<b>49 (02 +21 +26)</b>
<b>7. Calculated EC = No. of STPs× @10 lakhs/month/STP (Since 01.07.2020 to 31.01.2022)</b>	<b>:</b>	<b>49 STPs x 10 Lakhs x 19 months= Rs. 9310 Lakhs</b>

**Note:**

- a) Relevant lists of STPs are enclosed.
- b) EC may be deposited in favour of CPCB, Account no. 532702050000164 (Bank: Union of India, I.P. Extension Branch, Vikas Marg Extension, Delhi, IFSC; UBIN0553271) within one month from the date of issue of this letter as per Hon'ble NGT order.

<b>Status of Drains for EC Calculation as on 31.01.2022, Bihar</b>							
S.No.	Drain Name	Status of Drain (S- Sewage, D-Dry)	Tapping Status (T- Tapped, UT- Untapped, No information -NI)	Intrim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No, NI-No-Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)
1	Sidnath Drain, Buxar, Buxar	S	UT	No	40	190	230
2	Nath Baba Drain, Buxar	S	UT	No	40	190	230
3	Tadka Drain, Buxar	S	UT	No	40	190	230
4	Sarinpur Drain, Buxar	S	UT	No	40	190	230
5	Sati gaht, Buxar	S	UT	No	40	190	230
6	Bangla Ghat Nala, Buxar	S	UT	No	40	190	230
7	Sohani patti Nala, Buxar	S	UT	No	40	190	230
8	Danapur Cantt Drain, Patna	S	UT	<b>Yes</b>	<b>NA</b>	190	190
9	Digha Ghat Drain, Patna	S	UT	No	40	190	230
10	Kurzi Drain, Patna	S	UT	No	40	190	230
11	Rajapur Drain, Patna	S	UT	<b>Yes</b>	<b>NA</b>	190	190
12	Bans Ghat Drain/ Mandiri Nala, Patna	S	UT	No	40	190	230
13	Collectorate/Anta Ghat/Bakerganj Drain, Patna	S	UT	No	40	190	230
14	Mittan Ghat Drain, Patna	S	UT	No	40	190	230
15	Krishna Ghat Nala, Patna	S	UT	No	40	190	230
16	Barharwa Ghat Nala, Patna	S	UT	No	40	190	230
17	Rani Ghat Nala, Patna	S	UT	No	40	190	230
18	Ghagha Ghat Nala, Patna	S	UT	No	40	190	230
19	Masjid Ghat Nala, Patna	S	UT	No	40	190	230
20	Loharwa Ghat Nala, Patna	S	UT	NI	40	190	230
21	Gosai Ghat Nala, Patna	S	UT	No	40	190	230
22	Bhadra Ghat Nala, Patna	S	UT	No	40	190	230
23	Nauzar Ghat Nala, Patna	S	UT	No	40	190	230
24	Gai Ghat Nala, Patna	S	UT	No	40	190	230
25	Mahavir Ghat Nala, Patna	S	UT	No	40	190	230
26	Balu Ghat Nala, Patna	S	UT	No	40	190	230
27	Kali Ghat, Patna	S	UT	No	40	190	230

28	Shankarpur Road Nala, Ward-15, Dighwara, Dighwara	S	UT	NI	40	190	230
29	ITC Drain, Munger	D	UT	No	NA	NA	0
30	Lal Darwaja drain, Munger	S	UT	NO	40	190	230
31	Pokhariya Nala Mohammadpur Jail kenajdik, Begusarai	S	UT	NO	NA	NA	NA
32	Sarkikal Drain, Bhagalpur	S	UT	NO	40	190	230
33	Saklichand Drain, Bhagalpur	S	UT	NO	40	190	230
34	Barari Ghat Drain, Bhagalpur	S	UT	NO	40	190	230
35	DN Singh Drain, Bhagalpur	S	UT	NO	40	190	230
36	Koyal Ghat Drain, Bhagalpur	S	UT	NO	40	190	230
37	Adampur Nala, Bhagalpur	S	UT	NO	40	190	230
38	Hathiya Nala near intekwell, Bhagalpur	S	UT	NO	40	190	230
39	Neel Kothi Nala, Bhagalpur	S	UT	NO	40	190	230
40	Pipalli dham Nala -2, Bhagalpur	S	UT	NO	40	190	230
41	Kuppa Ghat, Bhagalpur	S	UT	NO	40	190	230
42	Hathiya Nala, near Tilkamanjhi, Bhagalpur	S	UT	NO	40	190	230
43	S.T.P Nala Bhagalpur, Bhagalpur	S	UT	NO	40	190	230
44	Shahebganj Miyabari Nala, Bhagalpur	S	UT	NO	40	190	230
45	Champa Nala -1, Bhagalpur	S	UT	NO	40	190	230
46	Champa Nala -2, Bhagalpur	S	UT	NO	40	190	230
47	Khirni Ghat Drain, Bhagalpur	S	UT	NO	40	190	230
48	Kowa Drain, Kahalgaon	S	UT	NO	40	190	230
49	Kagali Nala, Kahalgaon	S	UT	NO	40	190	230
50	L.C.T Nala, Kahalgaon	S	UT	NO	40	190	230
51	Asamsan Ghat Nala, Kahalgaon	S	UT	NO	40	190	230
52	Pampu Nala, Kahalgaon	S	UT	NO	40	190	230
53	Maner bazar Nala, Maner Nagar	S	UT	NO	40	190	230
54	Raghopur Dugar Nala, Bakhtiyarpur	S	UT	NO	40	190	230
55	Pipal Ghat Nala, Barh	S	UT	NO	40	190	230
56	Shalimpur Nala, Barh	S	UT	NO	40	190	230
57	Malina Ghat Nala Ward no. 11 Salempur Barh, Barh	S	UT	NO	40	190	230



58	Gauri shankar Ghat, Barh	S	UT	NO	40	190	230
59	Talimpur Nala	S	UT	NO	NA	NA	0
60	Dayachak Nala	S	UT	NO	NA	NA	0
61	Tapaswi Ghat Nala, Mokama	S	UT	NO	40	190	230
62	Chaudhry Ghat, Pipaltal, Mokama	S	UT	NO	40	190	230
63	Kamleshwari Asthan Nala, Mokama	S	UT	NO	40	190	230
64	Sidhnath Mandir, Mokama	S	UT	NO	40	190	230
65	Masjid Ghat Nala, Sultanganj	S	UT	NO	40	190	230
66	Kali Ghat Samaspur, Fatuha	S	UT	NO	40	190	230
67	Maksudpur Nala (East), Fatuha	S	UT	NO	40	190	230
68	Maksudpur Nala (West), Fatuha	S	UT	NO	40	190	230
69	Kataiya Ghat, Fatuha	S	UT	NO	40	190	230
70	Devanti Ghat, Fatuha	S	UT	NO	40	190	230
71	Mastana Ghat, Fatuha	S	UT	NO	40	190	230
72	Chhoti Saripur, Buxar	S	UT	NI	40	190	230
73	Hospital Road Drain , Buxar	S	UT	NI	40	190	230
74	BeerpurBhual NH-19 Drain, Dighwara, Dighwara	S	UT	NI	40	190	230
75	Pipalli dham Nala -1, Bhagalpur	S	UT	NO	40	190	230
76	Dhobiya Ghat, Laxmi flour mill, Barh	S	UT	NO	40	190	230
77	Khagaol Aasiyana Over bridge crossing Nalla, Phulwari	S	UT	NO	40	190	230
78	Birla Colony Nala A, Phulwari	S	UT	NO	NA	NA	0
79	Birla Colony Nala B, Phulwari	S	UT	NO	NA	NA	0
80	Mitramandal Colony Drain, Phulwari	2nd order	UT	NO	NA	NA	0
81	Issopur Rai chowk nalla, Phulwari	S	UT	NO	NA	NA	0
82	Ram Nagina Singh College Nala, Maner Nagar	S	UT	NI	40	190	230
83	Ram Ghat Nala, Maner Nagar	S	UT	NI	40	190	230
84	Vishari Asthan Ghat Nala (1st), Sultanganj	S	UT	NO	40	190	230
85	Vishari Asthan Ghat Nala (2nd), Sultanganj	S	UT	NO	40	190	230

86	Jahaj Ghat Nala, Sultanganj	S	UT	NO	40	190	230
87	Krishngarh Bhattagali Nala, Sultanganj	S	UT	NO	40	190	230
88	New Sidhi Ghat Nala nearby masjid, Sultanganj	S	UT	NO	40	190	230
89	New Sidhi Ghat Nala, Sultanganj	S	UT	NO	40	190	230
90	New basti Nala, Naugachia	S	UT	NO	40	190	230
91	Maa Tara Bhawan Nala, Naugachia	S	UT	NO	40	190	230
92	Ward no. -08 Nala, Naugachia	S	UT	NO	40	190	230
93	Station road Nala (1), Naugachia	S	UT	NO	40	190	230
94	Station road Nala (2), Naugachia	S	UT	NO	40	190	230
95	Durga Asthan Nala, Naugachia	S	UT	NO	40	190	230
96	Ward no. -03 Nala, Naugachia	S	UT	NO	40	190	230
97	Milan Chawk Nala, Naugachia	S	UT	NO	40	190	230
98	Ward no. - 09 Nala, Naugachia	S	UT	NO	40	190	230
99	Rajendra Colony, ward no- 05 Nala, Naugachia	S	UT	NO	40	190	230
100	Nagar Panchyat karyalay akebagal me ward no- 16, Naugachia	S	UT	NO	40	190	230
101	Hardiya patti, ward no- 21 Nala, Naugachia	S	UT	NO	40	190	230
102	Hero Honda showroom, ward no- 21 Nala, Naugachia	S	UT	NO	40	190	230
103	SatsangBhawan Drain, Naugachhiya, Naugachia	S	UT	NO	40	190	230
104	Raj Kumar Bhagat Road Drain, Naugachhiya, Naugachia	S	UT	NO	40	190	230
105	Noniya patti, ward no. -20 Nala, Naugachia	S	UT	NO	NA	NA	0
106	Mushar patti, ward no- 13 Nala	S	UT	NO	NA	NA	0
107	Barwatta Nala, Sonapur	S	UT	NO	40	190	230
108	Khanua Nala, Chhapra	S	UT	NO	40	190	230
109	Bankipur Ghorkak Nala, Fatuha	S	UT	NO	40	190	230
110	Krishn Chawk Nala, Barahiya	S	UT	NO	40	190	230
111	Baba Dani Mohalla Nala, Barahiya	S	UT	NO	40	190	230

112	Bangal kunjtaal Nala, Barahiya	S	UT	NO	40	190	230
113	Bah Path Nala, Barahiya	S	UT	NO	40	190	230
114	Ramnagar Nalla, Jamalpur	S	UT	NO	40	190	230
115	Laxmipur Nalla, Jamalpur	S	UT	NO	40	190	230
116	Aashikpur Nalla, Jamalpur	S	UT	NO	40	190	230
117	Faridapur Nalla, Jamalpur	S	UT	NO	40	190	230
118	Badshahi Nala, Kahalgaon	S	UT	NO	40	190	230
119	Koyala Nala, Kahalgaon	S	UT	NO	40	190	230
120	Subhash Chowk Nala, Hazipur	S	UT	NO	40	190	230
121	Bagahing tola, Dighwara	S	UT	NO	40	190	230
122	Marchav Baba Mandir, Dighwara	S	UT	NO	40	190	230
123	UMV Nala, Dighwara	S	UT	NO	40	190	230
124	Post office road, Dighwara	S	UT	NO	40	190	230
125	Market Area, Dighwara	S	UT	NO	40	190	230
126	R. Primary school, Dighwara	S	UT	NO	40	190	230
127	Barbana, Dighwara	S	UT	NO	40	190	230
128	M.S Basadpur, Dighwara	S	UT	NO	40	190	230
129	Mukhtar Maidan drain, Teghra	S	UT	NI	40	190	230
130	Teghra Chowk Nala, Teghra	S	UT	NO	NA	NA	0
131	Pirpatra Nala, Manihari	S	UT	NO	40	190	230
132	Primari Health School Nalla, Manihari	S	UT	NO	40	190	230
133	Bahiolakh drain, Arah	S	UT	NI	40	190	230
134	Sapna Cinema drain, Arah	S	UT	NI	40	190	230
135	Sant Hospital bypass Road drain, Arah	S	UT	NI	40	190	230
136	Bind Toli-Ujiyar Tola drain, Arah	S	UT	NI	40	190	230
137	Awarpool drain, Arah	S	UT	NI	40	190	230
138	BasanBigha Drain, Biharsharif, (Patuana)Nalanda, Biharsharif	S	UT	NI	40	190	230
139	Kargil Chowk Drain, Biharsharif, Nalanda, Biharsharif	S	UT	NI	40	190	230
140	Milki Par Drain, Biharsharif, Nalanda, Biharsharif	S	UT	NI	40	190	230
141	BaluGhat Drain, , Darbhanga	S	UT	NI	40	190	230
142	QuilaGhat Drain, , Darbhanga	S	UT	NI	40	190	230

143	GayatriMandirGhat Drain, , Darbhanga	S	UT	NI	40	190	230
144	EkmiGhat Drain, , Darbhanga	S	UT	NI	40	190	230
145	Allapatti Drain , Darbhanga	S	UT	NI	40	190	230
146	Khabra Drain, Muzaffarpur	S	UT	NI	40	190	230
147	Sikandarpur Drain, Muzaffarpur	S	UT	NI	40	190	230
148	Kamra/BaluGhat Drain, Muzaffarpur	S	UT	NI	40	190	230
149	Harpur-Lohri Drain, Muzaffarpur	S	UT	NI	40	190	230
150	Soda Godown Sluice Gate Chowk Drain, Muzaffarpur	S	UT	NI	40	190	230
151	Badshahi Drain, Patna	S	UT	NO	40	190	230
152	Lalganj Drain, Purnia	S	UT	NI	40	190	230
153	Ajiyar Drain, Amarpur, Amarpur	S	UT	NI	40	190	230
154	Bikram Dominiapul Drain, Bikram	S	UT	NI	40	190	230
155	Ashpura Drain, Bikram	S	UT	NI	40	190	230
156	Lahariya Bazar-1, Dalsingh Sarai, Samastipur, Dalsingh Sarai	S	UT	NI	40	190	230
157	Lahariya Bazar-2, MahadevAsthan, Dalsingh Sarai, Samastipur, Dalsingh Sarai	S	UT	NI	40	190	230
158	Ramashrya Nagar Drain, Dalsingh Sarai, Samastipur, Dalsingh Sarai	S	UT	NI	40	190	230
159	BadiGudri Drain, Dalsingh Sarai, Samastipur, Dalsingh Sarai	S	UT	NI	40	190	230
160	BadiThakurwari Drain, Dalsingh Sarai, Samastipur, Dalsingh Sarai	S	UT	NI	40	190	230
161	Dhobi Ghat Drain, Dalsingh Sarai, Samastipur, Dalsingh Sarai	S	UT	NI	40	190	230
162	Main Drain, Dumra,Near Treasury Bridge, Dumra	S	UT	NI	40	190	230
163	Chakiya Keshariya Road Bridge Drain, Keshariya, Kesariya	S	UT	NI	40	190	230
164	FCI Godown Drain, Mahua, Mahua	S	UT	NI	40	190	230
165	GautamDwar Drain, Mahua, Mahua	S	UT	NI	40	190	230

166	Data Mirja Halim Shah Mazar Drain, Mehshi, Mehshi	S	UT	NI	40	190	230
167	Mukhya Bazar, Near Fish Market, Nagar Panchyat Road,, Ramnagar	S	UT	NI	40	190	230
168	ChatiyaGhat Drain West, DhangalToli,, Ramnagar	S	UT	NI	40	190	230
169	ChatiyaGhat Drain East, Kathawa Pull,, Ramnagar	S	UT	NI	40	190	230
170	Railly Bazar Drain, , Ramnagar	S	UT	NI	40	190	230
171	Mill Quarter Drain, Pachurkha, Ramnagar	S	UT	NI	40	190	230
172	Janakpur Ghat Drain, Arwal	S	UT	NI	40	190	230
173	Sahi Mohalla Drain, Arwal	S	UT	NI	40	190	230
174	Karbala Maidan Drain, Arwal	S	UT	NI	40	190	230
175	Malhi Patti Drain, Arwal	S	UT	NI	40	190	230
176	Kagzi Mohalla Drain, Arwal	S	UT	NI	40	190	230
177	Muradpur Chowki Drain, Arwal	S	UT	NI	40	190	230
178	Brahmsthani Drain, Arwal	S	UT	NI	40	190	230
179	Burhwa Mahadev Drain, Arwal	S	UT	NI	40	190	230
180	Baidrabad English Drain , Arwal	S	UT	NI	40	190	230
181	Dr. Hiralal Galli Drain, Arwal	S	UT	NI	40	190	230
182	Dani Bigha Drain Ward no.- 3, Aurangabad	S	UT	NI	40	190	230
183	Dani Bigha Drain Ward no.- 2, Aurangabad	S	UT	NI	40	190	230
184	Nawadih Drain , Aurangabad	S	UT	NI	40	190	230
185	Barat Pool Tiwari Ghat Drain, Aurangabad	S	UT	NI	40	190	230
186	Dindayal Nagar Drain, Bagha -1, Bagha, West Champaran	S	UT	NI	40	190	230
187	Mahavir Colony Drain, Banka, Banka	S	UT	NI	40	190	230
188	Gandhi Chowk Drain, Naya Tola, Banka, Banka	S	UT	NI	40	190	230
189	Vijay Nagar Drain – 1, Banka, Banka	S	UT	NI	40	190	230

190	Babu Tola Drain, Banka, Banka	S	UT	NI	40	190	230
191	Ganauli pool Drain, Bettiah, Bettiah	S	UT	NI	40	190	230
192	Parwatiya Tola Drain, (ward no -1), Bettiah	S	UT	NI	40	190	230
193	Canal Road Drain, Dehri Dalmiyanagar, Rohtas	S	UT	NI	40	190	230
194	Pali Gaon Drain , Dehri Dalmiyanagar, Rohtas	S	UT	NI	40	190	230
195	Main Bazar Drain, Dehri Dalmiyanagar, Rohtas	S	UT	NI	40	190	230
196	Central drain, Dumraon, Buxar	S	UT	NI	40	190	230
197	Kewra Bagh drain, Dumraon, Buxar	S	UT	NI	40	190	230
198	Polytechnic college drain, Jamui	S	UT	NI	40	190	230
199	Algna Drain, Jehanabad, Jehanabad	S	UT	NI	40	190	230
200	NizamuddinPur Drain, Jehanabad, Jehanabad	S	UT	NI	40	190	230
201	Daulatpur Drain, Jehanabad, Jehanabad	S	UT	NI	40	190	230
202	Raja Bazar Drain, Jehanabad, Jehanabad	S	UT	NI	40	190	230
203	Madarapur Drain, Jehanabad, Jehanabad	S	UT	NI	40	190	230
204	Daannagar By-Pass Nala, Khagria	S	UT	NO	NA	NA	0
205	P.W High school Nala, Khagria	S	UT	NO	40	190	230
206	Khagaul Over Bridge Drain, Khagaul	S	UT	NI	40	190	230
207	Railway Colony Drain, Khagaul	S	UT	NI	40	190	230
208	Mahaveer Marg drain, Kishanganj, Kishanganj	S	UT	NI	40	190	230
209	TegariaMadhav Nagar Meat Market drain, Kishanganj, Kishanganj	S	UT	NI	40	190	230
210	Pilkhana Road drain, Kishanganj, Kishanganj	S	UT	NI	40	190	230
211	Khankha drain, Kishanganj, Kishanganj	S	UT	NI	40	190	230
212	Vetnary Hospital drain, Kishanganj, Kishanganj	S	UT	NI	40	190	230
213	Medical College Gausala drain, Kishanganj, Kishanganj	S	UT	NI	40	190	230

214	DharamganjMajhia drain, Kishanganj, Kishanganj	S	UT	NI	40	190	230
215	MahaveerAsthan, Purani Bazar drain, Lakhisarai	S	UT	NI	40	190	230
216	BadhiDargah drain, Lakhisarai	S	UT	NI	40	190	230
217	Suraj Narayan Ghat drain, Lakhisarai	S	UT	NI	40	190	230
218	Kali Pahari & Lal Pahari drain, Lakhisarai	S	UT	NI	40	190	230
219	Railway West Cabin drain, Punjabi Mohalla drain, Lakhisarai	S	UT	NI	40	190	230
220	Domestic Waste Water/Sewage drain, passing near power grid of Sugar Mill, Narkatiaganj	S	UT	NI	40	190	230
221	Dhum Nagar Mandir drain, Narkatiaganj	S	UT	NI	40	190	230
222	Drain at Naga Road, Shivpuri Mohalla, Raxaul, Raxaul	S	UT	NI	40	190	230
223	Drain at ChhatiayaGhat, near Railway Bridge, Raxaul, Raxaul	S	UT	NI	40	190	230
224	Drain near Custom Check Post Bridge, Raxaul, Raxaul	S	UT	NI	40	190	230
225	MagardahiGhat Drain, Main Market, Samastipur, Samastipur	S	UT	NI	40	190	230
226	Jamuari River Pool (Mohanpur) Drain, Samastipur	S	UT	NI	40	190	230
227	Railway Colony Drain, Samastipur, Samastipur	S	UT	NI	40	190	230
228	Below Lakhandai River, MehsoulChouk, Sitamarhi	S	UT	NI	40	190	230
229	Ring Bandh,Near Mahatma School Road, Near Hanuman Mandir, Sitamarhi	S	UT	NI	40	190	230
230	Kabristan Drain, Near Bus stand, Dumra Road, Sitamarhi, Sitamarhi	S	UT	NI	40	190	230
231	BhramasthanGali drain, Rajopatti, Sitamarhi, Sitamarhi	S	UT	NI	40	190	230

232	ChakMaila Drain, Rajopatti, Sitamarhi	S	UT	NI	40	190	230
233	Near Shiv Mandir Drain, Siwan, Siwan	S	UT	NI	40	190	230
234	ShivwaratSahMandir Drain, Siwan, Siwan	S	UT	NI	40	190	230
235	Navalpur Drain, Siwan, Siwan	S	UT	NI	40	190	230
236	KhurmabadTakiya Drain, Siwan, Siwan	S	UT	NI	40	190	230
237	Kochas Drain, Kochas	S	UT	NI	40	190	230
238	Rafiganj Mahadev ghat drain, Rafiganj	S	UT	NI	40	190	230
239	Rafiganj Samshan ghat drain, Rafiganj	S	UT	NI	40	190	230
240	Rafiganj Ramchandra ghat drain, Rafiganj	S	UT	NI	40	190	230
241	Mestartola drain, Belsand, Belsand	S	UT	NI	40	190	230
242	Babar kigali drain, Belsand, Belsand	S	UT	NI	40	190	230
243	Main road to Chandeshwarsingh residence drain, Belsand, Belsand	S	UT	NI	40	190	230
244	Masjid road drain, Belsand, Belsand	S	UT	NI	40	190	230
245	Sangam Studio Drain, Nabinagar, Nabinagar	S	UT	NI	40	190	230
246	Drain Near Hanuman Mandir at Suara River, Bhabhua, Bhabhua	S	UT	NI	40	190	230
247	Main drain Shivpuri Colony , Mohania, Mohania	S	UT	NI	40	190	230
248	Sahebganj, Sahebganj	S	UT	NI	40	190	230
249	Marahura, Marahura	S	UT	NI	40	190	230
250	Gol Bazar Shastri Nagar (Murliganj Madhepura), Murliganj	S	UT	NI	40	190	230
251	Middle Chowk Hatbazar (Murliganj Madhepura), Murliganj	S	UT	NI	40	190	230
252	Gol Bazar Drain (Murliganj Madhepura, Murliganj)	S	UT	NI	40	190	230
253	Jhil Chowk Near Benga River (Murliganj Madhepura, Murliganj)	S	UT	NI	40	190	230



254	Bikramganj kashighat drain, Bikramganj, Bikramganj	S	UT	NI	40	190	230
255	Bikramganj thana chowk drain, Bikramganj, Bikramganj	S	UT	NI	40	190	230
256	Nasriganj Drain, Nasriganj	S	UT	NI	40	190	230
257	Nasriganj urdu vidyalaya Drain, Nasriganj	S	UT	NI	40	190	230
258	Sasaram Nahar drain, Sasaram	S	UT	NI	40	190	230
259	Primary school aashapur drain, Benipur	S	UT	NI	40	190	230
260	Benipur Market Drain, Benipur	S	UT	NI	40	190	230
261	Ram Tola Pound Drain, Nirmali, Nirmali	S	UT	NI	40	190	230
262	Purvi Ring Bandh Drain, Nirmali, Nirmali	S	UT	NI	40	190	230
<b>Amountin Lakh (Rs.)</b>					<b>9920</b>	<b>47500</b>	<b>57420</b>
<b>Total Amount of EC in Lakhs (Rs.)</b>					<b>57420</b>		

\*Drain List is provided by State Authorities

Abbreviation: (S-Sewage, D-Dry, T-Tapped, UT-Untapped, No information -NI)

Calculation of EC for under-construction/trial/not completed/non-operational/proposed STPs in Bihar (Febraury 2022)											EC calculated @Rs. 10 lakh per month (Duration 01.07.2020 to 31.1.2022)
S.No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated (Yes/ No)	
								As on 30.6.2020	As on 31.1.2022		
1	Beur Old, Patna	Commissioned	1	35	Patna	ASP	BUIDCO	Non operational	<b>Non-Operational</b>	Yes	190
2	Beur New, Patna	Commissioned	1	43	Patna	SBR	BUIDCO	Under Trial from Aug 2020	<b>Operational</b>	No	
3	Karmali Chak	Commissioned	1	37	Patna	SBR	BUIDCO	Under Trial from Aug 2021	<b>Operational</b>	No	
4	Saidpur STP	Commissioned	1	60	Patna	SBR	BUIDCO	Under construction	<b>Operational</b>	No	
5	Saidpur STP	Commissioned	1	45	Patna	ASP	BUIDCO	Non-operational	<b>Non - operational</b>	Yes	190
6	Pahari	Non-commissioned	1	60	Patna	SBR	BUIDCO	Under Construction	Under Construction	Yes	190
7	Digha	Non-commissioned	1	100	Patna	NA	BUIDCO	Under Construction	Under Construction	Yes	190
8	Kankarbagh	Non-commissioned	1	50	Patna	NA	BUIDCO	Under Construction	Under Construction	Yes	190
9	Phulwari sarif-1	Non-commissioned	1	7	Patna	NA	BUIDCO	Under Construction	Under Construction	Yes	190

10	Phulwari sarif-2	Non-commissioned	1	6	Patna	NA	BUIDCO	No information	Under Construction	Yes	190
11	Mokama	Non-commissioned	1	8	Mokama	SBR	BUIDCO	Under Construction	Under Construction	Yes	190
12	Barh	Non-commissioned	1	11	Barh	SBR	BUIDCO	Under Construction	Under Construction	Yes	190
13	Bakhtiyarpur	Non-commissioned	1	10	Bakhtiyarpur	SBR	BUIDCO	Under Construction	Under Construction	Yes	190
14	Maner	Non-commissioned	1	6.5	Maner	NA	BUIDCO	Under Construction	Under Construction	Yes	190
15	Sonepur	Non-commissioned	1	3.5	Sonepur	SBR	BUIDCO	Under Construction	Under Construction	Yes	190
16	Chhapra	Non-commissioned	1	32	Chhapra	SBR	BUIDCO	Under Construction	Under Construction	Yes	190
17	Sultanganj	Non-commissioned	1	10	Sultanganj	MBBR	BUIDCO	Under Construction	Under Trial Since July 2021	Yes	190
18	Begusarai	Non-commissioned	1	17	Begusarai	NA	BUIDCO	Under Construction	Under Construction	Yes	190
19	Naugachia	Non-commissioned	1	9	Naugachia	NA	BUIDCO	Under Construction	Under Construction	Yes	190
20	Danapur	Non-commissioned	1	25	Patna	NA	BUIDCO	Under tendering	Under Construction	Yes	190
21	Fatuha	Non-commissioned	1	7	Patna	NA	BUIDCO	Under tendering	Under Construction	Yes	190
22	Bhagalpur	Non-commissioned	1	45	Bhagalpur	NA	BUIDCO	Under tendering	Under Construction	Yes	190
23	Munger	Non-commissioned	1	30	Munger	NA	BUIDCO	Under tendering	Under Construction	Yes	190
24	Khagaria	Non-commissioned	1	5	Khagaria	NA	BUIDCO	Under tendering	Under Construction	Yes	190

25	Serinpur	Non-commissioned	1	16	Buxar	NA	BUIDCO	Under tendering	Under Construction	Yes	190
26	Hajipur	Non-commissioned	1	22	Hajipur, Vsishali	NA	BUIDCO	Under tendering	Under Construction	Yes	190
27	Baraihiya	Non-commissioned	1	6	Baraihiya	NA	BUIDCO	Under tendering	No information	Yes	190
28	Kahalgaon	Non-commissioned	1	6	Kahalgaon	NA	BUIDCO	Under tendering	No information	Yes	190
29	Dighwara	Non-commissioned	1	NA	Dighwara	NA	BUIDCO	Under tendering	No information	Yes	190
30	Teghra	Non-commissioned	1	NA	Teghra	NA	BUIDCO	Under tendering	No information	Yes	190
31	Manihari	Non-commissioned	1	NA	Manihari	NA	BUIDCO	Under tendering	No information	Yes	190
32	Jamalpur	Non-commissioned	1	NA	Jamalpur	NA	BUIDCO	Under tendering	No information	Yes	190
33	Khagul	Non-commissioned	1	NA	Khagul	NA	BUIDCO	Under tendering	No information	Yes	190
34	Harinagar (Ramnagar)	Non-commissioned	1	NA	Harinagar (Ramnagar)	NA	BUIDCO	Proposed	No information	Yes	190
35	Narkatiyaganj	Non-commissioned	1	NA	Narkatiyaganj	NA	BUIDCO	Proposed	No information	Yes	190
36	Jogbani	Non-commissioned	1	NA	Jogbani	NA	BUIDCO	Proposed	No information	Yes	190
37	Raxual	Non-commissioned	1	NA	Raxual	NA	BUIDCO	Proposed	No information	Yes	190
38	Dehri	Non-commissioned	1	NA	Dehri	NA	BUIDCO	Proposed	No information	Yes	190
39	Arwal	Non-commissioned	1	NA	Arwal	NA	BUIDCO	Proposed	No information	Yes	190
40	Daudnagar	Non-commissioned	1	NA	Daudnagar	NA	BUIDCO	Proposed	No information	Yes	190

41	Muzaffarpur	Non-commissioned	1	NA	Muzaffarpur	NA	BUIDCO	Proposed	No information	Yes	190
42	Samastipur	Non-commissioned	1	NA	Samastipur	NA	BUIDCO	Proposed	No information	Yes	190
43	Motihari	Non-commissioned	1	NA	Motihari	NA	BUIDCO	Proposed	No information	Yes	190
44	Supaul	Non-commissioned	1	NA	Supaul	NA	BUIDCO	Proposed	No information	Yes	190
45	Saharsa	Non-commissioned	1	NA	Saharsa	NA	BUIDCO	Proposed	No information	Yes	190
46	Madhepura	Non-commissioned	1	NA	Madhepura	NA	BUIDCO	Proposed	No information	Yes	190
47	Darbhanga	Non-commissioned	1	NA	Darbhanga	NA	BUIDCO	Proposed	No information	Yes	190
48	Gopalganj	Non-commissioned	1	NA	Gopalganj	NA	BUIDCO	Proposed	No information	Yes	190
49	Bagha	Non-commissioned	1	NA	Bagha	NA	BUIDCO	Proposed	No information	Yes	190
50	Kisanganj	Non-commissioned	1	NA	Kisanganj	NA	BUIDCO	Proposed	No information	Yes	190
51	Lakhisarai	Non-commissioned	1	NA	Lakhisarai	NA	BUIDCO	Proposed	No information	Yes	190
52	Jamui	Non-commissioned	1	NA	Jamui	NA	BUIDCO	Proposed	No information	Yes	190
										Total	9310
Abbreviation: BUIDCO - Bihar Urban Infrastructure Development Corporation Ltd ASP - Activated Sludge Process SBR - Sequence Batch Reactor NA- Not Available											

**SUMMARY OF JHARKHAND DRAINS FOR EC CALCULATION**

<b>EC Calculation Period</b>		<b>01.11.2019 to 30.06.2020</b>	<b>01.07.2020 to 31.01.2022</b>
1. Drains discharging into River Ganga and its tributaries	:	06	06
2. Tapped Drains	:	06	06
3. Untapped Drains	:	00	00
4. Untapped Drains not considered for EC	:	00	00
5. Drains where interim measure taken during 01.11.2019 to 30.06.2020	:	-	-
6. No. of untapped drains considered for EC calculation	:	00	00
7. Calculated EC = No. of drains × @ 05 (01.11.2019 to 30.06.2020) and 10 (01.07.2020 to 31.01.2022) Lakhs/Month/Drain	:	00	00

**\*\* Total EC from 01.11.2019 to 31.01.2022 = Rs. 00**

**Note-**

- a) Relevant list of drains along with EC calculation is enclosed.
- b) Discrepancies, if any regarding drains information and EC calculation may kindly be communicated to CPCB within 7 days.

**SUMMARY OF JHARKHAND STPs FOR EC CALCULATION****EC Calculation Period: 01.07.2020 to 31.01.2022**

<b>1. Total no. of STPs</b>	<b>:</b>	<b>08</b>
<b>2. Operational STPs</b>	<b>:</b>	<b>02</b>
<b>3. Non-operational STPs</b>	<b>:</b>	<b>0</b>
<b>4. Under Construction/ under-trial STPs</b>	<b>:</b>	<b>01</b>
<b>5. Under Tendering/DPR/Proposed STPs</b>	<b>:</b>	<b>05</b>
<b>6. No. of STPs to be considered for EC calculation</b>	<b>:</b>	<b>06 (01 +05)</b>
<b>7. Calculated EC = No. of STPs× @10 lakhs/month/STP (Since 01.07.2020 to 31.01.2022)</b>	<b>:</b>	<b>6 STPs x 10 Lakhs x 19 months = Rs. 1140 Lakhs</b>

**Note:**

- a) Relevant lists of STPs are enclosed.
- b) EC may be deposited in favour of CPCB, Account no. 532702050000164 (Bank: Union of India, I.P. Extension Branch, Vikas Marg Extension, Delhi, IFSC; UBIN0553271) within one month from the date of issue of this letter as per Hon'ble NGT order.

<b>Status of Drains for EC Calculation as on 31.01.2022, Jharkhand</b>							
<b>S.No.</b>	<b>Drain Name</b>	<b>Status of Drain (S-Sewage, D-Dry)</b>	<b>Tapping Status (T-Tapped, UT-Untapped, No information -NI)</b>	<b>Intrim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No)</b>	<b>EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)</b>	<b>EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)</b>	<b>Total EC Calculated (in Lakhs)</b>
1	Gopalpull Nala, Sahibganj	S	T	No	NA	NA	0
2	Jharna Nala, Sahibganj	S	T	No	NA	NA	0
3	Mahajan Toli, Rajmahal	S	T	No	NA	NA	0
4	Kasim Bazar, Rajmahal	S	T	No	NA	NA	0
5	Neel Kothi, Rajmahal	S	T	No	NA	NA	0
6	Ferry Ghat, Rajmahal	S	T	No	NA	NA	0
<b>Amount in Lakh (Rs.)</b>					<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Amount of EC in Lakh (Rs.)</b>					<b>0</b>		

\*Drain List is provided by State Authorities

\*Abbreviation: S-Sewage, D-Dry, T-Tapped, UT-Untapped, No information -NI)



Calculation of EC for under-construction/trial/not completed/non-operational/proposed STPs in Jharkhand (Febraury 2022)												
S.No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated (Yes/ No)	EC calculated @Rs. 10 Lakh per month (Duration 01.07.2020 to 31.1.2022)	
								As on 30.6.2020	As on 31.1.2022			
1	Sahibganj	Commissioned	2	12	Sahibganj	SBR	JUIDCO	Operational	Operational	No		
2	Rajmahal (Bengdubbi STP)	Non-commissioned	1	3.5	Rajmahal (Bengdubbi STP)	NA	JUIDCO	Under Trial since Dec,2020	Under Trial	Yes	190	
3	Dhanbad STP	Non-commissioned	3	144	Dhanbad STP	NA	NA	DPR Phase	DPR Phase (as per RD-K letter, no info in CPCB list)	Yes	190	
4	Phusro	Non-commissioned	1	15	Phusro	NA	NA	DPR Phase	DPR Phase (as per RD-K letter, no info in CPCB list)	Yes	190	
5	Ramgarh	Non-commissioned	1	40	Ramgarh	NA	NA	DPR Phase	DPR Phase (as per RD-K letter, no info in CPCB list)	Yes	190	
										Total	760	
				Abbreviation: JUIDCO - Jharkhand Urban Infrastructure Development Company								

				SBR - Sequence Batch Reactor				
				NA - Not Available				

**SUMMARY OF WEST BENGAL DRAINS FOR EC CALCULATION**

<b>EC Calculation Period</b>		<b>01.11.2019 to 30.06.2020</b>	<b>01.07.2020 to 31.01.2022</b>
1. Drains discharging into River Ganga and its tributaries	:	101	101
2. Tapped Drains	:	00	00
3. Untapped Drains	:	101 + 301*	101 + 301*
4. Untapped Drains not considered for EC (Dry, Canal)	:	4	4
5. Drains where interim measure taken during 01.11.2019 to 30.06.2020	:	00	-
6. No. of untapped drains considered for EC calculation	:	97 +301*	97 +301*
7. Calculated EC = No. of drains × @ 05 (01.11.2019 to 30.06.2020) and 10 (01.07.2020 to 31.01.2022) Lakhs/Month/Drain	:	398 Drains x Rs.5 Lakhs x 08 Months = Rs.15,920 Lakhs	398 Drains x Rs.10 Lakhs x 19 Months = Rs.75,620 Lakhs

**\*\* Total EC from 01.11.2019 to 31.01.2022 = Rs (15,920 + 75,620) Lakhs = Rs 91,540 Lakhs**

**Note-** \*WBPCB in matter of O.A. no 600/2018 has mentioned that 402 drains have been identified in the Ganga front towns of West Bengal. UD & MA Department of Govt. of West Bengal vide email dated 08.02.2022 has also provided the information of 402 drains discharging into Ganga from 42 towns. However, CPCB during Post monsoon 2021 has monitored 101 drains in West Bengal whereas the list and coordinates of remaining 301 drains are not available with CPCB and these drains were considered as untapped and EC is imposed accordingly.

- a) Relevant list of drains along with EC calculation is enclosed.
- b) Discrepancies, if any regarding drains information and EC calculation may kindly be communicated to CPCB within 7 days.

**SUMMARY OF WEST BENGAL STPs FOR EC CALCULATION**

**EC Calculation period: 01.07.2020 to 31.01.2022**

<b>1. Total no. of STPs</b>	<b>:</b>	<b>64</b>
<b>2. Operational STPs</b>	<b>:</b>	<b>19</b>
<b>3. Non-operational STPs/Under Rejuvenation STPs</b>	<b>:</b>	<b>05+17= 22</b>
<b>4. Under Construction/under-trial/Upgradation STPs</b>	<b>:</b>	<b>08</b>
<b>5. Under Tendering/DPR/Proposed STPs</b>	<b>:</b>	<b>15</b>
<b>6. No. of STPs to be considered for EC calculation (Sl. No. 3 +4+5)</b>	<b>:</b>	<b>45 (22+08+15)</b>
<b>7. Calculated EC = No. of STPs× @10 lakhs/month/STP (Since 01.07.2020 to 31.01.2022)</b>	<b>:</b>	<b>45 STPs x 10 Lakhs x 19months = Rs. 8550 Lakhs</b>

**Note:**

- a) Relevant lists of STPs are enclosed.
- b) EC may be deposited in favour of CPCB, Account no. 532702050000164 (Bank: Union of India, I.P. Extension Branch, Vikas Marg Extension, Delhi, IFSC; UBIN0553271) within one month from the date of issue of this letter as per Hon'ble NGT order.

<b>Status of Drains for EC Calculation as on 31.01.2022, West Bengal</b>							
<b>S.No</b>	<b>Drains</b>	<b>Status of Drain (S-Sewage, C-Canal, D-Dry)</b>	<b>Tapping Status (T-Tapped/ UT-Untapped/NI- No Information)</b>	<b>Interim Measures taken from 01.11.2019 to 30.06.2020 (Yes/No/ NI-No Information)</b>	<b>EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)</b>	<b>EC Calculated from 01.07.2020 to 31.12.2021 @10.0 Lakh per month (18 Months)</b>	<b>Total EC Calculated (in Lakhs)</b>
1	Jangipur Drain, Jangipur	S	UT	No	40	190	230
2	Majher Char Khal, Kalyani	S	UT	No	40	190	230
3	Halisahar Drain, Halisahar	S	UT	No	40	190	230
4	Garifa Drain-South/Ramaghat-Open pucca drain, Garifa	S	UT	No	40	190	230
5	Garifa Drain-North, Garifa	S	UT	No	40	190	230
6	Thanar Khal, Naihati	S	UT	No	40	190	230
7	Dhopa Ghat Drain, Hooghly	S	UT	No	40	190	230
8	Imambara Khal, Hooghly	S	UT	No	40	190	230
9	BTPS Out fall Drain-I, Hooghly	S	UT	No	40	190	230
10	ITC Triveni Drain, Chandrahati, Hooghly	S	UT	No	40	190	230
11	Chinsurah-Majir Rasta Drain, Hooghly	S	UT	No	40	190	230
12	Chandni Ghat Drain, Chinsurah	S	UT	No	40	190	230
13	Chandannagar Drain, Chandannagar	S	UT	No	40	190	230
14	Bhatapara Drain, Bhatapara	S	UT	No	40	190	230
15	Bhatapara-Open pucca drain, Bhatapara	S	UT	No	40	190	230
16	Baidyabati Drain, Baidyabati	S	UT	No	40	190	230
17	Debitala Pancha Khal, Garulia Municipality	S	UT	No	40	190	230
18	DVC Canal, Champdani	S	UT	No	40	190	230
19	Serampore/Bhagirathi Drain, Serampore	S	UT	No	40	190	230
20	Chatra Khal, Serampore	S	UT	No	40	190	230
21	Barrackpore Khal, Barrackpore	S	UT	No	40	190	230

22	Gandhighat Drain, Barrackpore	S	UT	No	40	190	230
23	Dhobi Ghat Drain, Barrackpore	S	UT	No	40	190	230
24	Titagarh Drain, Titagarh	S	UT	No	40	190	230
25	Hasting Ghat Drain, Rishra	S	UT	No	40	190	230
26	Bagh Khal, Rishra & Konnagar	S	UT	No	40	190	230
27	Khardah Khal, Khardah	S	UT	No	40	190	230
28	Balughat-Manirampur pucca drain, Barrackpore	S	UT	No	40	190	230
29	Champdany Ferry Ghat/ Paolghat Drain, Khardah	S	UT	No	40	190	230
30	Dawangazi Ghat Drain, Bally	S	UT	No	40	190	230
31	Bally Khal, Bally	S	UT	No	40	190	230
32	Jagatnath Ghat Drain-1, Belur	S	UT	No	40	190	230
33	Kamarhati Drain @ Jute Mill, Kamarhati	S	UT	No	40	190	230
34	PB Ghat Drain, Kamarhati	S	UT	No	40	190	230
35	Kuthighat Drain/ Baranagar Khal, Baranagar	S	UT	No	40	190	230
36	Chitpur Ghat Khal/ Circular Canal, Chitpur	S	UT	No	40	190	230
37	Cossipore/ Kashipur Khal, Cossipore	S	UT	No	40	190	230
38	Muni Khali Khal, Shobhabazar/ Chorial	S	UT	No	40	190	230
39	Pratapnagar-Rajbari Drain, Howrah	S	UT	No	40	190	230
40	Telkal Ghat Drain, Howrah	S	UT	No	40	190	230
41	Ramkrishna Ghat Drain, Howrah	S	UT	No	40	190	230
42	101, Foreshore Road Drain, Howrah	S	UT	No	40	190	230
43	Sarasvati Khal, Dhulahagarh	S	UT	No	40	190	230
44	Tolly Nala, Garia, Tollygunj	S	UT	No	40	190	230

45	Nimtala Khal, Ahirtala, Beniatala, Nimtala	S	UT	No	40	190	230
46	Dhankheti Khal, Garden reach	S	UT	No	40	190	230
47	Shibpur Burningghat Drain, Shibpur-Howrah	S	UT	No	40	190	230
48	Bagher Khal, Kanchara Para	S	UT	No	40	190	230
49	130 Foreshore Road Drain, Howrah	S	UT	No	40	190	230
50	Nazerganj Khal, Sankrail	S	UT	No	40	190	230
51	Singhi More Khal, Dhulahagarh	S	UT	No	40	190	230
52	N.C. Pal Khal, Sankrail	S	UT	No	40	190	230
53	Bazarpara-Garighat Drain/ Sharenga Khal, Dhulagarh & Sankrail Industrial areas	S	UT	No	40	190	230
54	Akhra Food Chat drain (Munikali Khal), Budge Budge	S	UT	No	40	190	230
55	Alliance Mill Drain, Jagatddal	S	UT	No	40	190	230
56	Rosbara Drain, Bandel	S	UT	No	40	190	230
57	Haldia (Jhikhur Khali lock gate bridge), Haldia-	S	UT	NI	40	190	230
58	Haldia, Erekhali Shiv Temple , East Medinapore	S	UT	NI	40	190	230
59	Garchumuk , Garchumuk	S	UT	NI	40	190	230
60	Kumar Khali ,711315, Kumar Khali	S	UT	NI	40	190	230
61	Madai Hat , Madai Hat	S	UT	NI	40	190	230
62	Rangamati More , Rangamati	S	UT	NI	40	190	230
63	Kalinga Nagar, 711315, Kalinagar Area	S	UT	NI	40	190	230
64	Uluberia , Uluberia	S	UT	NI	40	190	230
65	Chakashi, Chengail, Chengail	S	UT	NI	40	190	230
66	Chakmadhu, Nalpur near Bauria ferry ghat , Bauria	S	UT	NI	40	190	230

67	Sankrail, near Manikpur ferry ghat , Manikpur	S	UT	NI	40	190	230
68	Sankrail , Sankrail	C	UT	NI	NA	NA	0
69	Botanical Gareden-I, Kolkata , Botanical Gareden	S	UT	NI	40	190	230
70	Botanical Gareden-II, Kolkata, Botanical Gareden	S	UT	NI	40	190	230
71	Gondal Para , Chandannagar	S	UT	NI	40	190	230
72	Sarishapara , Sarishapara	S	UT	NI	40	190	230
73	Azimganj , Azimganj	S	UT	NI	40	190	230
74	Sagar Dhighi WBPDC water project , Sagar Dhighi	S	UT	NI	40	190	230
75	Gadde , Sagar Dhighi	D	UT	NI	NA	NA	0
76	At Lalbagh Burning Ghat, Ward No-2, Lalbagh	D	UT	NI	NA	NA	0
77	At Rattola Colony, Ward No-2, Lalbagh	S	UT	NI	40	190	230
78	Lalbagh Sadhar Ghat, ward No-2, -	S	NI	NI	40	190	230
79	sahanagar,Near ChairGhat, ward No-4, -	S	NI	NI	40	190	230
80	Hatat Coluny, Ward no-5, Murshidabad	S	UT	NI	40	190	230
81	At Hazardwary Complex, Ward No-10, Murshidabad	S	UT	NI	40	190	230
82	Ichhaganj Dahapara Ferry Ghat Dear Chay Para, Ward No-12, Lalbagh	D	UT	NI	NA	NA	NA
83	Nashipur Ghosh Para,Ward No-14, Lalbagh	S	UT	NI	40	190	230
84	Rattala- Gorabazar Beherampore , Berhampore	S	UT	NI	40	190	230
85	Goshpara Nabadwip , Nabadwip	S	UT	NI	40	190	230
86	Raninagar _Chakdha , Chakdha	S	UT	NI	40	190	230



43682/2022/LAW-HO

87	Anthpur (Sastri Nagar), Antpur Fari	S	UT	NI	40	190	230
88	Ichapur Khal, Goalapara, Ramnaga	S	UT	NI	40	190	230
89	Monirampore -Barrackpore, Barrackpore	S	UT	NI	40	190	230
90	Barrackpore (adjacent to Ramakrishana Mission), Barrackpore	S	UT	NI	40	190	230
91	Talpukur , Titagarh	S	UT	NI	40	190	230
92	Dakineshwar Alambazar (Left), Dakineshwar	S	UT	NI	40	190	230
93	Kanchantala-I (left Bank), Garden Reach	S	UT	NI	40	190	230
94	Kanchantala-II, Garden Reach	S	UT	NI	40	190	230
95	Kanchantala-III, Garden Reach	S	UT	NI	40	190	230
96	Budge Budge -Pujali , Pugali and Budge-Budge	S	UT	NI	40	190	230
97	Dakshin Raypur , Chakbansberia, Alampur, Nodakhali	S	UT	NI	40	190	230
98	Baratala , Kathgora, Raniyi, Pukursita	S	UT	NI	40	190	230
99	Falta- III, Ram Nagar	S	UT	NI	40	190	230
100	NDL-25 Falta , Basulat village area	S	UT	NI	40	190	230
101	NDL-26 Falta , Rammnagar area	S	UT	NI	40	190	230
<b>Amount in Lakh (Rs.)</b>					<b>3880</b>	<b>18430</b>	<b>22310</b>
<b>Total Amount of EC in Lakhs (Rs.)</b>						<b>22310</b>	

\*Drain List is provided by State Authorities

\*Abbreviation: S-Sewage, D-Dry, T-Tapped, C- Canal, UT-Untapped, No information -NI)

Calculation of EC for under-construction/trial/rejuvenation/not completed/non-operational/proposed STPs in West Bengal (Febraury 2022)											
S.No	Name of STP	Physical Status	No. of STPs	Designe d Capacity (MLD)	Ganga front Town	Technolog y	STP operating agency	Operational Status		EC calculate d (Yes/ No)	EC calculated @Rs. 10 lakh per month (Duration 01.07.2020 to 31.1.2022 )
								As on 30.6.2020	As on 31.1.2022		
1	Titagarh (ASP)	Commissione d	1	4.5	Titagarh	ASP	KMDA	Under Rejuvenation	Non-Operational (Under Rejuvenation)	Yes	190
2	Titagarh (OP)	Commissione d	1	4.5	Titagarh	OP	KMDA	Under Rejuvenation	Non-Operational (Under Rejuvenation)	Yes	190
3	Bandipur STP	Commissione d	1	14	Titagarh	WSP	KMDA	Under rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
4	Bansberia STP	Commissione d	1	0.3	Bansberia	WSP	KMDA	Under Rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
5	Kamarhati STP	Commissione d	1	60	Kamarhati	TF	KMDA	Under Rejuvenation	Non-operational (Under Rejuvenation)	Yes	190

6	Garulia STP	Commissioned	1	4.1	Garulia	WSP	KMDA	Under-rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
7	Bhadreswar STP	Commissioned	1	7.6	Bhadreshwar	AL	KMDA	Under Rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
8	Baidyabati STP	Commissioned	1	6	Baidyabati	AL	KMDA	Under Rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
9	Howrah STP (Arupara)	Commissioned	1	65	Howrah	TF	KMDA	Under Rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
10	Kona STP (Chakpara, Anandanagar Gram, Balli Panchayat)	Commissioned	1	62	Howrah	WSP	KMDA	Under Rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
11	Champadani	Commissioned	1	1	Champdani	AL	KMDA	Under-rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
12	Panihati STP	Commissioned	1	12	Panihati	OP	KMDA	Under-rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
13	Gayeshpur, Halishar & Kanchrapara	Commissioned	1	8.33	Kanchrapara	SBR	KMDA	Operational	Operational	No	
14	Halishahar	Commissioned	1	16	Halisahar	SBR	KMDA	Operational	Operational	No	

15	Serampore STP	Commissioned	1	18.6	Serampore	TF	KMDA	Under Rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
16	Konnagar (Rishra)	Commissioned	1	22	Konnagar	OP	KMDA	Under Rejuvenation	Non-Operational (Under Rejuvenation)	Yes	190
17	Murshidabad STP	Commissioned	1	1.96	Murshidabad	OP	PHED	Non-operational	Non-Operational	Yes	190
18	Berhampore	Commissioned	1	3.7	Murshidabad	OP	KMDA	Non-operational	Non-Operational	Yes	190
19	Jiaganj, Azimpur	Commissioned	1	1.39	Jiaganj-Azinganj	OP	JAM	Non-Operational	Non-Operational	Yes	190
20	Naihati-1 STP	Commissioned	1	11.56	Naihati	ASP	KMDA	Operational/Under Rejuvenation	Non-Operational (Under Rejuvenation)	Yes	190
21	Naihati-2 STP	Commissioned	1	6.5	Naihati	WSP	KMDA	Under Rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
22	Chandannagar -2 STP (OP)	Commissioned	1	4.5	Chandannagar	OP/WSP	KMDA	Operational/Under Rejuvenation	Non-operational (Under Rejuvenation)	Yes	190
23	Chandannagar -1 STP (TF)	Commissioned	1	18.16	Chandannagar	TF	KMDA	Operational/Under Rejuvenation	Operational	No	
24	Jaggadal – Bhatpara	Commissioned	1	31	Bhatpara	FBBAS	KMDA	Operational	Operational	No	
25	Jaggadal – Bhatpara	Commissioned	1	9.5	Bhatpara	ASP	KMDA	Operational	Operational	No	
26	Jaggadal – Bhatpara	Commissioned	1	0.5	Bhatpara	OP	KMDA		Non-operational	Yes	190

27	Kankinara, Madrail,	Commissioned	1	10	Bhatpara	WSP	KMDA	Operational	Operational	No	
28	Barrackpore-2 STP ( 6 MLD ) , Lat Bagan	Commissioned	1	6	Barrackpore	SBR	KMDA	Operational	Operational	No	
29	Barrackpore-1 STP ( 18 MLD ) , Lat Bagan	Commissioned	1	18	Barrackpore	SBR	KMDA	Operational	Operational	No	
30	Garden Reach STP	Commissioned	1	57	Kolkata	ASP	KMC	Operational	Operational	No	
31	Cossipore, Chitpur, Bangur	Commissioned	1	45	Kolkata	ASP	KMC	Operational	Operational	No	
32	South Suburban /Keorapukur, Haridevpur	Commissioned	1	45	South Suburban	AL	KMC	Operational	Non-functional (Found submerged during the visit, because of rainy season)	No	
33	Shyamnagar STP Banerjee Para, Shyam Nagar, Kolkata, West Bengal	Commissioned	1	10	Kolkata	FBAS	Larsen & Toubro (L &T )	Operational	Operational	No	
34	Bagahajatin STP	Commissioned	1	15	Kolkata	AL	KMC		Operational	No	
35	Hatisur	Commissioned	1	10	Kolkata	ALCT	KMC		Operational	No	
36	Budge Budge STP, 9.33MLD	Commissioned	1	9.33	Budge Budge STP	SBR	KMDA	Operational	Operational	No	
37	Nabadwip	Commissioned	1	10	Nabadwip	OP	KMDA	Operational	Non-operational	No	

38	Katwa	Commissioned	1	5.49	Katwa	WSP	Katwa Municipality	Non-operational	Non-operational	Yes	190
39	Kalyani-1 Block-B2,B3	Commissioned	1	11	Kalyani	TF	KMDA	Operational	Operational	No	
40	Kalyani-2 Town area	Commissioned	1	10	Kalyani	WSP	KMDA	Operational	Operational	No	
41	Diamond Harbour STP	Commissioned	1	2.03	Diamond Harbour	WSP	PHED	Operational	Operational	No	
42	Near WBSETCL, Joka	Non-commissioned	1	45	Joka	NA	KMC	Under Construction	Under Construction	Yes	190
43	At Bank Plot, M.G. Road	Non-commissioned	1	40	Joka	NA	KMC	Under Construction	Under Construction	Yes	190
44	Nabadwip (9.5 MLD) New	Non-commissioned	1	9.5	Nabadwip	ASP	KMDA	Under Construction	Under Construction	Yes	190
45	Kanchrapara (18 MLD)	Non-commissioned	1	18	Kanchrapara	AL	KMDA	Under Construction	Under Construction	Yes	190
46	Berhampore (3.5 MLD)	Non-commissioned	1	3.5	Behrampore	SBR	KMDA	Under Construction	Under Construction	Yes	190
47	Raghunathganj (5 MLD)	Non-commissioned	1	5	Raghunathganj	SBR	KMDA	Under Construction	Under Construction	Yes	190
48	Jangipur (8 MLD)	Non-commissioned	1	8	Jangipur	SBR	KMDA	Under Construction	Under Construction	Yes	190
49	Maheshtala STP	Upgradation	1	35	Maheshtala	WSP	KMDA		Upgradation from 4 to 35 MLD	Yes	190

50	Hooghly-Chinsurah	Non-commissioned	1	26.5	Hoogly	NA	KMDA	Undertendering	Undertendering	Yes	190
51	North-Barrackpore (Babanpur)	Non-commissioned	1	11.25	Barrackpore	NA	KMDA	Undertendering	Undertendering	Yes	190
52	North-Barrackpore (Monirampur)	Non-commissioned	1	6.5	Barrackpore	NA	KMDA	Undertendering	Undertendering	Yes	190
53	Wireless Park	Non-commissioned	1	15.3	Kolkata	NA	KMC	Undertendering	Undertendering	Yes	190
54	Sukhapukur	Non-commissioned	1	5.06	Sukhapur	NA	KMC	Undertendering	Undertendering	Yes	190
55	Birji Road	Non-commissioned	1	5.7	Kolkata	NA	KMC	Undertendering	Undertendering	Yes	190
56	STP Near L.S 10	Non-commissioned	1	16	Kolkata	NA	KMC	Undertendering	Undertendering	Yes	190
57	Surinaam Ghat	Non-commissioned	1	25	Kolkata	NA	KMC	Undertendering	Undertendering	Yes	190
58	STP Near Bhangal Khal, Garden reach	Non-commissioned	1	35	Kolkata	NA	KMC	Undertendering	Undertendering	Yes	190
59	STP at Rajpur-Sonarapur, Rania	Non-commissioned	1	23	Sonarapur	NA	KMC	Undertendering	Undertendering	Yes	190
60	Dhuliyani	Non-commissioned	1	5.68	Dhuliyani	NA	MED	Undertendering	Undertendering	Yes	190

61	Santipur	Non-commissioned	1	16.6	Santipur	NA	MED	Undertendering	Undertendering	Yes	190
62	Chakdah	Non-commissioned	1	5.06	Chakda	NA	MED	Undertendering	Undertendering	Yes	190
63	Haldia	Non-commissioned	1	24.29	Haldia	NA	MED	Undertendering	Undertendering	Yes	190
64	Raiganj	Non-commissioned	1	10.52	Raiganj	NA	MED	Undertendering	Undertendering	Yes	190
										<b>Total</b>	<b>8550</b>
<p>Abbreviations used:</p> <p>KMDA- Kolkata Municipal Development Authority</p> <p>KMC - Kolkata Municipal Corporation</p> <p>PHED- Public Health Engineering Department</p> <p>MED - Municipal Engineering Directorate</p> <p>ASP - Activated Sludge Process</p> <p>OP - Oxidation Pond</p> <p>WSP - Waste Stabilization Pond</p> <p>SBR - Sequence Batch Reactor</p> <p>FBAS - Fixed Bed Biofilm Activated Sludge Process</p> <p>TF - Trickling filter</p> <p>ALCT - Aeration through long Channel Traverses</p> <p>NA- Not Available</p>											



## Annexure-IV

✓  
Speed Post/Email

F.No. B- 19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21

14510-14527

Dated: 16.03.2022

To,

SPMG/SMCG, Jal Nigam/Jal Sansthan and Urban development & housing department of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal (List Enclosed) & NMCG

**Subject: Environmental Compensation for untapped drains and incomplete STP projects -reg.**

*Reference: Hon'ble NGT orders dated 07/22.08.2019, 12/18.12.2019 & 13.08.2020 and 23.11.2021 in the matter of M.C. Mehta Vs Union of India, O.A. No. 200/2014*

Sir,

Kind reference is invited to above cited Hon'ble NGT orders wherein Central Pollution Control Board (CPCB) has been directed to calculate Environmental Compensation (EC) for untapped drains discharging in to river Ganga and its tributaries and incomplete/ under construction Sewage Treatment Plant (STP) projects in Ganga front states.

Hon'ble NGT vide order dated 23<sup>rd</sup> November, 2021 directed the following:

*"Compensations in the last order may now be positively collected by the CPCB and the NMCG within two months. In case of non-compliance, coercive measures be taken including initiating prosecution against the defaulters under Section 26 of the NGT Act, 2010. NMCG and CPCB may file their report of further progress as on 31.3.2022 by 15.4.2022 which may also be simultaneously uploaded on their respective websites"*

Accordingly, CPCB has calculated EC based on information collected through monitoring/inspections and state agencies for untapped drains and incomplete/under construction STP projects.

In compliance to the said Hon'ble NGT order, EC for the period 01.11.2021 to 31.01.2022 has been calculated @ Rs. 10.0 Lakhs per month for each untapped drain and incomplete STP projects, and for the period from 01.11.2019 to 31.06.2020 @ Rs. 5.0 Lakhs per month for each untapped drain where no interim measures were taken. Details of EC calculated are enclosed at Annexure-I.

In view of above, I am directed to request you that the status of drains and STP projects considered for levying EC may kindly be got re-confirmed. In case of discrepancies, if any, the same may be intimated to CPCB within 15 days and accordingly EC shall be deposited in favor of CPCB, Account no. 532702050000164 (Bank: Union of India. I.P. Extension Branch, Vikas Marg Extension, Delhi, IFSC: UBIN0553271).

Yours faithfully,

Encl.: As above

(A.K. Vidyarthi)

Director & DH, WQM-II Division

Copy to-

Member Secretary (SPCB of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal)

(A.K. Vidyarthi)

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
निर्गत... 17/3/2022  
दिनांक... 17.3.2022

o/c

RA(AD)



Sl. No.	Address and list of State Agencies (SPMG/SMCG, Jal Nigam/Jal Sansthan and Urban development & housing department of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal) & NMCG
1.	Project Director, State Programme Management Group (SPMG-UK) – Namami Gange 117, Indira Nagar Dehradun 248001 (Uttarakhand)
2.	Principal Secretary Urban Development Department 43/6, Mata Mandir Road, Dharampur Dehradun-248001 (Uttarakhand)
3.	The Chief General Manager Uttarakhand Jal Sansthan B-block, Jal Bhavan, Nehru Colony, Dehradun – 248001 (Uttarakhand)
4.	The Managing Director Pay Jal Nigam Uttarakhand 11, Mohini Road, Rajendra Nagar Dehradun – 248001 (Uttarakhand)
5.	Project Director State Mission for Clean Ganga-UP (SPMG-UP) Plot N0-18, Sector-7, Gomti Nagar Extension, Lucknow, - 226010 (UP)
6.	Principal Secretary Urban Development Department (UDD) 824, Bapu Bhawan, Lucknow – 226001 (UP)
7.	The Managing Director Uttar Pradesh Jal Nigam 6, Rana Pratap Marg Lucknow – 226001 (UP)
8.	The Principal Secretary Urban Development and Housing Department (UD&HD) Vikas Bhawan, Bailey Road, Patna - 800 001 (Bihar)
9.	Project Director, SPMG Group (Secretary Urban Development, Govt. of Bihar), Vikash Bhawan, Bailey Road, Patna – 800001 (Bihar)

10.	The Managing Director Bihar Urban Infrastructure Development Corporation Limited, (BUIDCO) West Boring Canal Road, Raja Pul Patna- 800001 (Bihar)
11.	Project Director, State Programme Management Group (SPMG-Jharkhand) – Namami Gange Urban Development & Housing Department, Room no. 403, 4th Floor, Project Bhawan, Dhurwa, Ranchi, Jharkhand-834004
12.	The Chairman Jharkhand Urban Infrastructure Development Company Limited, Pragati Sadan (RRDA Building), 3 <sup>rd</sup> Floor, Kutchary Chowk, Ranchi, Jharkhand-834001
13.	Chief Executive Officer Kolkata Metropolitan Development Authority (KMDA) Unnayan Bhavan, DJ - 11, SCC - II, Salt Lake, Kolkata – 700091 (WB)
14.	The Municipal Commissioner Kolkata Municipal Corporation (KMC) 5, S.N.Banerjee Road, Kolkata -700 013 (WB)
15.	The Additional Chief Secretary/Engineer in-chief Public Health Engineering Department Head Office, 7 <sup>th</sup> Floor, New Secretariat Building 1, K.S. Roy Road, Kolkata – 700001 (WB)
16.	Programme Director State Programme Management Group (SPMG) – Namami Gange Unnayan Bhavan, Block -A, DJ- 11, Sector - II, Block-A, KMDA, Salt Lake, Kolkata – 700091 (WB)
17.	Principal Secretary, Department of Urban Development & Municipal Affairs, Govt. of West Bengal, Nagarayan, DF-8, Sector-I, Salt Lake, Kolkata – 700064 (WB)
18.	The Director General National Mission for Clean Ganga Ministry of Jal Shakti, Government of India 1 <sup>st</sup> Floor, Major Dhyan Chand National Stadium India Gate, New Delhi – 110002



## Annexure-V

विनय कुमार चौबे भा.प्र.से.

सचिव

Vinay Kr. Choubey

I.A.S

Secretary



झारखण्ड सरकार, नगर विकास एवं आवास  
विभाग, धुर्वा, रांची - ८३४००४, झारखण्ड

Government of Jharkhand

Urban Development & Housing Deptt.

Dhurwa, Ranchi-834004, Jharkhand

Ref.: JUIDCO/NGT-CPCB/Correspondence/3052/2022 - 6097

Dated: 30/3/2022

To,

Mr. A.K. Vidyarthi,  
Director & DH, WQM-II Division,  
Central Pollution Control Board,  
Parivesh Bhawan, East Arjun Nagar,  
Delhi - 110032.

Sub: Request to waive off Environmental Compensation for incomplete STP Projects in Jharkhand.

Ref: 1. CPCB letter no. 19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21 dated 16.03.2022.  
2. Hon'ble NGT Order dated 07/22.08.2019, 12/18.12.2019 & 13.08.2020 and 23.11.2021 in the matter of M.C. Mehta Vs Union of India OA No. 200/2014.

Sir,

With reference to the CPCB letter cited 1<sup>st</sup> above, issued with regard to the Hon'ble NGT Order, dated 23.11.2021 cited 2<sup>nd</sup> above, town-wise response to the various issues raised by you are mentioned as under:

**Rajmahal (1 STP):**

With reference to the Hon'ble NGT OA No. 200/2014, Order dated 16.11.2021, the Hon'ble court observed that "As an interim measure at 04 nos. of drains of Rajmahal, that are considered as dry / stagnant drains in which flow occurs during monsoon seasons at Rajmahal, the screens at drains have been installed on dated 25.03.2019. Provisions for tapping of 04 drains to 3.5 MLD STP have been completed under Namami Gange Programme. The interception and diversion work has been completed and 600 house service connections have been provided. Accordingly, flow of sewage into these drains has been arrested and bio-remediation may not be required. However, Jharkhand State PCB may continue monitoring the water quality of these drains regularly".

It is therefore evident that the Hon'ble Court has accepted that the efforts to ensure zero sewage discharge in River Ganga have been achieved.

It may be further noted, that the construction works of the Rajmahal STP was greatly hampered due to various restrictions imposed by the Central/ State Govt. during the 1<sup>st</sup> wave & 2<sup>nd</sup> wave of the COVID-19 pandemic along with unprecedented heavy monsoon. As a result, extension of time for completion of execution works was granted to the contractor with due approval by Competent Authority (World Bank as well as NMCG). Meanwhile, interim measures of remediation were employed till such time the STP was ready for operation. At present, Rajmahal MWW project STP is fully functional and treating waste water received from 4 Nos. of Nallah and 2600 Households. The same was witnessed by CPCB team on 23.12.2020, 01.10.2021, 24.11.2021 & 25.02.2022. Thus the orders of the Hon'ble NGT Court have been complied with and zero sewage discharge in River Ganga has been achieved.



### **Dhanbad (3 STP) and Ramgarh (1 STP):**

By taking initiative and subsequent to the meeting held by the then Chief Minister (Jharkhand) and Union Minister (Water Resources, River Development and Ganga Conservation) on 03.02.2015, the former had requested to the latter to include the projects related to pollution abatement of Damodar River in the NMCG program vide letter no 3900674 dated 13/08/2015 (Annexure-1).

The concept notes for towns of Dhanbad, Phusro and Ramgarh consisting of Sewerage and Treatment for a cost of Rs. 1640 Crores was submitted to NITI Aayog in Aug 2015. The case was subsequently forwarded to NMCG for approval in Feb 2016. (Annexure-2).

NMCG vide letter no T-17/2015-16 /1248/NMCG/648 dated 28/12/2016 to GOJ principally agreed to support pollution abatement projects in Damodar River for construction of STPs and associated Interception and Diversions as well as connecting piping. (Annexure-3).

Subsequently fresh DPRs were prepared and submitted by the Government of Jharkhand and the same was forwarded to NMCG vide Letter no JUIDCO/DPR-Sew-I&D/Ramgarh/2406/2020 - 2173 dated 06/08/2010 for Ramgarh (Annexure-4) and vide Letter no 7/DMA/NGBRA/DMB-STP/67/2015/210 dated 10/07/2019 for Dhanbad. (Annexure-5)

It may be further noted that repeated waves of COVID 19 pandemic further hampered progress due to imposition of lockdowns by the Central and State Governments resulting in significant disruption of work.

These DPRs are under scrutiny at NMCG and on obtaining requisite approvals from NMCG tendering process will be initiated.

### **Phusro (1 STP):**

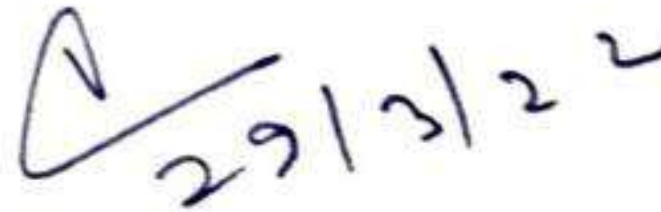
The Administrative Approval for the project of "Phusro I&D and STP project, (Jharkhand)" was received from NMCG vide letter no. Pr-25011/1/2019/Project Development (Bihar and Jharkhand) - Phusro, dated 15.12.2020 (see Annexure-6) and as per provisions laid in its Annexure-II - "Conditions on Administrative Approval and Expenditure Sanction for the project on "Phusro I&D and STP Project, (Jharkhand)", S. No. 2: "General & Technical Conditions" Point No. iii: "The Jharkhand Urban Infrastructure Development Company Ltd. (JUICo) shall be the Executing Agency (EA) of the project to be implemented under the guidance of the SMCG, in coordination and consultation with the ULB and overall monitoring of National Mission for Clean Ganga (NMCG) as per provisions laid down in the NGRBA programme framework", the tender for the above work was floated vide NIT No. JUIDCO/PHUSRO/I&D/STP/2021-375, dated 18.03.2021. Currently, the above tender is under disposal in consultation with NMCG. As soon as the tender process is completed with concurrence of NMCG, the selected implementing agency will start the construction activities pertaining to the above tender.

**It may be further noted that Jharkhand is the first and only state to have achieved zero discharge of nallahs to river Ganga. It is clearly evident from your own summary sheet where no EC has been calculated on this account.**

**In view of the above enumerated facts, we request you to take a compassionate and considered view and waive off the said EC on us.**

Encl.: As above.

Your faithfully,

  
(Vinay Kr. Choubey)

**Copy to: The Director General, NMCG, New Delhi; for kind information.**



ANNEXURE - 1

रघुवर दास  
Raghubar Das



मुख्यामंत्री  
झारखण्ड सरकार  
Chief Minister  
Govt. of Jharkhand

149

172

54

आवृत्त/म सुश्री उमा भारती,

अ.स.प.सं.: 3400674

दिनांक: 13-8-2015

भवदीय के साथ दिनांक-03.02.2015 को राँची में संपन्न बैठक में सह निर्णय लिया गया था कि नमामि गंगे परियोजना के तहत गंगा के सहायक नदी दामोदर को भी सम्मिलित किया जायेगा।

दिनांक--26.03.2015 को माननीय प्रधानमंत्री जी की अध्यक्षता में एन0जी0आर0बी0ए0 की बैठक में मैंने दामोदर नदी को भी नमामि गंगे परियोजना में सम्मिलित करने का प्रस्ताव रखा था। गंगा को अक्षुण्ण एवं निर्गल करना तबतक आरंभव प्रतीत होता है, जब तक उसमें सम्मिलित होने वाली प्रमुख सहायक नदियों को भी स्वच्छ न कर लिया जाय।

सविनय आग्रह है कि जिस प्रकार यमुना नदी को नमामि गंगे कार्यक्रम में सम्मिलित कर लिया गया है, उसी प्रकार झारखण्ड राज्य में लगभग 300 कि0मी0 में बहने वाली नदी दामोदर को भी प्रदूषण मुक्त करने हेतु अधिकारिक रूप से उसे नमामि गंगे कार्यक्रम में सम्मिलित कर लिया जाय तथा दामोदर नदी से संबंधित परियोजनाओं की स्वीकृति प्रदान की जाय।

दादर प्रशासक

भवदीय

13/8/2015  
(रघुवर दास)

सेवा में,

सुश्री उमा भारती,  
माननीया मंत्री,  
जल संसाधन, नदी विकास एवं गंगा संरक्षण मंत्रालय,  
भारत सरकार,  
कमरा सं0-210, श्रम शक्ति भवन,  
रफी मार्ग, नई दिल्ली-110001

3, कॉक रोड, राँची-834008/ 3, Kanke Road, Ranchi-834008  
दूरभाष/Tele.-0651-2280886, 2280996, 2400233 एवं 2280717, 2400232 (Fax/फैक्स)  
e-mail- cmjharkhand.rnc@gmail.com

Scanned by CamScanner



ANNEXURE - 2

T-17/2015-16/1248/NMCG /99  
National Mission for Clean Ganga, NGRBA  
Ministry of Water Resource, River Development and Ganga Rejuvenation

3<sup>rd</sup> Floor, Rear Wing  
Doorsanchar Sadan; 9, CGO Complex  
Lodi Road, New Delhi - 110003  
Dated: 10<sup>th</sup> February 2016

171

To,  
Shri A. Murlidharan,  
Deputy Advisor (WR),  
National Institute for Transforming India,  
(Water Resources Division)  
NITI Aayog, Sansad Marg, New Delhi

**Sub: Proposal for Financial Assistance for Specific Projects identified by the State Government of Jharkhand.**

Sir,

This has reference to your office memorandum No. 25(1)/44/2015-WR, seeking the views and comments of NMCG, MoWR, RD&GR on the proposal from the state of Jharkhand.

The proposal as received from the state government of Jharkhand is for seeking financial assistance for pollution abatement in river **Damodar**, one of the major tributary of river Ganga to a tune of **Rs. 1640 crore**.

In this regard, we principally agree to support pollution abatement projects in Damodar with following conditions/observations:

- (i) The assistance for industrial pollution control to a tune of Rs 140 Cr. has been found as process related components which the individual industries need to take care as part of maintaining the environmental norms and conditions of consent to operate (CTO) received from state pollution control board. Under Namami Gange these items seems not eligible for fund request.
- (ii) STPs at towns namely Dhanbad, Ramgarh and Phusro can be supported. State Government may be advised to submit necessary DPR with detailed cost estimates as per the NGRBA framework under Namami Gange programme;
- (iii) Under Namami Gange programme, NMCG would support Interception and Diversion (I&D) structures in instead of detailed sewerage network in captioned towns. State Government may accordingly be advised to submit necessary DPR related to I&D works with detailed cost estimates as per the NGRBA framework.

This issues with the approval of Secretary, MoWR, RD&GR.

Yours Faithfully,

*N.V. Satish*  
(N.V. Satish Seemakurti)  
Director (T-1)

**Copy to:**

1. PPS to Secretary, MoWR, RD&GR and MD, NMCG, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001 PS to Mission Director, NMCG
2. PS to AMD (Admin), NMCG



ANNEXURE - 3



T-17/2015-16/1248/NMCG-648  
 National Mission for Clean Ganga, NGRBA  
 Ministry of Water Resource, River Development and Ganga Rejuvenation

3<sup>rd</sup> Floor, Rear Wing  
 Doorsanchar Sadan; 9, CGO Complex  
 Lodi Road, New Delhi - 110003  
 Dated: 28<sup>th</sup> December 2016

To,  
 Shri Rajesh Kumar Sharma,  
 Project Director,  
 SPMG-Jharkhand

**Sub: Proposal for Financial Assistance for Specific Projects identified by the State Government of Jharkhand.**  
**Ref: SPMG-JHK Memo No. 7/n.pr.ni/NGRBA/ DNB-STP/67/2015/575**

Sir,

In reference to above, wherein confirmation has been sought on in principle consent to support pollution abatement project in Damodar.

In this regard, following is informed:

- (i) The assistance for industrial pollution control to a tune of Rs 140 Cr. has been found as process related components which the individual industries need to take care as part of maintaining the environmental norms and conditions of consent to operate (CTO) received from state pollution control board. Under Namami Gange these items seems not eligible for fund request.
- (ii) STPs at towns namely Dhanbad, Ramgarh and Phusro can be supported. State Government may be advised to submit necessary DPR with detailed cost estimates as per the NGRBA framework under Namami Gange programme;
- (iii) Under Namami Gange programme, NMCG would support Interception and Diversion (I&D) structures in instead of detailed sewerage network in captioned towns. State Government may accordingly be advised to submit necessary DPR related to I&D works with detailed cost estimates as per the NGRBA framework.

Thanking you,

Yours Faithfully,

**Sundeep**  
 Director (T-II)

**Copy to:**

1. PPS to OSD, MoWR, RD&GR and MD, NMCG, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001PS to Mission Director, NMCG
2. PS to DG, NMCG
3. Deputy Advisor (WR), National Institute for Transforming India, Niti Ayog, Sandad Marg, New Delhi



Letter No.: -JUIDCO/DPR-Sew-I&amp;D/Ramgarh/2406/2020...2173

Govt. of Jharkhand

Urban Development & Housing Department

169

From,

Vinay Kumar Choubey, IAS  
Secretary to Govt.

To,

Shri Rajiv Ranjan Mishra, IAS  
Director General,  
National Mission for Clean Ganga,  
Major Dhyan Chand National Stadium,  
First Floor, National Stadium, India Gate,  
New Delhi-110002.

Sub.: Regarding submission of Detailed Project Report (DPR) with detailed cost estimate for Interception &amp; Diversion (I&amp;D) scheme of Ramgarh town. Ranchi, Date 06/08/20

Ref.: NMCG letter no. 648 dated 28.12.2016, and Hon'ble NGT Principal Bench, New Delhi OA no. 200/2017 in the matter of M.C. Mehta versus Union of India &amp;Ors.

Respected Sir,

With reference to the aforesaid subject, it is worth to mention that the river Damodar flows approximately 300 km in Jharkhand before it merges into river Ganga at Hoogly (West Bengal), during the course of journey of river Damodar, it passes through three of our major urban centers viz. Dhanbad, Phusro and Ramgarh that are situated on the bank of river Damodar.

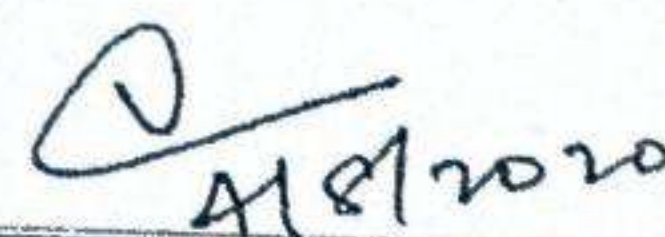
Also, taking into concurrence the current orders of Hon'ble NGT Court Principal Bench, New Delhi, OA No. 200/2014 in the matter of M.C. Mehta versus Union of India &Ors., regarding the pollution abatement of river Ganga and its tributary under Phase - III. The DPR for Interception & Diversion (I&D) scheme of Ramgarh town is prepared.

Therefore, as per the NMCG direction vide letter no. 648 dated 28.12.2016, the DPR for the Interception & Diversion (I&D) scheme of Ramgarh town is hereby enclosed and it is requested to kindly approve the DPR at the earliest.

Thanking you.

Enclosure: A/A.

Yours faithfully,


(Vinay Kumar Choubey)  
Secretary to Govt.



Govt. of Jharkhand  
Urban Development & Housing Department

900

From, Ajoy Kumar Singh, IAS  
 Secretary to Govt.

ANNEXURE - 5

To,  
 Shri Rajiv Ranjan Mishra, IAS  
 Director General,  
 National Mission for Clean Ganga,  
 Major Dhyan Chand National Stadium,  
 First Floor, National Stadium, India Gate,  
 New Delhi-110002.

Ranchi, Date 10/07/19

Sub.: Regarding submission of Detailed Project Report (DPR) with detailed cost estimate for Interception & Diversion (I&D) scheme of Dhanbad town.

Ref.: NMCG letter no. 648 dated 28.12.2016, and Hon'ble NGT Principal Bench New Delhi OA no. 200/2017 in the matter of M.C. Mehta versus Union of India & Ors.

Sir,

With reference to the aforesaid subject, it is worth to mention that the river Damodar flows approximately 300 km in Jharkhand before it merges into river Ganga at Hoogly (West Bengal), during the course of journey of river Damodar, it passes through three of our major urban centers viz. Dhanbad, Phusro and Rmagarh that are situated on the bank of river Damodar.

Also, taking into concurrence the current orders of Hon'ble NGT Court Principal Bench, New Delhi, OA No. 200/2014 in the matter of M.C. Mehta versus Union of India & Ors., regarding the pollution abatement of river Ganga and its tributary under Phase - III. The DPR for Interception & Diversion (I&D) scheme of Dhanbad town is prepared.

Therefore, as per the NMCG direction vide letter no. 648 dated 28.12.2016, the DPR for the Interception & Diversion (I&D) scheme of Dhanbad town is hereby enclosed and it is requested to kindly approve the DPR at the earliest.

Thanking you.

Enclosure: A/A.

Yours faithfully,

(Ajoy Kumar Singh)  
 Secretary to Govt.



File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&Jharkhand)-Phusro

ANNEXURE-6

Pr-25011/1/2019/Project Development (Bihar and Jharkhand) - Phusro  
National Mission for Clean Ganga  
Department of Water Resources, River Development  
& Ganga Rejuvenation, Ministry of Jal Shakti  
Government of India

1<sup>st</sup> Floor  
Major Dhyan Chand, National Stadium  
India Gate, New Delhi-110002  
Dated: 15<sup>th</sup> December 2020

To,  
**The Project Director,**  
SMCG Cell, Directorate Municipal Administration  
Urban Development Department, Government of Jharkhand  
Room No-415, 4<sup>th</sup> floor, Project building, Dhurva  
Ranchi-04

**Sub: Administrative Approval and Expenditure Sanction for "Phusro I&D and STP Project, (Jharkhand)" under Namami Gange Programme with 100% central sector support at an estimated cost of Rs 61.05 Crore (Sixty One Crore and Five Lakhs only).**

Sir,

I am directed to convey the grant of Administrative Approval and Expenditure Sanction for the project on "**Phusro I&D and STP Project, (Jharkhand )**" under National Ganga Plan (NGP) with 100% central sector support at an estimated cost of **Rs 61.05 Crore (Sixty One Crore and Five Lakhs only)** with the following Major components.

- Development of a 3 STPs (15 MLD) including necessary ancillary infrastructures, UV disinfection, SCADA and online monitoring system:
    - a. 4 MLD STP in sewage Zone I
    - b. 1 MLD STP in sewage Zone II
    - c. 10 MLD STP for sewage in Zone III, IV and V)
  - 4 number of I&D structures for the drains
  - 650 m of Drains for I&D works
  - Rising main of 900m from Zone V to IV
  - 1 Intermediate sewage pumping stations At Zone V I&D
  - Hydro Power Generation Plant 5KW at 4 MLD STP
  - Approach Roads & Protection works in STP
  - Environment plan during construction and operation phase
  - Reuse of treated waste water
  - Operation & maintenance for 15 years
  - Completion Time: 18 Months including bidding period
2. The summary of cost is given at **Annexure-I**.
3. Administrative Approval and Expenditure Sanction for the project is granted subjected to the conditions as per **Annexure-II**.

601 → 15/12/2020



File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&Jharkhand)-Phusro

165

4. The period of completion of the project is 18 (Eighteen) months from the date of issue of AA&ES. The procurement of goods and services shall be made strictly as per the 'NGRBA programme framework' and various other guidelines of NMCG. The detailed schedule of the project implementation is given in **Annexure-III**.
5. The grantee institution i.e. the State Mission for Clean Ganga (SMCG), is a registered society of the State Government constituted with the objective of serving as the dedicated institution for effective implementation of the Namami Gange programme activities at the state level, and the state is responsible in the long term for the conservation and health of the state's stretch of the river Ganga.
6. The funds for expenditure on the schemes would be debitable to the National Ganga Plan (NGP) account of the NMCG. The NMCG/Government of India reserves the right to withdraw the sanction at any stage, if it is convinced that the fund has not been properly utilized or appropriate progress is not being made.
7. In case of violation of any of the conditions of the grant or in case of closure or dissolution of the grantee organization, the Government shall take possession of all the assets of the organization acquired out of the Government grants and use them in any manner deemed appropriate or to recover from the organization the value of such assets at its discretion.
8. This AA&ES is issued based on the appraisal and sanction of the Executive Committee vide its 30<sup>th</sup> meeting held on 29<sup>th</sup> October 2020 and concurrence of ED (Finance) of NMCG vide office Note#28 dated 25.11.2020 and approval of DG, NMCG vide office Note#30 dated 25.11.2020.

Yours faithfully,

621 → 15/12/2020

(Krishan Lal Ahuja)  
Under Secretary, NMCG

**Copy forwarded for information and necessary action to: -**

- 1) The Chief Secretary, Government of Jharkhand, Project Bhawan, Dhurwa Ranchi-04
- 2) The Principal Secretary, Government of Jharkhand, Project Bhawan, Dhurwa Ranchi-04
- 3) Chairperson, Phusro Nagar Parishad, Phusro

**Copy forwarded for information to: -**

- 1) PS to Hon'ble Minister – Jal Shakti, Shram Shakti Bhawan, N. Delhi-110001
- 2) PPS to Secretary, DoWR, RD & GR, Shram Shakti Bhawan, New Delhi-110001
- 3) PS to DG / ED(Projects) / ED(Finance) / ED(Technical) / DS (Admin.), NMCG, N. Delhi
- 4) NMCG Officials
- 5) Sanction Folder/Guard File/MIS Division NMCG

621 → 15/12/2020

(Krishan Lal Ahuja)  
Under Secretary, NMCG



## File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&amp;Jharkhand)-Phusro

165

## Annexure-I

## Summary of cost of the project proposal of Phusro I&amp;D and STP Project, Jharkhand

S. No.	Items	Quantities	Cost
<b>A</b>	<b>Items on which centage is admissible</b>		
1	Nala tapings	4 nos.	51.78
2	Drains	650 m	200.00
3	Rising mains, Zone V to IV	200 mm, 900 m	38.66
4	<b>Sewage pumping station</b>		
	3 PPs for SPS at Zone V		10.17
	1 SPS at Zone V		14.16
	<b>Sub Total SPS</b>		<b>24.33</b>
5	<b>Sewage Treatment Plant (STP)</b>		
(a)	STP-1, 4 MLD (SBR – For Estimation purpose)		640.00
	DG sets, 2*320 KVA		
	Transformers		
	C. wall, 123 m		
	Generator room		
	Greenery		
(b)	STP-2, 1 MLD (Phytorid)		200.00
	C. wall, 154 m		
	Greenery		
(c)	STP-3, 10 Mld (SBR – For Estimation purpose)		1500.00
	DG sets, 2*320 KVA		
	Transformers		
	C. wall, 253 m		
	Generator room		
	Greenery		
	<b>Sub Total STPs</b>		<b>2340.00</b>
6	Retaining walls	262 m	298.27
7	Approach roads	310 m, for 10 MLD STP	35.94
8	Treated effluent disposal	To be done by State Govt. for use in Thermal power plants situated within 50 Km from STP	
(a)	Treated water storage tank at 4 MLD STP	140 kl	0
(b)	Treated water storage tank at 10 MLD STP	350 kl	0
(c)	Rising main from 4 MLD STP to industries	11.563 Km	0
(d)	Rising main from 10 MLD STP to industries	13.475 Km	0
9	Staff quarters	1	17.50
10	Hydropower generation plant at 4 MLD STP	5 KW	15.00
	<b>Sub Total (A) Basic Capital Cost</b>		<b>3021.48</b>
<b>B</b>	<b>Centage</b>		
1	Cost of project preparation @ 4% as per NGRBA guidelines (maximum)		120.86
2	Cost of project supervision @ 4% as per NGRBA guidelines (maximum)		120.86
	<b>Sub Total B</b>		<b>241.72</b>
<b>C</b>	<b>Miscellaneous Cost</b>		
1	O&M cost for 1 <sup>st</sup> 15 years, excluding power charges		1334.14
2	Power connection		100.00
3	Communication & Public Outreach	-	49.91
4	Governance and Accountability Plan (GAPP)	-	49.91
5	Environmental Mitigation and Monitoring Cost	-	13.68

61 → 15/12/2020



File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&amp;Jharkhand)-Phusro

164

S. No.	Items	Quantities	Cost
	(ESAMP)		
6	Railway line Crossing, R & B Road Crossing Charges		94.13
7	Power charges for 1 <sup>st</sup> 15 years		1199.70
	<b>Sub Total C</b>		<b>2841.47</b>
	<b>Total Cost of project A+B+C</b>		<b>6104.67</b>
	<b>Total project cost in Rs. Cr.</b>		<b>61.05</b>

61-92  
15/12/2022



163

Annexure-IIConditions on Administrative Approval and Expenditure Sanction for the project on 'Phusro I&D and STP Project, (Jharkhand)'**1. Specific Conditions:**

- i. The State Govt. should ensure the availability of land in their possession before awarding the works.
- ii. All infrastructure projects need to conduct project specific IEC activities and detailed plan for such activities to be submitted to NMCG.
- iii. "Namami Gange" signage to be placed at all the project sites approved under Namami Gange programme.
- iv. Cost of getting statutory clearances will be provided as a reimbursement on the basis of supporting documents.
- v. State Government shall ensure that after implementation of this project, no untreated drains will fall in the river Damodar from Phusro etc.
- vi. Installation of trash arresting rack and its regular O&M at the mouth of all drains and adequate provision for handling septage in the STP facility may also be made part of project proposal for implementation.
- vii. State Govt. need to expedite the bidding process for the project. The entire bidding process including award of work for the project shall be completed within 3 months from the date of issue of AA&ES.
- viii. The disinfection method to be adopted in the project (e.g. UV radiation / Chlorination method etc.) shall be consistent with the disinfection process already adopted in other STP projects in Jharkhand funded by Namami Gange.
- ix. State government will pari-pasu implement the project for utilization of treated wastewater from the project for irrigation, industrial purpose as per its policy and other national policy.
- x. State Govt. need to submit a revised DPR, before bidding, based on Third Party Agency's recommendations complete with detailed designs and hydraulic analysis.

**2. General & Technical Conditions:**

- i. State Mission for Clean Ganga (SMCG), Jharkhand, which is dedicated cell within the UD Department shall be responsible for overall planning, management and effective implementation of the project at state level.
- ii. 'Municipal Council Phusro' shall be the Urban Local body (ULB) responsible for ensuring commitment to ownership, commitment to reforms for sustainable O &M, and community involvement.
- iii. The Jharkhand Urban Infrastructure Development Corporation Ltd (JUIDCo) shall be the Executing Agency (EA) of the project to be implemented under the guidance of the SMCG, in coordination and consultation with the ULB and overall monitoring of the National Mission

15/12/2020



for clean Ganga (NMCG) as per provisions laid down in the NGRBA programme framework.

- iv. The project will be implemented through DBOT mode with Operation and Maintenance support for a period of 15 years. The O&M works would include basic cleaning works, service management for the proposed service area of I&D and STP operation. After 15 years, the operation and maintenance of the plant shall be the responsibility of the state government. Sustainable revenue generation from beneficiaries, re-use of treated effluent and waste to energy etc. shall be encouraged.
- v. The Phusro I&D and STP Project to be executed in DBOT mode and needs to be suitably aligned with the "Strategic Sanitation Plan"/ "City Sanitation Plan"/ "Master Plan" for Phusro, Jharkhand. Synergy shall be ensured with other central/State sponsored programme like JnNURM, UIDSSMT etc. in the project area to avoid any overlap/duplication.
- vi. The project is to be implemented within 18 months from the date of issue of AA&ES as per the implementation schedule given in Annexure-III. All the bidding activities and award of work to be completed within 3 months.
- vii. SMCG need to take steps to prepare bid documents in line with the Model Bid Document (MBD) for projects funded under National Ganga Plan.
- viii. The compliance of observations of the NMCG and TPA would be ensured by SMCG at the time of finalization of Bid Document including submission of supplementary/ revised final DPR.
- ix. The activities proposed under the project shall conform to all Environmental Legislations and the NGRBA programme framework.
- x. The Environmental & Social Assessment & Management Plan/ESDDR as prepared part of the project and approved is required to be disclosed in the website of SMCG/JUIDCO prior to bid publication and the EMP shall be made part of the bid document.
- xi. A detailed site specific ESIA and ESMP is required to be prepared by the DBOT operator and need to be shared with NMCG and approval to be taken.
- xii. No untreated municipal/domestic wastewater should be allowed to fall in the Damodar river stretch of Municipal Council of Phusro.
- xiii. Detailed design & implementation of the I&D system, Pumping stations, STP, Effluent Channel and Rising Main should be based on extensive survey. Proper investigation should be carried out before execution to achieve economy in the proposal as well as to avoid any shortfall in the design. Choice of technology should be left open and decided during the bidding process.
- xiv. Standard procedure as indicated in the CPHEEO manual on Sewerage & Sewage Treatment, NGRBA Guidelines and codes of practice of BIS will be strictly followed during project implementation.

62 - 15/12/2020



## File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&amp;Jharkhand)-Phusro

(161)

- xv. Progress of implementation of the project shall be closely monitored by the State Government of Jharkhand /SMCG, so as to ensure that the project is completed within the stipulated period of time. In addition the progress (physical & Financial, including funds utilization certificates) needs to be reported to NMCG on regular basis and as and when requested.
- xvi. Any cost escalation or time overrun will be brought to the notice of NMCG. Decision of cost overrun/time overrun will be granted based upon discussion in the EC of NMCG.
- xvii. The project should encourage reuse of treated waste water. A plan and implementation schedule for water reuse needs to be provided before bidding.
- xviii. The treated sewage must meet the standards prescribed by NGT treated effluent for BOD, TSS and coliform and in case where EC has specifically recommended, meet higher standards and disinfect the treated effluent before disposal.
- xix. The condition assessment of the existing civil structures for possible use is to be included in the bid document.
- xx. The actual project cost shall be the awarded cost.
- xxi. The actual project cost shall be the awarded cost. If the awarded cost is within the sanctioned estimated cost then state government is not required to take NOC from NMCG.
- xxii. In case the final/negotiated quote of a contract exceeds the value put to tender up to 5% (i.e. up to overall Rs 25 Cr.) of the estimated cost, the Executing Agency can award the work following the due process of procurement guidelines of state government. Justification of the increase in cost must be submitted by the Executing Agency through SMCG to NMCG (Post award of contract) for information and issuance of revised AA&ES.
- xxiii. In case the final/negotiated quote of a contract exceeds 5% (or Rs 25 Cr.) but is within 10% (or upto Rs 50 Cr.) of the estimated cost, the Executing Agency can award the work with approval of SMCG and also following the due process of procurement guideline of the state government. Justification of the increase in cost must be submitted by the Executing Agency through SMCG to NMCG (Post award of contract) for information and issuance of revised AA&ES.
- xxiv. In case the final/negotiated quote of a contract exceeds the estimated cost by more than 10% (or above Rs 50 Cr.), the work shall be awarded by Executing Agency only after obtaining approval of NMCG. In such case, necessary justification shall be provided to NMCG by SMCG for approval of this additional cost.
- xxv. The State is advised to consider charging people on a monthly basis for the sewerage system to recover at-least O&M cost as the charges per household would be quite low. Suitable sewage cess / tariff / tax and sewer

GA → 15/12/2020



## File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&amp;Jharkhand)-Phusro

160

connection fee may be imposed on the beneficiaries to recover the O&M at the least to start with. However, the full project cost recovery at the earliest should be aimed at.

- xxvi. To impart training to all personnel engaged on construction and O&M for quality construction and O&M of works.
- xxvii. Regular monitoring of the project implementation in accordance with the NGRBA framework.
- xxviii. Guidelines issued by Ministry of Finance and other governing organizations regarding disaster management as applicable be adhered to during project execution.
- xxix. The SMCG shall ensure appointment of agency for third party inspection (TPI)/ evaluation of the project.
- xxx. Water supply rate and Sewage generation estimation shall conform to CPHEEO guidelines as per their manual.
- xxxi. All components of the project shall be completed within specified time limits and the resources and outputs and outcomes are to be ensured as envisaged in the approved project Completion Report shall be submitted to NMCG on completion of the project.
- xxxii. Any additional component relevant for project or any component requiring modification or deletion, may be added or modified or deleted as the case may be, only with the prior approval of the competent Authority.
- xxxiii. Staffs that may be employed for preparation, execution or operation of the project by the EA are not to be treated as employees of the SMCG/NMCG. The deployment of such staff at the time of completion or termination of the project will not be the concern or liability of the SMCG/NMCG.
- xxxiv. Optimal utilization of the assets relating to the project and created under Ganga Action Plan or any other Central /State Plan shall also be ensured by the SMCG/EA/ULB.
- xxxv. All data, records, documents and material related to the project shall be stored properly and catalogued by the SMCG/EA for reference and reference and retrieval including regular uploading /disclosure/updating of such data on website.
- xxxvi. The State /SMCG/EA shall ensure that all provisions of the RTI Act 2005 are adhered to as far as information pertaining to the project is concerned.
- xxxvii. The State /SMCG/ULB shall ensure that public is informed in Phusro regarding implementation of the project and soliciting their cooperation and views as applicable.
- xxxviii. For the provisions made under IEC activities, the SMCG shall make suitable arrangements with Municipal Council of Phusro for executing the 'Communication and Public Outreach' programmed under its supervision towards sensitization of people for abatement of pollution.

15/12/2020



File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&Jharkhand)-Phusro

159

xxxix. The all the specific conditions and generic conditions mentioned in the AA&ES are to be complied by the SMCG through their Executing Agency. The SMCG will ensure fulfillment of such conditions before finalizing the bid(s) by the EA.

(or) 15/12/2020



File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&Jharkhand)-Phusro

152

The release of funds is subject to the following terms and conditions:-

**2.1 Annual Plan and Procurement Plan:**

- i. The Annual Plan and yearly Procurement Plan shall be prepared by the month of November every year for the next financial year as per the provisions made in the NGRBA programme framework and submitted by the SMCG to the NMCG for necessary approval and budget allocations.
- ii. The SMCG shall furnish to the NMCG annually a report of its work within three months from the closing of the respective financial years.

**2.2 Financial Aspects:**

- i. Funds shall be made available to the agencies strictly as per the 'Financial Management Manual (FMM)' of the NGRBA programme framework.
- ii. The SMCG/ULB shall take all necessary legal and executive measures to ensure adequate resources available for operation & maintenance of the assets created under the Project to fulfill its mandate.
- iii. The funds released for the project shall be held in an interest earning NGRB project bank account of the SMCG (the mother account). For any diversion of funds, the signatory of the bank account(s) shall be held responsible.
- iv. The SMCG/EA are not permitted to seek or utilize funds for the same purpose from any other organization (Government, semi-Government, autonomous or private) without prior approval of the competent authority.
- v. The sanctioned cost will be born under Namami Gange Plan. The sanctioned amount should be spent exclusively thereon as per the scope of the project and within the stipulated time. The liability of NMCG will not exceed the amount sanctioned for the project. For carrying forward any work(s) /activities beyond the specified time limit prior approval of the NMCG should be obtained.
- vi. It is the responsibility of the SMCG/EA/ULB to ensure that the assets are exclusively used for the purpose for which grant is sanctioned and to maintain the assets and their records properly.
- vii. All the assets acquired/created out of the grants shall not be disposed of, encumbered, or utilized for any purpose other than that for which sanctioned without prior approval of the Government.
- viii. O&M costs will be considered for release only after the project construction is complete and a realistic plan for use of O&M cost based upon actual sewerage load to be submitted.
- ix. Any payments made on account of project preparation by NMCG relating to this project shall be adjusted accordingly from the project preparation head.

**2.3 Audit:**

- i. The Comptroller & Auditor General of India (the External Auditor) at his discretion shall have the right of access to the project related books and accounts of the SMCG/EA for the purpose of Audit.

62 → 15/12/2022



File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&Jharkhand)-Phusro

C157

- ii. The books of accounts of the grantee, relating to this grant, shall be open to Audit by the Internal Auditor of the SMCG and the External Auditor.
- iii. The overall auditing arrangements to cover both periodical internal and annual external audit of project shall be ensured as per the 'Financial Management Manual (FMM)' of the NGRBA programme framework.

**2.4 Flow of Funds:**

The fund releases by the NMCG shall be remitted by Electronic transfer to the SMCG account. The fund shall flow from the SMCG account to a separate sub-project specific zero balance bank account (the 'child account') of the EA in the same bank of SMCG. The following details may be kept updated from time to time enable electronic remittance: -

- i. Bank account details of EA, both in figures and words, to SMCG.
- ii. Bank account details of EA and SMCG both in figures and words to NMCG.
- iii. MICR Code and IFSC Code of the Bank Branch (es).
- iv. The NMCG Bank will transfer funds from the NMCG'S account to the SMCG account on submission of Utilization Certificate (UC).
- v. The SMCG Bank will transfer funds from the SMCG'S account (mother account) to the child account of EA as soon as payment instruction is issued by the EA to its banker for transfer funds to contractors/suppliers/service providers account on the same date through 'Real Time Gross Settlement (RTGS)', and thus at the end of any given day, the EA child account will always have a zero balance.

**2.5 Submission of Monthly and Quarterly Physical Progress Report (MPPR / QPPR):**

- i. The Monthly Physical Progress Reports (MPPRs) shall be submitted by the 10<sup>th</sup> day of every month regularly by the EA to the SMCG and by the 20<sup>th</sup> day of every month regularly by the SMCG to the NMCG. The Quarterly Physical Progress Report (QPPRs) shall be submitted to the SMCG Jharkhand and NMCG within 30 days from the end of each quarter.
- ii. The MPPRs in standard format, to be developed by the EA in consultation with SMCG, shall be signed by at least two designated officers of the EA, one of whom will be chief Project Coordinator, Municipal Council Phusro and also by at least two designated officers of the SMCG, one of whom will be the Programme/Project Director.
- iii. The signing officers will indicate her/his name and designation in full in capital letters and commencement of processing the case, ink-signed MPPR must follow by Post.
- iv. Consistency between physical progress and expenditure shall be maintained and reasons for substantial variations i.e., more than 10% shall be appropriately explained against each item.

**2.6 Submission of 'Accounting and Financial Reports (AFR)' by the EA:**

- i. The EA shall furnish monthly 'Accounting and Financial reports (AFRs)' by the 10<sup>th</sup> day of every month with all relevant documents and materials as per the 'Financial Management Manual (FMM)' of the NGRBA programme framework after commencement of the

15/12/2020



project to the SMCG and by the 20th day of every month regularly by the SMCG to the NMCG.

- ii. The 'Accounting and Financial Report (AFR)' in standard format, to be developed by the EA in consultation with SMCG, shall be signed and stamped by the Head of the Accounts Department and Head of the Organization, Municipal Council of Phusro.
- iii. The name and designation of the officers signing the AFR shall be clearly mentioned in full and in capital letters. While AFR submitted by fax will be acceptable for commencement of processing the case, ink -signed AFR must follow by Post.
- iv. As part of the AFR, the EA shall submit the following to the SMCG:
  - a) Invoices of suppliers /contractors against which online payment instruction issued by the EA in the previous month.
  - b) A list of invoices received and not paid during the previous month.
  - c) A list of contracts signed during the previous month.

**2.7 Submission of Utilization Certificate (UC) by the SMCG:**

- i. The SMCG shall submit quarterly Utilization Certificate (UC) to the NMCG within 30 days from the end of each quarter. The UC shall be submitted in standard format as prescribed in Form No.12-A of GFR 2017.
- ii. The UC shall be signed and stamped by the Head of the Account Department and Programmed /Project Director duly countersigned by the State authorities.
- iii. The name and designation of the officers signing the UC shall be clearly mentioned in full and in capital letters. While UC submitted by fax will be acceptable for commencement of processing the case, ink-signed UC must follow by Post.

**2.8 Inspection and Monitoring:**

- i. The SMCG Jharkhand and its Standing Executive Committee shall monitor the project from time to time and shall also monitor implementation performance of the EA-JUIDCo.
- ii. The SMCG shall ensure appointment of agency (ies) for third party inspection (TPI). The EA through the SMCG shall submit copies of the TPI Reports along with their responses/comments to the NMCG. Releases of fund will be subject to compliance of TPI reports.
- iii. City level Citizen's Monitoring Committees (CMC) shall be constituted in the Phusro Town to serve as a transparency mechanism on flow of project/ programme related information to citizens and key stakeholders and to garner their feedback on project / programme processes, as described in the NGRBA programmed framework, Social audit will be conducted by the CMC as per the provisions of the NGRBA programme framework.
- iv. The NMCG may depute any person to visit the SMCG/ EA for the purpose of monitoring its work and accounts of the SMCG. Full cooperation shall be provided by the executing agency to the persons deputed for inspection.

61  
15/12/2020



File No.Pr-25011/1/2019/ProjectDevelopment(Bihar&Jharkhand)-Phusro

155

- v. Director General, NMCG may monitor overall progress of project periodically from time to time.

-----x-----

6/1/15  
15/12/22



Implementation plan of 18 months for I&D Scheme of Phusro Nagar Pasidhad under Namami Gange Programme

Sr. No.	Description of Item	Time in Quarter Months					
		1	2	3	4	5	6
1	Technical Sanctions, Preparation of BOQs and Tender Preparation	█					
2	Tender Process, Tender Finalisation and Issue of Work Order	█					
3	Construction of I & D Structures in Zone I, II, IV & V		█				
4	Construction of Compound walls around STPs		█				
5	Laying of approach roads for STPs		█				
6	Construction of Retaining walls at 4 MLD STP & 10 MLD STP		█				
7	Construction of 4.00 MLD STP with -SBR technology		█				
8	Construction of 10.00 MLD STP with -SBR technology		█				
9	Providing 1.00 MLD capacity STP in Zone-II with Phytoria technology.		█				
10	Construction of Collection Well cum Pumping station at zone-V I&D structure		█				
11	Laying of pumping main from Zone-V collection well to STP at Zone IV using Di K5			█			
12	Supply and installation of Pumps at pumping stations including all accessories Zone- V			█			
13	Providing Hydro power generation plant of 5 KW capacity at 4.00 MLD STP			█			
14	Providing Greenery at STPs			█			
15	Environmental Sanitation and Management Plan (ESAMP)		█				
16	Communication and Public Outreach		█				
17	Governance and Accountability Action Plan (GAAP) and Grievance Redressal Mechanism (GRM)		█				
18	Trial Run and Handover to Phusro Nagar Parishad				█		

*Car...*  
15/12/2020

159



Letter No: BGCMS/2017/AP to SWM & SM for NGT/21 (Part-IIA).....UD&HD

**Bihar State Ganga River Conservation and Program Management Society (BGCMS), Patna**

Under

**Government of Bihar**

**Urban Development & Housing Department**

From,

**Rahul Barman**

Deputy Secretary,

Urban Development & Housing Department.

To,

**Shri A.K. Vidyarthi,**

Director & DH, WQM-II Division,

Central Pollution Control Board,

Ministry of Environment Forest and Climate Change,

Government of India.

Patna, Date: .....

**Sub: Your letter dated 16.03.2020 bearing number F.No.B-19123/WQM-II/Legal/NGT-2/CPCB/2021.**

**Ref: Hon'ble NGT orders dated 07/22.08.2019, 12/18.12.2019 & 13.08.2020 and 23.11.2021 in the matter of M.C. Mehta vs Union of India, O.A. No.200/2014.**

Sir,

This is with reference to your letter dated 16.03.2022 in reference to Hon'ble NGT's order dated 23.11.2021, directing Central Pollution Control Board ('CPCB') and National Mission for Clean Ganga ('NMCG') to collect Environmental compensation ('EC') for untapped drains and incomplete/under construction STP projects, within two months and to further take coercive measures in the event of non-compliance. Accordingly, CPCB has calculated the EC for the period 01.11.2021 to 31.01.2022 @Rs. 10 Lacs per month for each untapped drain and incomplete STP projects and for the period from 01.11.2019 to 31.06.2020 @ Rs. 5 Lac per month for each untapped drain.

2. At the outset, it is submitted that your letter dated 16.03.2022 and the NGT order dated 23.11.2021 is in the teeth of order dated 24.02.2021 passed by the Hon'ble Supreme Court in Civil Appeal No. 534/2021 in the matter of The State of Bihar vs Union of India & Ors (**Copy Enclosed**), wherein the Hon'ble Supreme Court was pleased to issue Notice and pass the following Order:

**"No Coercive steps shall be taken in the meantime".**

3. A brief background and relevance/impact of Civil Appeal No. 534/2021 on the instant letter and NGT order dated 23.11.2021 is provided herein below for your ready reference:

**Brief Background:**

- i. I.A. no 290/2020 in Original Application No. 200/2014 was preferred by the State of Bihar seeking extension of time for completing Sewerage Treatment Schemes/STP's up to 2022 and waiver of the cost imposed upon the State of Bihar in terms of order dated 07.08.2019 and 12.12.2019 passed in O.A. No.200 of 2014.
- ii. The above referred application was dismissed by the Hon'ble NGT vide its order dated 16.09.2020. The operative para of order dated 16.09.2020 is reproduced herein for ready reference:

"The Tribunal does not have any jurisdiction to extend time so as to permit activities which are crime under the law of land and also contempt of the orders of the Hon'ble Supreme Court. The extension earlier granted is only for taking coercive measures of

recovering compensation. Recovery of compensation for the loss caused to the environment to apply binding principal of polluter pays for utilizing the said amount of remediation of environment. Thus, there is no merit in the prayer for extension of time, which has to be rejected. The State may take further steps of recovering the compensation as already directed which may be deposited with the State PCB and thereafter utilized in coordination with the SPCB for remediation of environment under an action plan to be prepared by the CPCB and the State PCB”.

- iii. Aggrieved by the aforesaid order, the State of Bihar had preferred a Civil Appeal no. 534 of 2021 before Hon'ble Supreme Court under Section 22 of the National Green Tribunal Act, 2010, challenging the Order dated 16.09.2020 passed by the Hon'ble National Green Tribunal, Principal Bench, New Delhi ('NGT') in I.A. No. 290 of 2020 in O.A. No.200 of 2014.
  - iv. The aforesaid Civil Appeal was listed before the Hon'ble Supreme Court on 24.02.2021, when the Hon'ble Supreme Court was pleased to pass the order that **“No Coercive steps shall be taken in the meantime”**.
4. Pertinently, the perusal of the order dated 23.11.2021 passed by the Hon'ble NGT would reveal that the said order is being passed in continuation of the previous orders dated 22.08.2019, 18.12.2019 and 13.08.2020 in the matter of M.C. Mehta vs. Union of India, O.A. No.200/2014. Furthermore, the fact that the State of Bihar had challenged the order dated 16.09.2020 before the Hon'ble Supreme Court vide Civil Appeal no. 534 of 2021 and the subsequent order dated 24.02.2021 was not brought to the notice of the Hon'ble NGT by the CPCB.
  5. In view of above backdrop and order dated 24.02.2021, the order of Hon'ble NGT 23.11.2021 is not applicable qua the State of Bihar as the said order dated 24.02.2021 is still in operation and the matter is likely to be listed in due course.
  6. Therefore, it is kindly requested to apprise the Hon'ble NGT of the order dated 24.02.2021 passed by the Hon'ble Supreme Court of India and await the decision of the pending Civil Appeal and no further proceedings or coercive action be initiated against the State of Bihar, until the order dated 24.02.2021 is in operation and Civil Appeal No. 534 of 2021 is disposed of by the Hon'ble Supreme Court of India. In the light of the aforesaid, it is also humbly requested to kindly withdraw the letter dated 16.03.2022.

**Encl: As stated above.**

Yours faithfully

Sd/-

**Deputy Secretary**  
Urban Development & Housing Department.

Memo No.: BGCMS/2017/APtoSWM&SMforNGT/21(Part-IIA) 146...UD&HD, Patna, Date:- 31/03/2022

Copy to: Member Secretary, CPCB, New Delhi for information and necessary action.

**Encl: As stated above**

**Deputy Secretary**



ITEM NO.1 Court 3 (Video Conferencing) SECTION XVII

S U P R E M E C O U R T O F I N D I A  
R E C O R D O F P R O C E E D I N G S

Civil Appeal No(s). 534/2021

THE STATE OF BIHAR

Appellant(s)

VERSUS

UNION OF INDIA &amp; ORS.

Respondent(s)

(FOR ADMISSION and I.R. and IA No.23092/2021-EX-PARTE AD-INTERIM RELIEF and IA No.23094/2021-EXEMPTION FROM FILING C/C OF THE IMPUGNED JUDGMENT and IA No.23095/2021-INTERVENTION/IMPLEADMENT)

Date : 24-02-2021 This appeal was called on for hearing today.

CORAM : HON'BLE MR. JUSTICE ROHINTON FALI NARIMAN  
HON'BLE MR. JUSTICE B.R. GAVAI

For Appellant(s)

Mr. Sanjay Jain, ASG  
Mr. Keshav Mohan, Adv.  
Mr. R. K. Awasthi, Adv.  
Mr. Prashant Kumar, Adv.  
Mr. Piyush Vatsa, Adv.  
Ms. Ritu Arora, Adv.  
Mr. Santosh Kumar - I, AOR

For Respondent(s)

UPON hearing the counsel the Court made the following  
O R D E R

Issue notice.

No coercive steps shall be taken in the meantime.

(JAYANT KUMAR ARORA)  
COURT MASTER(BEENA JOLLY)  
BRANCH OFFICERSignature Not Verified  
Digitally signed by  
Jayant Kumar Arora  
Date: 2024.02.24  
16:15:56 IST  
Reason:

**NANDINI GHOSH, IAS**  
Special Commissioner



DEPARTMENT OF URBAN  
DEVELOPMENT & MUNICIPAL  
AFFAIRS  
GOVERNMENT OF WEST BENGAL  
"Nagarayan", DF-8, Sector-I  
Salt Lake, Kolkata- 700064  
Ph: (033) 2321-1121  
E-mail : nandinighosh.jsudma@gmail.com

Memo No. 39-Spcl. Commr(NG)

Date: 01.04.2022

To,  
Dr. A.K.Vidyarthi,  
Additional Director & Divisional Head, WQM-II,  
Central Pollution control Board,  
Ministry of Environment, Forest & Climate Change, GOI,  
Parivesh Bhawan, East Arjun Nagar,  
New Delhi – 110032.

**Subject: Justification for exemption of Environmental Compensation (EC) for untapped drains and incomplete STP Projects within KMC area.**

**Reference:**

1. Letter of Director & DH, WQM-II Division of CPCB vide F.NO.B-19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21 dated 16.03.2022
2. Letter received from Municipal Commissioner KMC and Principal Secretary to the Government of West Bengal vides Memo no. Con/Com/248/S&D/2021-22 dated 29.03.2022.

Sir,

With reference to the above subject, please see the attachments for the grounds and justification for exemption of Environmental Compensation for the under construction of three number of STPs under KEIIP, three number of Proposed STPs for Tolly Nullah and three number of proposed STPs under Municipal Waste Water Project including the ECS imposed on Dhankheti Khal, Chitpur Ghat Khal/Circular Canal, Cossipore Khal/Cossipore and Moni Khal.

This is for your further information that Department of UD & MA, GoWB is giving top most priority in pollution abatement of Ganga and other rivers and has constituted a high level Committee under the Chairmanship of CEO KMDA & PD WBSPMG who is in the rank of Secretary to the Government of West Bengal (Memo No. 14/Law/C-12/Misc/NGT-2016 dated 25.03.2022 and the Committee includes members from Regional office WBPCB and CPCB). The first Meeting of the Committee is scheduled to be held on 6.04.2022.

Under these circumstances, we are putting forward the ground and justification for exemption of EC on the drains under jurisdiction of KMC.

Encl: As stated.

Yours faithfully,



**Memo No. 38/1(18)-Spl. Commr (NG)**

**Date: 01.04.2022**

Copy forwarded for kind information to:

1. Member Secretary, WBPCB, Paribesh Bhavan, 10A, LA Block, Sector III, Bidhannagar, Kolkata, West Bengal 700106.
2. Chairman, CPCB, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
3. Principal Secretary, UD&MA Department.
4. The Municipal Commissioner, Kolkata Municipal Corporation along with the concerned Engineers, 5, S.N. Banerjee Road, Kolkata-700013.
5. The Chief Executive Officer, Kolkata Metropolitan Development Authority & The Programme Director, SPMG, CJ-164, 2nd Avenue, DJ Block, Sector II, Bidhannagar, Kolkata, West Bengal 700091.
6. APD WBSPMG, CJ-164, 2nd Avenue, DJ Block, Sector II, Bidhannagar, Kolkata, 700091
7. Special Secretary Department of UD & MA & Chairman, Liquid Waste Management Committee.
8. Shri D.P. Mathuria, Executive Director (Technical), NMCG, 1<sup>st</sup> Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi- 110002.
9. DG Tolly Nullah, KMC, Kolkata Municipal Corporation, 5, S.N. Banerjee Road, Kolkata-700013
10. DG KEIIP, 206, Acharya Jagadish Chandra Bose Rd, Mullick Bazar, Park Street area, Kolkata, West Bengal 700017
11. DG Drainage, KMC, Kolkata Municipal Corporation, 5, S.N. Banerjee Road, Kolkata-700013
12. Regional Director, WBPCB, Paribesh Bhavan Canteen, 10A, Broadway Rd, LA Block, Sector III, Bidhannagar, Kolkata, West Bengal 700106.
13. Chief Technical Advisor, Environment Department, Pranisampad Bhawan, Block LB-II, Salt Lake, Sector III, Bidhannagar, Kolkata – 700 106
14. Dr. Pravin kumar, Director (T-III), NMCG, NMCG, 1<sup>st</sup> Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi- 110002.
15. Senior Law Officer, Department of UD & MA
16. OSD to Municipal Commissioner, Kolkata Municipal Corporation, 5, S.N. Banerjee Road, Kolkata-700013.
17. Senior PA to HMIC, UD&MA Department.
18. Senior P.S to Principal Secretary, UD&MA Department.

Special Commissioner



43682/2022/LAW-HO

**Binod Kumar, IAS**  
**MUNICIPAL COMMISSIONER**



**KOLKATA MUNICIPAL CORPORATION**  
5, S. N. BANERJEE ROAD • KOLKATA – 700 013  
Phone 2286 1234 Fax 2286 1434/1334  
e-mail : bkoffice9@gmail.com

No. Con/Com/248/S&D/2021-22  
Date: 29/03/2022

To  
The Principal Secretary  
to the Govt. of West Bengal,  
Urban Development & Municipal Affairs Department,  
Nagarayan, DF – 8, Sec- I, Salt Lake,  
Kolkata – 700 064

UD/00/2022/02081

Pr. Secy. *UD&MA*

Dt. 29/03/2022

**Sub: Justification for exemption of Environmental Compensation (EC) for untapped drains and incomplete STP projects within KMC area.**

**Ref: Letter of Director & DH, WQM-II Division of Central Pollution Control Board vide F.No. B-19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21 dated: 16.03.2022.**

Sir,

Enclosed please find the grounds and justification for exemption of environmental compensation for the under construction of three nos. STPs under KEIIP, three nos. proposed STPs under Tollys Nullah Rehabilitation Project and three nos. proposed STPs under Municipal Waste Water Project including the ECs imposed on Dhankheti Khal, Chitpur Ghat Khal/ Circular Canal, Cossipore Khal/ Cossipore and Monikhal.

Especially in case of KEIIP all the STPs are under progress as per revised schedule and the work is in full swing. For proposed STPs under Municipal Waste Water Project, no AA & FS was received from NMCG. Further for the proposed STPs under Tollys Nullah Rehabilitation Project the BID document was amended time and again as per the directives of NMCG. For abatement of pollution at Tollys Nullah several interim measures have been taken.

In view of the above, the grounds and justification may be conveyed to the CPCB and NMCG for exemption of Environmental Compensation.

Thanking you.

Yours faithfully

*Be*  
29/3/22  
(Binod Kumar, IAS)

**Municipal Commissioner & Principal Secretary to the Govt. of West Bengal**

Encl: As stated.

*Sending it to S&D Com. (NS) 31/03.*



**Synopsis on prayer for exemption of EC imposed by CPCB as per latest order of Hon'ble NGT under OA no. 200/2014 dated 23.11.2021**

**Environmental Compensation for untapped drains and incomplete STP projects under KEIIP**

Reference to letter F. no. B-19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21 dated 16.03.2022 of Central Pollution Control Board, it is to inform you that 40 MLD STP at Bank Plot, M G Road (under package SD29), 45 MLD STP near WBSETCL, Joka (under package SD28) and 23 MLD STP at Rajpur-Sonarapur, Rania (under package SD30R) are under advance stage of construction. The likely completion date for both the STPs (Packages SD28 and SD29) is 31.03.2023 and STP (for package SD30R) is 30.06.2023. The present progress for both the STPs is satisfactory and will be commissioned within the revised completion date.

STP-wise detail is given below for ready reference:

**1) 40 MLD STP at Bank Plot, M. G. Road (Contractor: M/s SNET-EAGLE INFRA JV)**

The Notice to Proceed was issued on 08.03.2019 and the contractual completion date as per agreement was 02.09.2021. Due to pandemic situation (COVID-19), the desired progress could not be achieved during March 2020 – August 2021 and COVID-19 3rd wave impact during December'2021 and January 2022. Thus, a valuable time of about 18 months was lost due to said reasons. Due to the reasons for delay not attributable to both KEIIP/KMC and the contractor, time eligible for extension is upto 31.03.2023. The present progress of work is in full swing and the project is running as per revised schedule for completion by 31.03.2023.

**2) 45 MLD STP near WBSETCL, Joka (Contractor: M/s SNET-SSG JV)**

The Notice to Proceed was issued on 08.03.2019 and the contractual completion period was 02.09.2021. Due to pandemic situation (COVID-19), the desired progress could not be achieved during March 2020 – August 2021 and COVID-19 3rd wave impact during December'2021 and January 2022. Thus, a valuable time of about 18 months was lost due to said reasons. Due to the reasons for delay not attributable to both KEIIP/KMC and the contractor, time eligible for extension is upto 31.03.2023. The present progress of work is in full swing and the project is running as per revised schedule for completion by 31.03.2023.

**3) 23 MLD STP at Rajpur-Sonarapur, Rania (Contractor: M/s TEPL-SNET JV)**

The Notice to Proceed was issued on 04.05.2021 and the contractual completion date is 30.06.2023. Immediately after issuance of the Notice to Proceed, the design work was taken up. The work for this STP is in full swing and the progress is as per schedule. It is expected that the work will be completed by the scheduled completion date.

It is assured that the STPs will be completed and commissioned within the revised completion date as stated hereinabove. The STPs will be in operation as soon as it is commissioned.

Under the above circumstances, when the construction of all the STPs are under advance stage of construction and the progress is satisfactory, it is requested to kindly consider the waiver of the imposition of Environmental Compensation as per order of Hon'ble NGT till completion of the above STPs.

The justification of delay due to COVID-19 is attached.

Encl. As stated above.



## ANNEXURE-A: TENTATIVE DELAY ANALYSIS ON ACCOUNT OF COVID PANDEMIC

Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
A COVID (1 <sup>st</sup> WAVE)									
1	Complete Lockdown	22-03-20 To 31-05-20	70	<ul style="list-style-type: none"> <li>100% CLOSURE</li> <li>COMPLETE HALT OF TRANSPORT / COMMUNICATION</li> </ul>	<ul style="list-style-type: none"> <li>Period observed 100% closure, and the entire period was lost.</li> </ul>	70	<ul style="list-style-type: none"> <li>40-3-2020 DM-I(A) dt. 24.03.2020- GOI</li> </ul> <p><a href="https://www.mha.gov.in/sites/default/files/MHAorder%20copy_0.pdf">https://www.mha.gov.in/sites/default/files/MHAorder%20copy_0.pdf</a></p>	25.03.20 to 14.04.20	A period of 21 days with effect from 25.03.20 till 14.04.20- GOI
							<ul style="list-style-type: none"> <li>105(9)Secy.(Tr) dt. 21.03.2020 – WB</li> </ul> <p><a href="https://wb.gov.in/upload/MCLNEWS-200323112335837.pdf">https://wb.gov.in/upload/MCLNEWS-200323112335837.pdf</a></p>	21.03.20 To 31.03.20	Restrictions of Transport movement-WB
							<ul style="list-style-type: none"> <li>No.20-CS-2020 dt. 21.03.2020-Extn.- WB</li> </ul> <p><a href="https://wb.gov.in/COVID-19/train.pdf">https://wb.gov.in/COVID-19/train.pdf</a></p>	22.03.20 To 31.03.20	Restrictions of train movement-WB

Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
							<ul style="list-style-type: none"> <li>• 40-3-2020-DM-I(A) dt. 15.04.2020- GOI</li> </ul> <a href="https://www.mha.gov.in/sites/default/files/MHAorder%20copy_0.pdf">https://www.mha.gov.in/sites/default/files/MHAorder%20copy_0.pdf</a>	15.04.20 To 03.05.20	A period of 18 days with effect from 15.04.2020 till 03.05.2020 - G.O.I (I.T. Services upto 50% strength/ Group A & B Officer of State Govt. as required, / Group C up to 33% strength)
							<ul style="list-style-type: none"> <li>• 40-3-2020 DM-I (A) dt. 01.05.2020- GOI</li> </ul> <a href="https://www.mha.gov.in/sites/default/files/MHA%20Order%20Dt.%201.5.2020%20to%20extend%20Lockdown%20period%20for%202%20weeks%20w.e.f.%204.5.2020%20with%20new%20guidelines_0.pdf">https://www.mha.gov.in/sites/default/files/MHA%20Order%20Dt.%201.5.2020%20to%20extend%20Lockdown%20period%20for%202%20weeks%20w.e.f.%204.5.2020%20with%20new%20guidelines_0.pdf</a>	04.05.20 To 18.05.20	A period of 14 days with effect from 04.05.2020 till 18.05.2020 - G.O.I & WB (Private Office - 33% strength, remaining work from home/ Govt Officer 100% strength and Co-workers- 33% strength)



Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
							<ul style="list-style-type: none"> <li>• 103-CS-2020 dt. 04.05.2020 – WB</li> </ul> <a href="https://wb.gov.in/upload/MCLNEWS-200504151447289.pdf">https://wb.gov.in/upload/MCLNEWS-200504151447289.pdf</a>		
							<ul style="list-style-type: none"> <li>• 177-CS-2020 dt 18.05.2020– WB</li> </ul> <a href="https://wb.gov.in/upload/MCLNEWS-200518160501402.pdf">https://wb.gov.in/upload/MCLNEWS-200518160501402.pdf</a>	19.05.20 To 31.05.20	A period of 13 days with effect from 19.05.2020 till 31.05.2020 - WB (Labour for Construction-, alternate 50% strength / Private Office-50% strength)
2	Partial Lockdown	01-06-20 To 31-08-20	91	<ul style="list-style-type: none"> <li>• Sites re-opened, with maximum Labour for Construction-50% strength, Government offices at 33% strength</li> <li>• Public Transport (Trains, Bus &amp; Metro</li> </ul>	<ul style="list-style-type: none"> <li>• 50% Construction labour could not be organised.</li> <li>• The work output was limited due to (a) abiding COVID protocols at work-site, (b) restricted movement of vehicles / equipment, (c) limited work-time and (d) enforcement of containment zones and also (e) intermittent complete lockdown resulting in further decrease of effective output.</li> </ul>	83	<ul style="list-style-type: none"> <li>• 218-CS-2020 dt. 30.05.2020– WB</li> </ul> <a href="https://wb.gov.in/upload/MCLNEWS-200608072209006.pdf">https://wb.gov.in/upload/MCLNEWS-200608072209006.pdf</a>	01.06.20 To 15.06.20	A period of 10 days with effect from 01.06.2020 till 15.06.2020 - WB (Labour for Construction-100% strength / Govt. Offices – 70% strength)
							<ul style="list-style-type: none"> <li>• 232-CS-2020 dt. 08.06.2020– WB</li> </ul> <a href="https://wb.gov.in/upload/MCL">https://wb.gov.in/upload/MCL</a>	16.06.20 To 30.06.20	A period of 15 days with effect from 16.06.2020 till 30.06.2020 - WB (



Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
				services) remains closed.	<ul style="list-style-type: none"> <li>Kolkata, being densely congested, number of Containment Zones were substantial.</li> </ul>		<a href="#">NEWS-200608144036466.pdf</a>		Labour for Construction-100% strength / Govt. Offices – 70% strength)
				<ul style="list-style-type: none"> <li>Enforcement of containment zones.</li> <li>Complete Lockdown in 7 days in August, separately.</li> <li>No Vaccination available.</li> </ul>	<ul style="list-style-type: none"> <li>Effectively, around 90% of the partial Lockdown period (91-7), i.e. 84 days x 90% = 76 days is estimated to be lost during this period, in addition to the complete Lockdown of 7 days.</li> <li>Estimated days Lost = 76 days (Partial Lockdown) + 7 days (Complete Lockdown) = 83 days.</li> </ul>		<ul style="list-style-type: none"> <li><b>272-CS-2020dt. 30.06.2020- WB</b> <a href="https://wb.gov.in/upload/MCLNEWS-200630145055996.pdf">https://wb.gov.in/upload/MCLNEWS-200630145055996.pdf</a></li> </ul>	01.07.20 To 31.07.20	A period of 31 days with effect from 01.07.2020 till 31.07.2020 - WB (Labour for Construction-100% strength / Govt. Offices – 70% strength)
							<ul style="list-style-type: none"> <li><b>285-CS-2020 dt. 30.07.2020—WB</b> <a href="https://wb.gov.in/upload/MCLNEWS-200731081132584.pdf">https://wb.gov.in/upload/MCLNEWS-200731081132584.pdf</a></li> </ul>	01.08.20 To 31.08.20	A period of 31 days with effect from 01.08.2020 till 31.08.2020 - WB (Labour for Construction-100% strength / Govt. Offices – 70% strength)
							<ul style="list-style-type: none"> <li><b>287-CS-2020 dt. 03.08.2020—WB</b> <a href="https://wb.gov.in/upload/MCLNEWS-200803141146717.pdf">https://wb.gov.in/upload/MCLNEWS-200803141146717.pdf</a></li> </ul>	05.08.20 08.08.20 20.08.20 21.08.20 27.08.20 28.08.20	A period of 7 days with effected as mentioned - WB

Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
								31.08.20	
3	Unlock Period	01-09-20 To 30-11-20	90	<ul style="list-style-type: none"> <li>Sites re-opened, with Labour for Construction-100% strength, Government offices at 70% strength.</li> <li>Public Transport (Bus &amp; Metro services) opens up in a phased manner</li> </ul>	<ul style="list-style-type: none"> <li>100% Construction labour could not be organised.</li> <li>The work output was limited due to (a) abiding COVID protocols at work-site, (b) restricted movement of vehicles / equipment, (c) limited work-time and (d) enforcement of containment zones and also (e) intermittent complete lockdown resulting in further decrease of effective output.</li> <li>Kolkata, being densely congested, number of Containment Zones were substantial.</li> </ul>	90	<ul style="list-style-type: none"> <li><b>298-CS-2020 DT. 31.08.2020—WB</b> <a href="https://wb.gov.in/upload/MC_LNEWS-200831174557130.pdf">https://wb.gov.in/upload/MC_LNEWS-200831174557130.pdf</a></li> <li><b>368-CS-2020 dt.01.11.2020—WB</b> <a href="https://wb.gov.in/upload/MC_LNEWS-201102172234618.pdf">https://wb.gov.in/upload/MC_LNEWS-201102172234618.pdf</a></li> </ul>	01.09.20 To 30.09.20	A period of 30 days with effect from 01.09.2020 till 30.09.2020 - WB
								01.10.20 To 30.11.20	A period of 60 days with effect from 01.10.2020 till 30.11.2020 - WB



Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
				<ul style="list-style-type: none"> <li>Train services resumes from 11-11-2020.</li> <li>Enforcement of containment zones.</li> <li>Complete Lockdown in 7 days in September separately.</li> <li>No Vaccination available.</li> </ul>	<ul style="list-style-type: none"> <li>The period falls in the Festive season, where Labourers return back to their native places. Although this is a natural event, the festive season coupled with COVID pandemic resulted in most Labourers not returning back in time.</li> <li>Effectively, around 75% of the partial Lockdown period (90), i.e. <math>90 \text{ days} \times 75\% = 45 \text{ days}</math> is estimated to be lost during this period.</li> </ul>		<ul style="list-style-type: none"> <li><b>Indian Railways Portal- dt. 09.11.2020 –GOI</b></li> <li><a href="https://er.indianrailways.gov.in/view_detail.jsp?lang=0&amp;id=0,4,268&amp;dcd=2964&amp;did=1605003417737B4FB2381FE7BDCBC3DA8B8F9F34B9BCF">https://er.indianrailways.gov.in/view_detail.jsp?lang=0&amp;id=0,4,268&amp;dcd=2964&amp;did=1605003417737B4FB2381FE7BDCBC3DA8B8F9F34B9BCF</a></li> </ul>	09.11.20	Resumption of EMU Train Services in ER from 11.11.2020 will take place in a phased manner.
4	Normalisation of services	01-12-20 To 14-03-21	103	<ul style="list-style-type: none"> <li>Sites re-opened, and Offices opened.</li> <li>Vaccination commenced from February, 2021</li> </ul>	<ul style="list-style-type: none"> <li>Effective work output was limited to (a) abiding COVID protocols at work-site, (b) restricted movement of vehicles / equipment, (c) limited work-time and (d) enforcement of containment zones and also (e) intermittent complete lockdown (resulting in reduced output).</li> <li>Effectively, around 50% of this period (of 103 days), i.e. <math>103 \text{ days} \times 50\% = 52 \text{ days}</math> is estimated to be lost during this period.</li> </ul>	52	.....		

Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
5	Election Phase	15-03-21 To 14-05-21	60	<ul style="list-style-type: none"> <li>Rise in COVID cases, due to 2nd Wave.</li> <li>Public Engagement in Elections.</li> <li>Permissions / Clearances for Works were delayed due to absence of</li> </ul>	<ul style="list-style-type: none"> <li>Effective work output was limited to (a) maintaining COVID protocols at work-site, (b) restricted movement of vehicles / equipment, (c) limited work-time and (d) enforcement of containment zones and also (e) intermittent complete lockdown (resulting in reduced output).</li> <li>Effectively, around 33% of this phase (60), i.e. 60 days x 33% = 20 days is estimated to be lost during this period.</li> </ul>	20	<ul style="list-style-type: none"> <li>12.03.2016 JCA-2 - North Block , N.Delhi- dt. 15.03.2021-Election -GOI</li> </ul> <p><a href="https://dopt.gov.in/sites/default/files/Election_3.pdf">https://dopt.gov.in/sites/default/files/Election_3.pdf</a></p> <ul style="list-style-type: none"> <li>714(20)-(LC-IR)-IR-7S-06-17 dt. 18.03.21- Notification election-2021—WB</li> </ul> <p><a href="https://www.indianstaffingederation.org/wp-content/uploads/2021/03/declaration-of-paid-holiday-in-west-bengal-on-account-of-legislative-assembly-election-2021.pdf">https://www.indianstaffingederation.org/wp-content/uploads/2021/03/declaration-of-paid-holiday-in-west-bengal-on-account-of-legislative-assembly-election-2021.pdf</a></p>	15.03.21 To 02.05.21	Schedule for General Election to the Legislative Assembly of West Bengal, Elections to be held in 8 phases in West Bengal, GoWB



Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
							<ul style="list-style-type: none"> <li>• <b>618-ISS-2M-22-2020 dt. 30.04.2021—WB</b> <a href="https://wb.gov.in/upload/MC LNEWS-210430141300979.pdf">https://wb.gov.in/upload/MC LNEWS-210430141300979.pdf</a></li> <li>• <b>622-ISS-2M-22-2020 dt. 01.05.2021—WB</b> <a href="https://wb.gov.in/upload/MC LNEWS-210501132608787.pdf">https://wb.gov.in/upload/MC LNEWS-210501132608787.pdf</a></li> <li>• <b>629-ISS/2M-22/2020 Dt. 05.05.2021-WB</b> <a href="https://wb.gov.in/upload/MC LNEWS-210505152845663.pdf">https://wb.gov.in/upload/MC LNEWS-210505152845663.pdf</a></li> </ul>		<p>Further directed that, until further orders, for the time being the restrictions/prohibitions will be in force in the WB.</p> <p>Physical attendance in private office shall not be more than 50% of the total strength.</p> <p>Integrated regime of restrictions/ prohibitions is hereby ordered in the WB</p>

Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
B COVID (2 <sup>nd</sup> WAVE)									
1	Re-imposition of Complete Lockdown	16-05-21 To 30-05-21	15	<ul style="list-style-type: none"> <li>Train services halted, Metro services closed. Public Transport halted.</li> <li>100% CLOSURE</li> </ul>	<ul style="list-style-type: none"> <li>100% closure reimposed and entire period was lost.</li> </ul>	15	<ul style="list-style-type: none"> <li>647-ISS-2M-22-2020 dt. 15.05.2021--WB <a href="https://wb.gov.in/upload/MC_LNEWS-210515104135699.pdf">https://wb.gov.in/upload/MC_LNEWS-210515104135699.pdf</a></li> <li>707-ISS-2M-22-2020 dt. 29.05.2021 -WB <a href="https://wb.gov.in/upload/MC_LNEWS-210529130920123.pdf">https://wb.gov.in/upload/MC_LNEWS-210529130920123.pdf</a></li> </ul>	16.05.21 To 30.05.21	<p>A period of 15 days with effect from 16.05.2021 till 30.05.2021 - WB (Govt. Office &amp; Private Sector 100% closed except Emergency &amp; Essential services).</p> <p>Closure of Trains/ Metro and all the Transport services</p>
2	Partial lockdown-1	01-06-21 To 30-06-21	29	<ul style="list-style-type: none"> <li>Private sector, with 25% staff strength, Government offices at 25% strength.</li> <li>Train services remain outside bounds of Public. Limited Public</li> </ul>	<ul style="list-style-type: none"> <li>Effective work output limited with (a) maintaining COVID protocols at work-site, (b) restricted movement of vehicles / equipment, (c) limited work-time and (d) enforcement of containment zones and also (e) intermittent complete lockdown (resulting in reduced output).</li> <li>Effectively, around 80% of the partial Lockdown period (29), i.e. 29 days x 80% = 22 days is estimated to be lost during this</li> </ul>	24	<ul style="list-style-type: none"> <li>753-ISS-2M-22-2020 dt. 14.06.2021- WB <a href="https://wb.gov.in/upload/MC_LNEWS-210614124306465.pdf">https://wb.gov.in/upload/MC_LNEWS-210614124306465.pdf</a></li> </ul>	01.06.21 To 30.06.21	<p>A period of 30 days with effect from 01.06.2021 till 30.06.2021 - WB ( Govt. Offices as per normal working hours with 25% strength and Private Sector restricted hours during 10AM to 04 PM not more than 25% strength).</p> <p>Closure of all local train services.</p>



Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
				Transport	period.				
3	Partial lockdown-2	01-07-21 To 31-08-21	60	<ul style="list-style-type: none"> <li>Private sector, with 50% staff strength, Government offices at 25% strength.</li> <li>Train services remain outside bounds of Public. Limited Public Transport</li> </ul>	<ul style="list-style-type: none"> <li>Effective work output limited with (a) maintaining COVID protocols at work-site, (b) restricted movement of vehicles / equipment, (c) limited work-time and (d) enforcement of containment zones and also (e) intermittent complete lockdown (resulting in reduced output).</li> <li>Effectively, around 80% of the partial Lockdown period (45), i.e. 45 days x 80% = 36 days is estimated to be lost during this period.</li> </ul>	46	<ul style="list-style-type: none"> <li>753-II-ISS-2M-22-2020 dt. 28.06.2021--WB</li> </ul> <p><a href="https://wb.gov.in/upload/MC_LNEWS-210628154510621.pdf">https://wb.gov.in/upload/MC_LNEWS-210628154510621.pdf</a></p>	01.07.21 To 15.07.21	<p>A period of 15 days with effect from 01.07.2021 till 31.08.2021 - WB ( Govt. Offices as per normal working hours with 25% strength and Private Sector as per normal working hours with 50% strength )</p> <p>Closure of all local train services</p>
							<ul style="list-style-type: none"> <li>753-III-ISS-2M-22-2020 dt. 14.07.2021—WB</li> </ul> <p><a href="https://wb.gov.in/upload/MC_LNEWS-210714200157011.pdf">https://wb.gov.in/upload/MC_LNEWS-210714200157011.pdf</a></p>	16.07.21 To 30.07.21	<p>A period of 15 days with effect from 16.07.2021 till 30.07.2021 - WB Govt. Offices as per normal working hours with 25% strength and Private Sector as per normal working hours with 50% strength )</p> <p>Closure of all local train services</p>

Sl. No	Description of Phase	Date	Days	Salient aspects of the period	Remarks	Assessment of Loss (In Days)	Notification Reference / Web Link	Date	Description
							<ul style="list-style-type: none"> <li>• 753-IV-ISS-2M-22-2020 dt. 29.07.2021—WB <a href="https://wb.gov.in/upload/MC_LNEWS-210729120021662.pdf">https://wb.gov.in/upload/MC_LNEWS-210729120021662.pdf</a></li> <li>• 753/V-ISS/2M-22/2020, DATED 13.08.2021) <a href="https://wb.gov.in/upload/MC_LNEWS-210813143837187.pdf">https://wb.gov.in/upload/MC_LNEWS-210813143837187.pdf</a></li> </ul>	31.07.21 To 31.08.21	A period of 15 days with effect from 31.07.2021 till 15.08.2021 - WB WB Govt. Offices as per normal working hours with 50% strength and Private Sector as per normal working hours with 50% strength )  Closure of all local train services
		Total	518		Total Days Lost	400			

## NOTE:

1. THE ASSESSED LOSS IS ESTIMATED AT 400 DAYS (SAY, 13.5 MONTHS), TILL END AUGUST '2021.
2. PARTIAL LOCKDOWN CONTINUED TILL 31<sup>ST</sup> AUGUST, 2021. PHASED UNLOCK PERIOD EXTENDED FROM SEPTEMBER TO END NOVEMBER, 2021 (2.5 MONTHS). MAXIMUM WORKFORCE IS LIMITED TO 50%, AND COVID PROTOCOLS ARE IN PLACE, WHICH HAS REDUCED WORK OUTPUT. TOTAL LOSS: 13.5 MONTHS + 2.5 MONTHS = 16 MONTHS
3. COVID 3<sup>RD</sup> WAVE IMPACTED WORK DURING DECEMBER & JANUARY-2022 RESULTING IN FURTHER DELAY OF 2 MONTHS.
4. IN CONSEQUENCE, A TOTAL DELAY OF 16 MONTHS + 2 MONTHS, SAY 18 MONTHS IS ASSESSED, ON ACCOUNT OF COVID.



## ANNEXURE – B: SUMMARY OF NOTIFICATION ISSUED

SL. NO.	Memo No & Date	Detail	Dates	Days	Description
1	40-3/2020-DM-I (A) DT. 24.03.2020	Complete Lock down	25.03.2020 to 14.04.2020	21	A period of 21 days with effect from 25.03.2020 till 14.04.2020 - G.O.I
1A	105(9) Secy.(Tr) 21.03.2020	Restriction of Transport Movement	21.03.2020 to 31.03.2020		Restrictions of Transport movement.- WB
1B	No.20-CS-2020 21.03.2020	Restriction of Train Movement	22.03.2020 to 31.03.2020		Restrictions of Train movement.- WB
2	40-3/2020-DM-I (A) DT. 15.04.2020	Complete Lock down	15.04.2020 to 03.05.2020	18	A period of 18 days with effect from 15.04.2020 till 03.05.2020 - G.O.I (I.T. Services upto 50% strength/ Group A & B Officer of State Govt. as required, / Group C up to 33% strength)
3	40-3/2020-DM-I (A) DT. 01.05.2020	Complete Lock down	04.05.2020 to 18.05.2020	14	A period of 14 days with effect from 04.05.2020 till 18.05.2020 - G.O.I & WB (Private Office -33% strength, remaining work from home/ Govt Officer 100% strength and Co-workers- 33% strength)
3A	103-CS/2020 04.05.2020				
4	177-CS/2020/ dt. 18.05.2020	Partial Lock down	19.05.2020 to 31.05.2020	13	A period of 13 days with effect from 19.05.2020 till 31.05.2020 - WB ( Labour for Construction-50% strength / Private Office-50% strength)
5	218-CS/2020/ dt. 30.05.2020	Partial Lock down	01.06.2020 to 15.06.2020	10	A period of 10 days with effect from 01.06.2020 till 15.06.2020 - WB ( Labour for Construction-100% strength / Govt. Offices – 70% strength)
6	232-CS/2020/ dt. 08.06.2020	Partial Lock down	16.06.2020 to 30.06.2020	15	A period of 15 days with effect from 16.06.2020 till 30.06.2020 - WB ( Labour for Construction-100% strength / Govt. Offices – 70% strength)
7	272-CS/2020/ dt. 30.06.2020	Partial Lock down	01.07.2020 to 31.07.2020	31	A period of 31 days with effect from 01.07.2020 till 31.07.2020 - WB ( Labour for Construction-100% strength / Govt. Offices – 70% strength)
8	285-CS/2020 30.07.2020	Partial Lock down	01.08.2020 to 31.08.2020	31	A period of 31 days with effect from 01.08.2020 till 31.08.2020 - WB ( Labour for Construction-100% strength / Govt. Offices – 70% strength)



SL. NO.	Memo No & Date	Detail	Dates	Days	Description
9	287-CS/2020 03.08.2020	Complete Lock down	05.08.2020, 08.08.2020, 20.08.2020, 21.08.2020, 27.08.2020, 28.08.2020 & 31.08.2020	7	A period of 7 days with effected as mentioned - WB
10	298-CS/2020 31.08.2020	Partial Lock down  Complete Lock down	01.09.2020 to 30.09.2020  07.09.2020 11.09.2020 12.09.2020	30	A period of 30 days with effect from 01.09.2020 till 30.09.2020 - WB
11	368-CS/2020 01.11.2020	Partial Lock down	01.10.2020 to 30.11.2020	60	A period of 60 days with effect from 01.10.2020 till 30.11.2020 - WB
12	Eastern Railway 09.11.2020	Press Release	11.11.2020		Resumption of EMU Train Services in ER from 11.11.2020 will take place in a phased manner.
13	North Block; New Delhi dated. 15.03.2021	General Elections- Office Memo	15.03.21 to 02.05.21	45	Schedule for General Election to the Legislative Assembly of West Bengal, Elections to be held in 8 phases in West Bengal, GoWB
13A	714(20)/(LC- IR)/IR/7S-06/17 18.03.2021				
14	618-ISS/2M-22/2020 Dt. 30.04.2021	General Order	-	-	Further directed that, until further orders, for the time being the restrictions/prohibitions will be in force in the WB. Physical attendance in private office, shall not be more than 50% of the total strength. Integrated regime of restrictions/prohibitions is hereby ordered in the WB
14A	622-ISS/2M-22/2020 Dt. 01.05.2021		-	-	
14B	629-ISS/2M-22/2020 Dt. 05.05.2021		-	-	
15	647-ISS/2M-22/2020 dt. 15.05.2021	Complete Lock Down	16.05.21 to 30.05.21	15	A period of 15 days with effect from 16.05.2021 till 30.05.2021 - WB (Govt. Office & Private Sector 100% closed except Emergency & Essential services). Closure of Trains/ Metro and all the Transport services
15A	707-ISS/2M-22/2020 dt. 29.05.2021				
16	753-ISS/2M-22/2020 14.06.2021	Partial Lock down	01.06.21 to 30.06.21	30	A period of 30 days with effect from 01.06.2021 till 30.06.2021 - WB ( Govt.

SL. NO.	Memo No & Date	Detail	Dates	Days	Description
					Offices as per normal working hours with 25% strength and Private Sector restricted hours during 10AM to 04 PM not more than 25% strength). Closure of all local train services.
16A	753/II-ISS/2M-22/2020 28.06.2021	Partial Lock down	01.07.21 to 15.07.21	15	A period of 15 days with effect from 01.07.2021 till 15.07.2021 - WB ( Govt. Offices as per normal working hours with 25% strength and Private Sector as per normal working hours with 50% strength ) Closure of all local train services
16B	753/III-ISS/2M-22/2020 14.07.2021	Partial Lock down	16.07.21 to 30.07.21	15	A period of 15 days with effect from 16.07.2021 till 30.07.2021 - WB Govt. Offices as per normal working hours with 25% strength and Private Sector as per normal working hours with 50% strength ) Closure of all local train services
16C	753/IV-ISS/2M-22/2020 29.07.2021	Partial Lock down	31.07.21 to 15.08.21	15	A period of 15 days with effect from 31.07.2021 till 15.08.2021 - WB WB Govt. Offices as per normal working hours with 50% strength and Private Sector as per normal working hours with 50% strength ) Closure of all local train services
17	753/V-ISS/2M-22/2020 13.08.2021	Partial Lock down	16.08.21 to 31.08.21	15	Closure of all local train services



**Environmental Compensation for untapped drains and incomplete STP projects under Tolly's Nullah**

**Details of Previous Tender publication and opening**

- Tender was Published 1st time on 27th Apr 2018 in HAM (Hybrid Annuity Mode) PPP model.
- The bid was extended time and again for 11 times up to 12/12/2018, as per the directives of NMCG, upon request on behalf of the prospective bidders. An Addendum to the tender clauses was uploaded, as instructed by NMCG. But it became fruitless as no bid was dropped.
- Based on the failure of 1st time Tender based on HAM PPP model, due to the financial burden for 60% of the Project Cost in the form of loan from Bank for a long term i.e. 15 years (for O&M).
- 2nd time Tender based on DBOT (Design Build Operate and Transfer) model, as approved by NMCG was published on 26th Dec 2019.
- Again keeping in view the failure of 1st time Tender the Bid document was amended time and again for 14 times up to 10/12/2020, as per the directives of NMCG, upon request on behalf of the prospective bidders, so as to make the Bid Successful. And finally the Bid was opened on 10/12/2020 with single Bid i.e. by "EMS-TCPL-VVIP JV".

**Updated Status of Previous Tender**

- Technical Bid was opened on 10.12.2020. The Draft Technical Evaluation report was submitted on 04.03.2021 to SPMG and subsequently NMCG reverted back on 12.03.2021, suggesting modifications.
- **The modified draft TBER was submitted to NMCG on 24.03.2021.** The TBER was under review with World Bank and the **reminder to accord NOC for the same was sent to NMCG on 01.04.2021, 12.04.2021 and 21.04.2021.**
- The TBER was reverted back by NMCG with some clarifications sought by World Bank. **The revised TBER has been submitted to SPMG for onwards submission to NMCG on 21/06/21.** The TBER is still under Review with World Bank. Further World Bank sent queries on 29/07/2021 for some Technical verifications, the Department has already verified all the credentials from the concerned issuing authority of the same. And the Response to Clarifications sought by World Bank on Revised TBER of Tolly's Nullah Project has been **submitted to SPMG for onwards submission to NMCG on 25/08/2021.**
- And after getting NOC on Technical Bid Evaluation by the World Bank/NMCG on 15<sup>th</sup> Sep 2021, the Financial Bid was publically opened on 23<sup>rd</sup> Sep 2021.



- The Combined Bid Evaluation Report (CBER) was then submitted to NMCG/World Bank on 16th of Nov 2021, after the final revision as suggested by NMCG/World Bank, followed with the submission of Justification for the price quoted by the bidder on 07th of Dec 2021
- But there was no fruitful outcome of the meeting with team NMCG, as NMCG was silent on finalizing of CBER and finally we got the mail on 13th of Jan 2022 for Cancellation of the running Tender for Tolly's Nullah project and to go for re-tender under Ganga Phase-II.

#### **Details of Preparation of Revised Draft DPR**

- Based on the note of World Bank/NMCG *“Please review the scope, QR and other provisions before going for retendering, so as to attract better participation and price. You may like to call a meeting of potentially interested Vendors before tendering, to have firsthand concerns of the potential bidders and inform the review of the bidding documents accordingly”*.
- A meeting with the potentially interested bidders/vendors was held on 03.03.2022 in the Chamber of Spl. Commissioner UD&MA Dept., GoWB (Nodal officer, Tolly's Nullah Project), where after thorough discussion considering all the points minutely, it was concluded that the revised estimated project Cost amounting to around INR 1354 crs. based on the current rates from Delhi Schedule of Rates (DSR) & PWD Schedule, GoWB for Civil related items and Current Market Price for Electro-Mechanical items, needs to be enhanced considering
  - Guaranteed Power Consumption
  - Land Cost
  - Removal and laying of Pipes through encroached area
  - Rejuvenation of Penstock gates to be added in O&M also
  - GST to be increased from 12% to 18% and Cess also to be updated accordingly
- In the meeting called for Review of Liquid waste Management on 07.03.2022, chaired by Hon'ble Principal Secretary, UD&MA Dept., GoWB it was again asked to recast the revised estimated project Cost to around INR 600 crs., excluding the SWF components.
- At the end the revised estimated project Cost i.e. around INR 788 crs., excluding the SWF components, was shared with Snr. Civil Engineer, WBSPMG before final submission. We were again advised to revisit the same and finally the revised estimated project Cost stands to INR 685.61 crs,
- **The Revised Draft DPR for “Pollution Abatement of Tolly's Nullah” has been submitted to WBSPMG for onwards submission to NMCG on 10.03.2022**



**Interim measures taken up by K.M.C.**

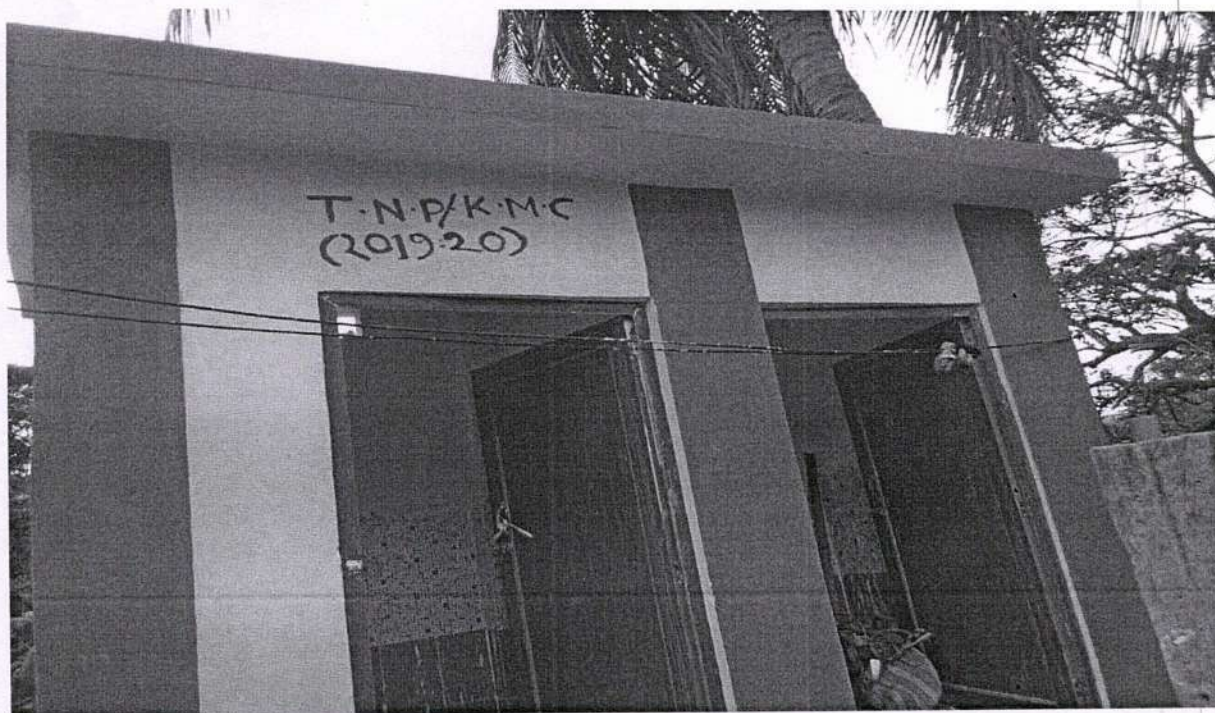
- As Tolly's Nullah (Adi Ganga) lies in Tidal Regime, no alternate/temporary measures of treatment are possible. In this regard we have also called tender for Bio-Phyto Remediation in Tolly's Nullah, but got failure as no bid was dropped. So, there is no any alternative but the Conventional STP.
- Based on the **Order of Hon'ble NGT** we have taken several interim steps time and again towards curbing the sources of pollution of Tolly's Nullah (Adi-Ganga), from state fund of GoWB as follows:
  - ❖ We have constructed **77 nos. of Community Sanitary Latrines** in ward no115, 116, 88,73,74,75&80, demolishing the make shift toilets over Tolly's Nullah (Adi-Ganga), amounting to an expenditure of approximately Rs. 87 lakhs.
    - **We have evicted all the khatals along the banks of Tolly's Nullah (Adi-Ganga).**
  - ❖ We have carried out **temporary Fencing of Tolly's Nullah (Adi-Ganga)** at vulnerable places of Br. X, Br. XI for **about 2km** for restricting the access towards the Bank of Tolly's (Adi-Ganga) Nullah resulting in minimizing the solid wastes being dumped directly to Tolly's Nullah (Adi-Ganga), amounting to an expenditure of around 15 lakhs.
  - ❖ We are carrying out cleaning of **floating garbage on regular basis** by installing **10 nos. of floating garbage arrester** at Tolly's Nullah (Adi-Ganga).
  - ❖ We have installed **04 nos. of organic Composter** as follows:
    - Ward no. 114, Kudghat bazar
    - Ward no.115, near karunamoyee Temple, Kudghat
    - Ward no. 82, near Chetla Bridge
    - Wardno. 73, Balaram Bose Ghat
  - ❖ We are carrying out Awareness Campaigns on Regular basis.
    - We have placed the **Banner in Bengali language** across the major Ghats of Tolly's Nullah (Adi-Ganga) regarding awareness for following:
      - Not to Bath using this river's water.
      - Not to drink this river's water at any cost.
      - To avoid use and sell/purchase of this river's water
      - Not to pollute this river's water throwing any remains from Rituals or any other solid materials.
      - No one should urinate or excrete in this river's water.

- We have carried out **Walk for Adi-Ganga Rally** from **Tolly Gunge to Kalighat** headed by **Hon'ble Mayor**.
- ❖ We have carried out **urgent re excavation/dredging** at most polluted stretch of upstream of Tolly's Nullah (Adi-Ganga) i.e. **nearly 4.6 km**, amounting to an expenditure of approximately Rs.1.33 crores, **in the year 2020**.
- We have already taken up a programme for **Dredging of Tolly's Nullah (Adi-Ganga) from confluence point of Ganga to Chetla Bridge**, amounting to **Rs10.02cr**. The Work has been inaugurated by **The Hon'ble Mayor, Kolkata** on **17.03.2022**.



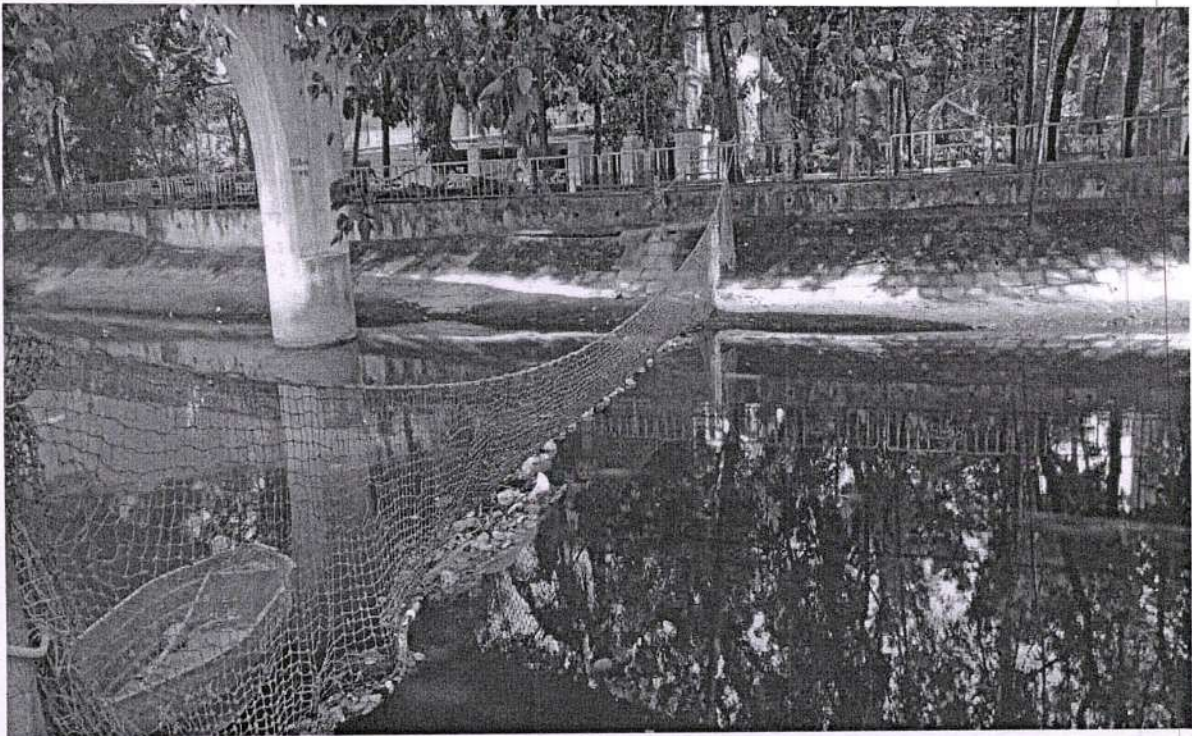
Annexure

Community Sanitary Latrine on the banks of Tolly's Nullah(Adi Ganga)



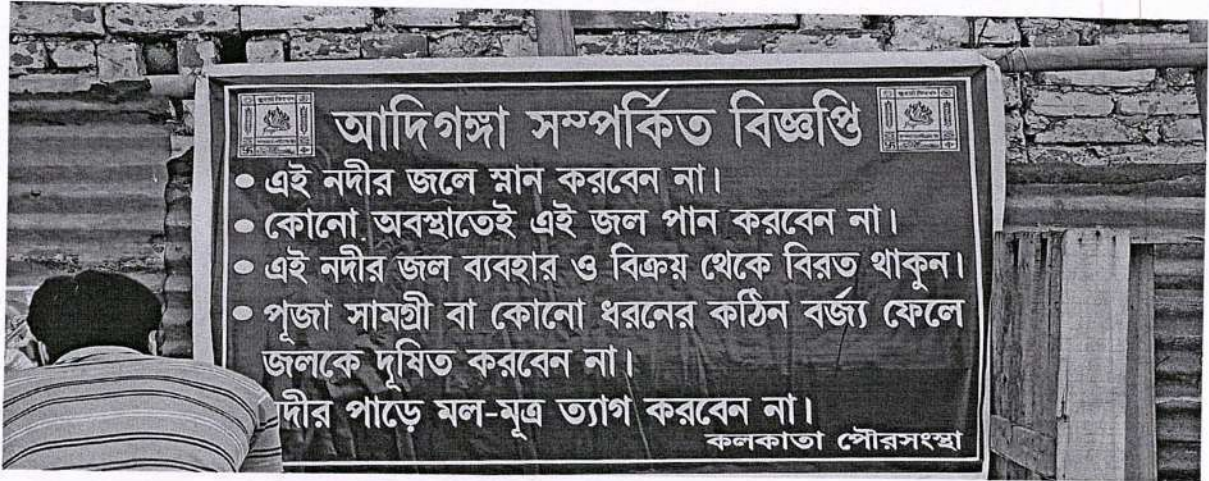


Floating Garbage Arrester at different locations on Tolly's Nullah(Adi Ganga)





The Banners in Bengali language across the major Ghats of Tolly's Nullah (Adi-Ganga)





Organic Composters in four locations covering Tolly's Nullah(Adi Ganga)









Walk for Adi Ganga (Tolly's Nullah)





Dredging of Tolly's Nullah (Adi Ganga)









Fencing of STPs and PSs of Tolly's Nullah





**Environmental Compensation for untapped drains and incomplete STP projects under MWWP**

**Present Status of the DPR:**

The Municipal Waste Water Project is a scheme of NMCG, Govt. of India under NGRBA (now Namami Ganga). KMC is executing agency here.

The Draft DPR has been prepared which covers areas of Br. V (Wd. 45), Br. IX (Wd. 76,79 & 80) and Br XV (Wd. 139, 140 & 141). The DPR proposes construction of sewer network for interception and diversion of flow from existing drains discharging to river Hooghly by lifting stations and treating the sewer in STPs. Dhankheti Khal is covered under this project and the 3 nos STPs viz. STP near LS-10, STP at Surinam Ghat and STP near Bhanga Khal are also proposed. The total project cost comes to Rs. 1551.3689 Crore (with 15 years O&M).

The draft DPR was sent to NMCG, Govt. of India through SPMG West Bengal on 01.10.2020, and the draft bidding document was also sent to NMCG on 09.04.2021.

On 14.05.2021, Mr. Vijay K Yadav of NMCG informed that the DPR has been accepted by competent authority. Later, on 03.08.2021, he informed that the draft bidding document has also been accepted.

However, no AA&ES or funding has been received from the NMCG till date. Hence, the question of EC does not arise until and unless AA&ES issued against the approved DPR.

**Dhankheti Khal:**

An STP at Br.-XV has been proposed to intercept and diversion of Dhankheti Khal under MWWP, the DPR of which is approved by NMCG, Govt. of India. But, no AA&ES is issued to take up the work. However, the department invited e-tender for bio remediation for outfall drain "Dhankheti Nikashi" on 14.12.2019 as interim measure. The tender opened on 22.01.2020. The lowest tenderer M/S J.M. Enviro technology quoted a rate of Rs 2,19,80,000/- (Rupees Two crore Nineteenth lakh Eighty thousand only) .But, the same could not be materialized as CPCB opined that the measure of bio-remediation will not be effective in case there is a tidal impact and Dhankheti Nikashi is under the tidal impact zone.

However, KMC sought for expertise opinion for alternative immediate short term measure vide letter dated 09.06.2020 addressed to PCB for compliance of order of Hon'ble NGT . But, no expertise alternative has yet been received.

The department has installed screens in three different locations on the drains towards downstream of River Hooghly. All the floating materials are regularly cleaned from the screen. Hence, EC may not be imposed for this drain.

**Chitpur Ghat Khal/ Circular Canal**

Circular canal is the downstream of Kestopur canal. The sewer outfalls on the canal has been blocked by penstock gates which are only operated during Monsoon. The DWF is diverted and treated in existing STP Bangur.

The Chitpur Ghat Khal/ Circular Canal is under the control of Irrigation & Waterways Department. Also, a lock gate is there at the confluence point of Circular Canal and River

Hooghly so that no DWF is allowed to River Hooghly during lean period. Also, arresting solid/floating garbage shall require bar screen or floating garbage arrester nets to be installed across the channel. Furthermore, the removal of the arrested solids shall have to be done to ensure unrestricted flow of water along the channel.

#### **Cossipore Khal/ Cossipore**

Cossipore Ghat Drain is equipped with penstock gate. The penstock gate is always kept closed. The gates at both the location is kept closed and there is a network to convey the sewage to the designated treatment facility. The locations do not discharge sewage in Ganga and thus may be considered to be kept out of the ambit of the 56 priority polluting drain/channel. Municipal Commissioner vide his letter no. Con/Com/162/S&D/2020-21 dated 31.12.2020 requested competent authority to exclude this drain from the list of priority drains/channel discharging to river Ganga i.r.o. NGT OA 200/2014.

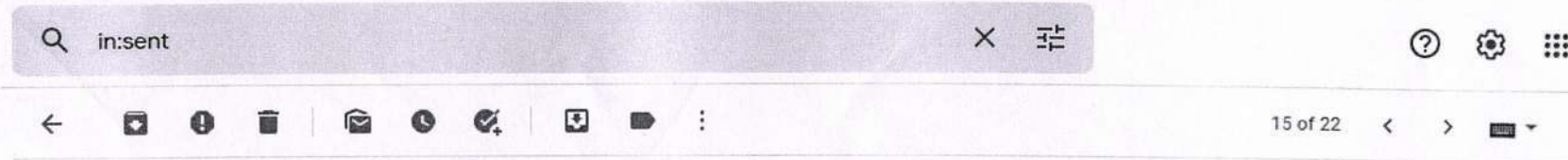
#### **Monikhal**

A portion of Monikhali is running through KMC area where the waste water discharges into Monikhali through Garden Reach STP.

Two STPs under the catchment area of Charial is being constructed by KEIIP, the work of which will be completed by 2023.



## ANNEXURE-I : REQUEST FOR ISSUING AA&amp;ES FOR MWW PROJECT



Re: Approval of draft DPR and draft bidding documents for Collection, conveyance, Treatment & disposal of waste water from drainage basins in Br.V, IX & XV of Kolkata Municipal Corporation, Kolkata



**SANJAY MANDAL** <iamsanjaymandal1969@gmail.com>  
to spmg.programdirector, mc, jmc\_dev, nandinighosh.jsudma, wbspmg.sce, santanukumarghsh

Tue, May 4, 2021, 7:09 PM

In connection with the above, this is to apprise that NMCG/World Bank was pleased to accord extension of time for the above captioned work on 03.03.2021 upto 22.05.2021.

The final DPR and final bidding document has to be completed within this time following approval of the draft DPR and draft bidding document. This is reiterated that on 16.12.2020 a virtual meeting was held with NMCG, SPMG and KMC on draft DPR and necessary compliance report on the observations given by NMCG was forwarded to SPMG on 29.01.2021. Draft bidding document approved by KMC Technical Review Committee has also been forwarded to SPMG on 09.04.2021 for approval/ observations from NMCG. The validity of contract is nearing its end, but no approval on draft DPR and Draft bidding document has yet been received.

In view of the above, **you are requested to issue AA&ES** along with approval of the DPR and Bidding document. In case of delay, it is further requested to extend the contract validity period as you deem fit.

With Regards,

Sanjay Kumar Mandal  
Dy.C.E (C)/S&D and Nodal Officer (MWWP)/ Kolkata

## ANNEXURE-2 : APPROVAL OF DRAFT DPR AND DRAFT BIDDING DOCUMENT FROM NMCG

**M** Gmail Santanukumar Ghosh <santanukumarghsh@gmail.com>

**Consultancy project (Consulting Services for preparation of the DPR "Collection, Conveyance, Treatment and Disposal of Wastewater from Drainage basins in Borough V, IX and XV of Kolkata Municipal Corporation", Kolkata), reg.**

14 messages

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**Vijay Yadav** <vijaykyadav@nmcg.nic.in> Fri, May 14, 2021 at 4:00 PM  
 To: Programme Director West Bengal <spmgs.programdirector@gmail.com>, APD WBSPMG <apd.wbspmg@gmail.com>, Municipal Commissioner KMC <mc@kmcgov.in>  
 Cc: Sh Ashok Kumar Singh <ed.projects@nmcg.nic.in>, Pravin Kumar <drpravin@nmcg.nic.in>, Senthikumar <d.senthil@nmcg.nic.in>, Jagan Mohan <l.procurement@nmcg.nic.in>, wbspmg sce <wbspmg.sce@gmail.com>, spmg phe <spmgs.phe@gmail.com>, santanukumarghsh <santanukumarghsh@gmail.com>

Dear Sir,

This is in reference to your email dtd. 19.02.2021 vide which WBSPMG/KMC has submitted the final draft DPR (Consulting Services for preparation of the DPR "Collection, Conveyance, Treatment and Disposal of Wastewater from Drainage basins in Borough V, IX and XV of Kolkata Municipal Corporation", Kolkata), West Bengal.


NMCG has examined the final DPR and I would like to inform you that Competent Authority has been accepted the DPR with minor comments. The final hard copy of the DPR send to NMCG/World Bank for their records.

Thanks & Regards,

**Vijay K Yadav**  
 National Mission for Clean Ganga  
 Sewerage & Drainage Deptt.  
 (Department of Water & Sewerage)  
 New Delhi  
 Email: vijaykyadav@nmcg.nic.in  
 Landline: 011-26112900, Ext-4112

**वजयि गंगे**

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 **Comments.pdf**  
410K

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**Santanukumar Ghosh** <santanukumarghsh@gmail.com> Sat, May 15, 2021 at 7:48 AM  
 To: Tapas Mandal <wbspmg.sce@gmail.com>, "iamsanjaykumarmandal1969@gmail.com" <iamsanjaykumarmandal1969@gmail.com>, "nandinighosh.jsudma@gmail.com" <nandinighosh.jsudma@gmail.com>

(Quoted text hidden)

Regards,  
 Santanu Kumar Ghosh,  
 Director General (Sewerage & Drainage)  
 Sewerage & Drainage Department.

<https://mail.google.com/mail/u/0/?ik=a852209602&view=pt&search=all&permthid=thread-%3A1699729387477933245&siml=msg-%3A169972...> 1/5



mail.google.com/mail/u/0/?tab=rm&ogbi#inbox/FMfcgzGmvfTwGHphwTxNxKMclxCSXnD

Gmail Search mail

Compose

Inbox 1,299

Starred

Snoozed

Important

Sent

Drafts 92

Categories

Meet

New meeting

Join a meeting

Hangouts

Saikat +

----- Forwarded message -----

From: **Vijay Yadav** <[vijaykyadav@nmcg.nic.in](mailto:vijaykyadav@nmcg.nic.in)>

Date: Tue, 3 Aug 2021, 12:36

Subject: Revised Draft Bid Document (Consulting Services for preparation of the DPR "Collection, Conveyance, Treatment and Disposal of Wastewater from Drainage basins in Borough V, IX and XV of Kolkata Municipal Corporation", Kolkata) reg. (ref. email 23rd July 2021)

To: Programme Director West Bengal <[spmgs\\_programdirector@gmail.com](mailto:spmg_programdirector@gmail.com)>, APD WBSPMG <[apd\\_wbspmg@gmail.com](mailto:apd_wbspmg@gmail.com)>

Cc: Pravin Kumar <[drpravin@nmcg.nic.in](mailto:drpravin@nmcg.nic.in)>, spmg phe <[spmgs.phe@gmail.com](mailto:spmgs.phe@gmail.com)>, wbspmg sce <[wbspmg.sce@gmail.com](mailto:wbspmg.sce@gmail.com)>, santanukumarghsh <[santanukumarghsh@gmail.com](mailto:santanukumarghsh@gmail.com)>, Sh Ashok Kumar Singh <[ed\\_projects@nmcg.nic.in](mailto:ed_projects@nmcg.nic.in)>

Respected Madam,

This is in reference to subject mentioned above I would like to inform you that Competent Authority, NMCG has approved the bid document via F.N. TE-15017/1/2020-O/o PS NMCG dtd. 30.07.2021. The final hard copy of the bid document may submit to NMCG/World Bank for their records.

This is issued with the approval of Competent Authority, NMCG

Regards,

Vijay

National Mission for Clean Ganga  
Ministry of Jal Shakti  
(Department of Water Resources, River Development & Ganga Rejuvenation)  
Email: [vijaykyadav@nmcg.nic.in](mailto:vijaykyadav@nmcg.nic.in)  
Landline: 011-23072900, Ext 462

## ANNEXURE-3 : TENDER FOR BIO REMEDIATION AND OPINION OF CPCB

eProcurement System of Government of West Bengal Created By: SWARUP DUTTA Created Date/Time: 22-Jan-2020 05:00 PM Tender Title: KMC/DG(S_D)/2019-20/GR/2A Tender ID: 2019_KMC_259404_1						
Tender Inviting Authority: Director General (S&D), KMC						
Name of Work: Design, drawing and construction of Bio-remedial / phyto-remedial structure/ any other suitable methods inclu						
Contract No: KMC/DG(S_D)/2019-20/GR/2A						
SCHEDULE OF WORK / ITEM(S)						
Sl.No	Description of Work / Item(s)	No.of Qty	Units	Estimated Rate	JM ENVIRO TECHNOLOGIES PVT. LTD.	
					Rate	Amount
1.00	Design, drawing and construction of Bio-remedial / phyto-remedial structure/ any other suitable methods including operation and maintenance of the same for one year at Dhankheti Nikashi in KMC area.					
1.01	All Survey, Design and Drawing Works	1.00	JOB	0.00	100000.000	100000.000
1.02	All Construction of Bio-remedial/ Phyto-remedial Structure Works/ or construction of structure for any other suitable method	1.00	JOB	0.00	200000.000	200000.000
1.03	Installation of all dozing equipment alongwith floating Bio-remedial / Phyto-remedial arrangement/ or for any other suitable method	1.00	JOB	0.00	200000.000	200000.000
1.04	Operation & Maintenance 1 Year (12 months)	12.00	MONTHS	0.00	1790000.000	21480000.000
Total in Figures						21980000.000
Lowest Amount Quoted BY: JM ENVIRO TECHNOLOGIES PVT. LTD.(21980000.000)						



**Fwd:**

1 message

amit roy &lt;akroy.kmc@gmail.com&gt;

To: Saikat Saha &lt;saikat.ce.09@gmail.com&gt;, Santanukumar Ghosh &lt;santanukumarghsh@gmail.com&gt;, sandip das &lt;sri.sandip.das@gmail.com&gt;, Supriyo Sengupta &lt;s\_sengupta@kmcgov.in&gt; Mon, Jan 13, 2020 at 2:55 PM

----- Forwarded message -----

From: amit roy &lt;akroy.kmc@gmail.com&gt;

Date: Mon, 13 Jan, 2020, 2:25 PM

Subject: Fwd:

To: MC's Office, The KMC &lt;mc@kmcgov.in&gt;

----- Forwarded message -----

From: amit roy &lt;akroy.kmc@gmail.com&gt;

Date: Mon, 13 Jan, 2020, 2:19 PM

Subject: Fwd:

To: akroy.kmc &lt;akroy.kmc@gmail.com&gt;

----- Forwarded message -----

From: Prabir Kumar Barai &lt;probirb@wbpcb.gov.in&gt;

Date: Mon, 13 Jan, 2020, 2:10 PM

Subject: Fwd:

To: &lt;akroykmc@gmail.com&gt;

----- Original Message -----

Subject: Fwd:

From: "rita saha" &lt;rtsaha70@gmail.com&gt;

Date: Mon, January 13, 2020 1:49 pm

To: "probirb" &lt;probirb@wbpcb.gov.in&gt;

this is for your kind information pls.

<https://mail.google.com/mail/u/0/?ik=7b5282916c&view=pt&search=all&permthid=thread-f%3A1655604270716457668&siml=msg-f%3A1655604270716457668>

1/3

v25/22, 5:01 PM

Gmail - Fwd:

\*Dr. Rita Saha,\*

\*Scientist-'D' &amp; Govt. Analyst\*

\*Central Pollution Control Board\*

\*(Ministry of Environment, Forest &amp; Climate Change)\*

\*Eastern Regional Directorate\*

\*Southend Conclave, 6th Floor.\*

\*1582, Rajdanga Main road, Kolkata-700107\*

Mobile:9433039867, Office:033-2441-6003

Fax:033 2441 8725, Email: rtsaha70@gmail.com

----- Forwarded message -----

From: rita saha &lt;rtsaha70@gmail.com&gt;

Date: Mon, Jan 6, 2020 at 11:37 PM

Subject:

To: akvidyarthi &lt;akvidyarthi@gmail.com&gt;

Sir

As discussed with you I am sending the information as follows:

- (1) Presently 56 drains are monitored in WBengal part. Out of these 56 drains BTPS outfall drain at Bandel, ITC Tribeni drain, Chandannagar drain, Thaner khal, Naihati, Roshara khal(Bandel) and Jangipur drain at Murshibad has no impact of tide, whereas other drains has impact of tide.
- (2) Drains which has the impact of tide Phyto-remediation or Bio-remediation cannot be successful.
- (3) Drains at Bihar and Jharkhand Phyto-remediation or Bio-remediation may be successful.

With regards

\*Dr. Rita Saha,\*

\*Scientist-'D' &amp; Govt. Analyst\*

\*Central Pollution Control Board\*

\*(Ministry of Environment, Forest &amp; Climate Change)\*

\*Eastern Regional Directorate\*

\*Southend Conclave, 6th Floor.\*

\*1582, Rajdanga Main road, Kolkata-700107\*

Mobile:9433039867, Office:033-2441-6003


Fax:033 2441 8725, Email: rtsaha70@gmail.com

Prabir Kumar Barai  
Senior Scientist  
West Bengal Pollution Control Board  
Paribesh Bhawan  
10A, Block-LA, Sector-III

## ANNEXURE-4 : LETTER TO PCB FOR RECOMMENDING ALTERNATIVE MEASURE

*Page-263 date-09/07/20* *o/c*

**Tapas Chowdhury, IAS**  
Special Municipal Commissioner



**Kolkata Municipal Corporation**  
5, S. N. Banerjee Road, Kolkata - 700 013  
Phone (Office): 2286-1271, Fax: 22520003  
I.C: 271, EPABX: 2286-1000(Extn.2603)

Memo No DR/263/2020-2021  
Date:09/07/2020

To  
The Member Secretary,  
West Bengal Central Pollution Control Board,  
Paribesh Bhawan, Building No. 10A, Block-LA,  
Sector-III, Bidhannagar, Kolkata- 700106.

Sub: Providing assistance & technical support regarding methodology for short term measures to abate drains/Nikashi having impact of tide discharging Municipal Waste Water to River Ganga.

Sir,

This is to inform you that the KMC has identified Nallahs/ Nikashis discharging Municipal Waste Water to River Ganga and DPR has been prepared accordingly by engaging consultant through Global Tender as per approval of NMCG, GoI & World Bank. The said draft DPR has been sent to NMCG, GoI through SPMG, WB on 30.03.2019 but approval is yet to be received. In the mean time, as per order of Hon'ble NGT, KMC invited tender for Bio-remediation /Phyto-remediation as short term measures for Dhankheti Nikashi out of 56 drains as earmarked in West Bengal. Finally, one tenderer was participated for the tender of bio remediation for Dhankheti Nikashi second time tender. The agency quoted rate more than two crores. for carrying out bio-remediation work of Dhankheti Nikashi for a period of one year. But, it is learnt from CPCB, Government of India that bio-remediation/ phyto-remediation etc cannot be successful when there is tidal impact. Since the Dhankheti Nikashi has impact of tide, Phyto-remediation or Bio-remediation may not be successful.

It would be much help if you kindly provide your expert opinion and proper guidance for execution of the above mentioned work immediately in any other means as a short term measures effectively to comply the orders of Hon'ble NGT.

Hence, you are requested to provide necessary assistance and supports for implementation of the above mentioned work by any suitable method as short term measures having impact of tide.

Thanking you.

Yours faithfully,  
*Tapas Chowdhury*  
Tapas Chowdhury, IAS  
(Special Municipal Commissioner)

Copy to:  
1. PA to Chairperson, BOA/KMC  
2. P.A. to Member, BOA(S&D)/KMC  
3. PA to Municipal Commissioner



## ANNEXURE-5 : LETTER OF MPL. COMMISSIONER TO FOR EXCLUSION OF DRAINS

**Binod Kumar, IAS**  
MUNICIPAL COMMISSIONER



KOLKATA MUNICIPAL CORPORATION  
5, S. N. BANERJEE ROAD • KOLKATA – 700 013  
Phone 2286 1234 Fax 2286 1434/1334  
e-mail : bkoffice9@gmail.com

Con/Com/ 162 /S&D/2020-21  
Date: 31/12/2020

To  
The Member Secretary,  
West Bengal Pollution Control Board,  
Paribesh Bhavan,  
Building no 10A, Block-LA, Sector-III, Bidhannagar,  
Kolkata- 700106

**Sub: Exclusion of Nimtala Burning Ghat & Cossipore Ghat Drain from the ambit of 56 priority drain/  
channel discharging to river Ganga i.r.o NGT OA 200/2014.**

Reference:

- MoM of 3<sup>rd</sup> meeting held on 11/11/2020 of LWM Committee of WB.
- Report on Details of all drains in the state with the heading "Information on drains, sewage treatment plants in compliance to Hon'ble NGT order dated 22.08.2019, 18.12.2019 and 13.08.2020".

Sir,

With reference to the communication above and relevant direction of LWM Committee of WB, it is hereby declared that the **Nimtala Burning Ghat & Cossipore Ghat Drain** is equipped with penstock gate. The gates at both the location is kept closed and there is a network to convey the sewage to the designated treatment facility. The locations do not discharge sewage in Ganga and thus may be considered to be kept out of the ambit of the 56 priority polluting drain/ channel.

The matter is placed for perusal and further necessary action in tune with the direction of LWM Committee of WB.

Thanking you,

Yours faithfully

(Binod Kumar, I.A.S.)  
Municipal Commissioner

Enclosure:

- Report in the matter of NGT OA 200/2014.
- MoM of 3<sup>rd</sup> meeting held on 11/11/2020 of LWM Committee of WB.

Copy to:

- Program Director, WBSPMG.
- Smt. Nandini Ghosh, I.A.S. Joint Secretary UD&MA Department, Govt. of WB.

(Binod Kumar, I.A.S.)  
Municipal Commissioner





## कार्यालय महाप्रबन्धक,

E-mail: gmypcugzb@gmail.com

Annexure-VIII

यमुना प्रदूषण नियन्त्रण इकाई, उत्तर प्रदेश जल निगम (नगरीय),  
सी-9, जल निगम कॉलोनी, राजनगर, गाजियाबाद (उ०प्र०) पिन - 201002

पत्रांक 367 / कार्य-19 / 108 दिनांक: 01-4-2022

सेवा में,

Director & DH  
WQM-II Division,  
Central Pollution Control Unit,  
Delhi

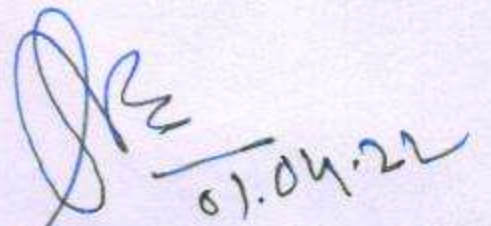
विषय: अन्टैपड नालों एवं अक्रियाशील/अपूर्ण एस०टी०पी० पर पर्यावरणीय क्षतिपूर्ति अधिरोपित करने के सम्बन्ध में।

महोदय,

उपरोक्त विषयक अपने कार्यालय पत्रांक B-19123/WQM-II/Legal/NGT-2/CPCB/2020-21 दिनांक 16.03.2022 का सन्दर्भ ग्रहण करने की कृपा करें। इस सम्बन्ध में इस मण्डलान्तर्गत परियोजना प्रबन्धक, यमुना प्रदूषण नियन्त्रण इकाई (प्रथम), उ० प्र० जल निगम (नगरीय), गाजियाबाद के पत्रांक 316/कार्य-34/66 दिनांक 29.03.2022 एवं परियोजना प्रबन्धक, अतिरिक्त निर्माण इकाई (प्रथम), उ० प्र० जल निगम (नगरीय), गाजियाबाद के पत्रांक 144/पी-03/06 दिनांक 30.03.2022 की छायाप्रति संलग्न कर इस अनुरोध के साथ प्रेषित है कि संदर्भित पत्रों में दिये गये तथ्यों के आधार पर लोनी स्थित 30 एम०एल०डी० एस०टी०पी० एवं मोदीनगर स्थित 20 एम०एल०डी० एस०टी०पी० पर अधिरोपित की गई पर्यावरणीय क्षतिपूर्ति निक्षेपित करने हेतु आवश्यक कार्यवाही करने की कृपा करें।

संलग्नक-उपरोक्तानुसार।


भवदीय

  
01.04.22  
(संजय कुमार गौतम)  
महाप्रबन्धक

पृ०सं० दिनांक-उपरोक्तानुसार।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. मुख्य अभियन्ता (नागर), उ०प्र० जल निगम (नगरीय), लखनऊ।
2. मुख्य अभियन्ता (गा० क्षेत्र), उ०प्र० जल निगम (नगरीय), गाजियाबाद।
3. परियोजना प्रबन्धक, यमुना प्रदूषण नियन्त्रण इकाई (प्रथम), उ० प्र० जल निगम (नगरीय), गाजियाबाद।
4. परियोजना प्रबन्धक, अतिरिक्त निर्माण इकाई (प्रथम), उ० प्र० जल निगम (नगरीय), गाजियाबाद।
5. अधिशासी अभियन्ता, निर्माण खण्ड (वि०/या०), उ० प्र० जल निगम (नगरीय), गाजियाबाद

  
महाप्रबन्धक





# कार्यालय परियोजना प्रबन्धक

## यमुना प्रदूषण नियंत्रण इकाई (प्रथम), उ०प्र० जल निगम (नगरीय), सै०-१ राजनगर, गाजियाबाद 201 001

पत्रांक  
सेवा में,

316

34

66

दिनांक 29-3-2022

महाप्रबन्धक,

यमुना प्रदूषण नियंत्रण इकाई,

उ०प्र० जल निगम (नगरीय),

गाजियाबाद।

विषय:- अन्टैपड नालों एवं अक्रियाशील/अपूर्ण एस०टी०पी० पर पर्यावरणीय क्षतिपूर्ति अधिरोपित करने के सम्बन्ध में।

महोदय,

उपरोक्त विषयक केन्द्रिय प्रदूषण नियंत्रण बोर्ड के पत्रांक B-19123/WQM-II/Legal/NGT-2/CPCB/2020-21 दिनांक 16.03.2022 द्वारा लोनी स्थित 30 एम०एल०डी० एस०टी०पी० को दिनांक 01.07.2020 से 31.01.2022 तक अक्रियाशील दर्शाते हुए रु० 190.00 लाख की पर्यावरणीय क्षतिपूर्ति अधिरोपित की गई थी। उक्त के सम्बन्ध में अवगत कराना है कि उक्त एस०टी०पी० घरेलू सीवेज के शोधन हेतु निर्धारित मानकों के अनुरूप डिजाईन एवं निर्मित किया गया था। लेकिन नगर पालिका परिषद, लोनी द्वारा लगभग 42 नालें जिसमें लोनी नगर के इन्ड्रस्ट्रियल क्षेत्र की फैक्ट्रियों के औद्योगिक अशोधित जल निस्तारण हो रहा था, को सीवर लाइन से जोड़ गया था। जिसके फलस्वरूप उक्त एस०टी०पी० पर गोबर, मलबा एवं घरेलू कचरा के साथ-साथ औद्योगिक अशोधित उत्प्रवाह भी आ रहा था। इसकी पुष्टि जोड़े गये नालों के सीवेज सैम्पल की जांच रिपोर्ट, जो श्रीराम इन्स्टीट्यूट इन्ड्रस्ट्रियल रिसर्च, नई दिल्ली की है, से की जा सकती है (रिपोर्ट संलग्न है)। एस०टी०पी० पर नालों के उपरोक्त उत्प्रवाह आने के कारण एस०टी०पी० की विभिन्न यूनितें (टैंक) सिल्ट, गोबर, गिट्ट इत्यादि से पूरी तरह भर गई थी। साथ ही अधिष्ठापित विद्युत/यांत्रिक संयंत्र, पम्प एवं उपकरणों पर अत्यधिक प्रतिकूल प्रभाव पड़ा था। जुलाई, अगस्त एवं सितम्बर वर्षा ऋतु के माह होने के कारण सीवर लाइन से जुड़े हुए नालों से एस०टी०पी० की क्षमता से काफी अधिक मात्रा में श्राव एस०टी०पी० पर आ रहा था जिसका पूर्णतः शोधन किया जाना सम्भव नहीं था। अतः वर्षा ऋतु के उक्त माहों में इस एस०टी०पी० की विभिन्न यूनितें (एम०बी०बी०आर० टैंक एवं क्लेरिफायर) में सिल्ट, गोबर इत्यादि भर गये थे, जिसके कारण एस०टी०पी० की विद्युत/यांत्रिक के संयंत्र तथा उपकरण काफी खराब हो चुके थे एवं अक्रियाशील हो गया था।

अधिशाली अभियन्ता, निर्माण खण्ड (वि०/यां), उ०प्र० जल निगम (नगरीय), गाजियाबाद द्वारा एस०टी०पी० के वि०/यां उपकरणों को ठीक कराने हेतु अमृत कार्यक्रम के अन्तर्गत योजना सैप वर्ष 2017-20 के लिए Restoration and Renovation of E&M works Loni Sewerage Scheme Under O&M of MPS-68 MLD and STP-30 MLD से सम्बन्धित परियोजना अनुमानित लागत रु० 448.36 लाख (सेन्टेज सहित) का प्राक्कलन तैयार कर शासन को प्रेषित की गई थी, जिसकी स्वीकृति शासनादेश संख्या 186/2020/3150 (1)/नौ-5-2020-41बजट/2020 दिनांक 28.09.2020 द्वारा प्रदान की गई थी। अधिशाली अभियन्ता, निर्माण खण्ड (वि०/यां), उ०प्र० जल निगम (नगरीय), गाजियाबाद द्वारा निविदा के माध्यम से फर्म मैसर्स वी०ए० टेक वाबाग लि० को उक्त कार्य को कराये जाने हेतु अनुबन्धित किया गया था। फर्म द्वारा एस०टी०पी० के वि०/यां उपकरणों को ठीक कराये जाने सम्बन्धी कार्य माह मार्च-2021 में पूर्ण करा दिये गये एवं एस०टी०पी० माह अप्रैल-2021 से क्रियाशील कर यू०पी०पी०सी०बी० की रिपोर्ट (संलग्न) के अनुसार मानकों के अनुरूप संचालित कर दिया गया था। जिससे स्पष्ट है कि एस०टी०पी० का संचालन मार्च-2021 तक बन्द था एवं केन्द्रिय प्रदूषण नियंत्रण बोर्ड द्वारा दिनांक 01.07.2020 से 31.01.2022 तक अक्रियाशील दर्शाया जाना त्रुटिपूर्ण है।

उल्लेखनीय है एस०टी०पी० पर औद्योगिक श्राव के पहुंचने के कारण ही एस०टी०पी० के विद्युत यांत्रिकों उपकरणों खराबी हुई थी। एस०टी०पी० पर औद्योगिक श्राव को रोकने का उत्तरदायित्व प्रदूषण नियंत्रण बोर्ड का ही है, जिस कारण उक्त अवधि में एस०टी०पी० में विद्युत/यांत्रिक उपकरणों की खराबी के कारण अक्रियाशील होने के लिए इस विभाग का कोई उत्तरदायित्व निर्धारित नहीं होता है।

अतः उपरोक्त के दृष्टिगत आपसे अनुरोध करना है कि केन्द्रिय प्रदूषण नियंत्रण बोर्ड द्वारा अधिरोपित की गई पर्यावरणीय क्षतिपूर्ति को हटाने हेतु उपरोक्त तथ्यों के आधार पर केन्द्रिय प्रदूषण नियंत्रण बोर्ड को अवगत कराने का कष्ट करें।  
संलग्नक-उपरोक्तानुसार।

भवदीय

(अमित कुमार)  
परियोजना प्रबन्धक

पृ०सं० एवं दिनांक-उपरोक्तानुसार।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. मुख्य अभियन्ता (गा० क्षेत्र), उ०प्र० जल निगम (नगरीय), गाजियाबाद।
2. अधिशाली अभियन्ता, निर्माण खण्ड (वि०/यां), उ०प्र० जल निगम (नगरीय), गाजियाबाद।
3. श्री प्रवीन यादव, परियोजना अभियन्ता/श्री शिव कुमार, सहायक परियोजना अभियन्ता।
4. मैसर्स वी०ए० टेक वाबाग लि०, शक्ति खण्ड-4, इन्दिरापुरम, गाजियाबाद।

परियोजना प्रबन्धक



**REGIONAL OFFICE  
U.P. POLLUTION CONTROL BOARD  
GHAZIABAD**

**Analysis Report of S.T.Ps**

Sampling Point	Date	Colour	pH	B.O.D (mg/l)	C.O.D (mg/l)	T.S.S (mg/l)
74 MLD S.B.R. Indrapuram, Ghaziabad	08.04.2021	Colorless	7.43	8.0	57.0	9.0
	13.04.2021	Colorless	7.32	7.0	51.0	8.0
	20.04.2021	Colorless	7.34	6.0	58.0	7.0
	28.04.2021	Colorless	7.33	8.0	80.0	10.0
56 MLD, U.A.S.B.R. Trans Hindon (Indrapuram), Ghaziabad	08.04.2021	Turbid	7.50	20.0	64.0	22.0
	13.04.2021	Colorless	7.45	18.0	61.0	21.0
	20.04.2021	Colorless	7.45	15.0	68.0	18.0
	28.04.2021	Turbid	6.57	16.0	88.0	40.0
56 MLD, S.B.R. Dudahaida Vijay Nagar, Ghaziabad	07.04.2021	Colorless	7.56	5.0	75.0	7.0
	13.04.2021	Colorless	7.80	6.0	63.0	9.0
	20.04.2021	Colorless	7.48	7.0	55.0	8.0
	28.04.2021	Colorless	7.59	9.0	78.0	8.0
70 MLD, U.A.S.B.R. Dudahaida Vijay Nagar, Ghaziabad	07.04.2021	Turbid	7.70	10.0	81.0	20.0
	13.04.2021	Colorless	7.80	11.0	74.0	18.0
	20.04.2021	Turbid	7.80	14.0	70.0	15.0
	28.04.2021	Turbid	7.57	20.0	85.0	25.0
51 MLD, U.A.S.B.R. Pathwa Khapur	06.04.2021	Colorless	7.35	13.0	57.0	17.0
	12.04.2021	Colorless	7.44	14.0	62.0	15.0
	19.04.2021	Colorless	7.20	12.0	51.0	13.0
	27.04.2021	Colorless	7.10	10.0	38.0	20.0
51 MLD, U.A.S.B.R. SPOH BILASKI Ghaziabad	07.04.2021	Turbid	7.45	9.0	88.0	32.0
	13.04.2021	Colorless	7.76	8.0	76.0	18.0
	20.04.2021	Colorless	7.95	9.0	66.0	10.0
	28.04.2021	Turbid	7.28	7.0	74.0	10.0

*SA*  
13/5/21

*Sharma*

SO

*SA*  
RO





कार्यालय परियोजना प्रबन्धक  
अतिरिक्त निर्माण इकाई (प्रथम), उ०प्र० जल निगम(नगरीय)  
आर-1, राजनगर, (निकट टेलीफोन एक्सचेंज), गाजियाबाद(उ०प्र०) पिन-201002

पत्रांक 144 / P-03 / 06  
सेवा में,

दिनांक:- 30/03/2022  
Email/whatsapp 8111

महाप्रबन्धक,

यमुना प्रदूषण नियंत्रण इकाई,  
उ० प्र० जल निगम(नगरीय),  
गाजियाबाद।

**Subject:- Environmental Compensation for untapped drains and incomplete STP projects-reg.**

**Referecncce:** Hon'ble NGT orders dated 07/22.08.2019, 12/18.12.2019 & 13.08.2020 and 23.11.2021 in the matter of M.C. Mehra Vs Union of India, O.A. No. 200/2014.

महोदय,

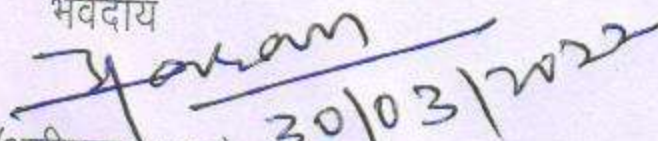
उपरोक्त विषयक Director & DH, WQM-II Division Central Pollution Control Board, Delhi कार्यालय के पत्रांक सं० B-19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21 दिनांक 16.03.2022 (छायाप्रति संलग्न) जो कि इस कार्यालय को दिनांक 29.03.2022 को प्राप्त हुआ है, का संदर्भ ग्रहण करने का कष्ट करें।

उक्त के सम्बन्ध में सादर अवगत कराना है कि इस इकाई द्वारा नगर पालिका परिषद, मोदीनगर (गाजियाबाद) में अमृत कार्यक्रम के अन्तर्गत अनुबन्ध संख्या 24/जी०एम०/2017-18 से अनुबन्धित फर्म मै० एच०एन०बी० इन्जीनियर्स प्रा० लि०, पूणे द्वारा निवाड़ी रोड मोदीनगर में 20 एम०एल०डी० एस०टी०पी०, का निर्माण करने के उपरान्त वर्तमान में ट्रायल एंड रन में चल रहा है। जो कि माह अप्रैल-2022 में पूर्ण होना प्रस्तावित है। उक्त योजना (मोदीनगर सीवरेज योजना फेज-1) के अनुबन्ध में कार्य प्रारम्भ तिथि 01.02.2018 तथा पूर्ण करने की तिथि 31.01.2020 थी। एस०टी०पी० के निर्माण में निम्नलिखित बाधाओं/समस्या होने के कारण एस०टी०पी० के निर्माण कार्य में विलम्ब हुआ।

क्रम सं०	बिन्दु	समयावधि	कुल समय
1.	एस०टी०पी०, एम०पी०एस० आई०पी०एस० निर्माण हेतु नगर पालिका परिषद, मोदीनगर द्वारा भूमि उपलब्ध कराया जाना।	01.02.2018 से 16.06.2019	लगभग 17 माह
2.	(EPCA Guidelines) द्वारा एन०सी०आर० में वायु प्रदूषण में कमी करने हेतु निर्माण कार्यों पर रोक लगाया जाना।	01.11.2018 से 15.11.2018 तथा 29.10.2019 से 11.12.2019 तक	लगभग 2 माह
3.	कोविड-19 महामारी के समय लॉकडाउन।	22.03.2020 से 30.06.2020 (लॉकडाउन)	वित्त मंत्रालय भारत सरकार द्वारा Govt. Projects को पूर्ण करने में 6 माह का अतिरिक्त समय दिये जाने हेतु घोषणा की गयी।
4.	वर्ष 2021 में कोविड-19 की दूसरी लहर आने के कारण।	अप्रैल-2021 से जून-2021 तक	लगभग 3 माह
5.	विद्युत विभाग द्वारा एस०टी०पी०, आई०पी०एस० पर विद्युत कनेक्शन उपलब्ध कराया जाना।	मार्च-2021 से अक्टूबर-2021 तक	लगभग 7 माह
7.	योजना पर निकायांश प्राप्त न होना।	मार्च-2021 से मार्च-2022 तक	लगभग 12 माह
8.	एन०एच०-58 पर I.P.S. से S.T.P. तक डाली जाने वाली राइजिंग मेन की कॉसिंग हेतु NCRTC (रेपिड मैट्रो रेल) विभाग द्वारा ड्राइंग देरी से उपलब्ध कराना।	जनवरी-2021 से जून-2021 तक	लगभग 6 माह
9.	अत्यधिक वर्षा होने के कारण।	जुलाई-2021 से सितम्बर-2021 तक	लगभग 3 माह



उक्त के अतिरिक्त अवगत कराना है कि उक्त संदर्भित एस0टी0पी0 का निर्माण कार्य माह अक्टूबर - 2021 में ही फर्म द्वारा पूर्ण करते हुये वर्तमान में एस0टी0पी0 का ट्रायल एंड रन प्रगति पर है, जोकि माह अप्रैल-2022 में पूर्ण होना प्रस्तावित है।  
अतः उक्त के सम्बन्ध में आपसे सादर अनुरोध है कि उपरोक्त बिन्दुओं का संज्ञान लेते हुये एस0टी0पी0 पर लगाये गये Environmental Compensation को निक्षेपित कराने हेतु आवश्यक कार्यवाही करने का कष्ट करें।

भवदीय  
  
 (अमीरुल हसन) 30/03/2022  
 परियोजना प्रबन्धक

पृ0सं0 एवं दिनांक उपरोक्तानुसार।

प्रतिलिपि:- निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित:-

1. निजी सचिव, प्रबन्ध निदेशक, उ0 प्र0 जल निगम(नगरीय), लखनऊ।
2. संयुक्त प्रबन्ध निदेशक(नागर), उ0 प्र0 जल निगम, लखनऊ।
3. मुख्य अभियंता(नागर), उ0 प्र0 जल निगम(नगरीय), लखनऊ।
4. मुख्य अभियंता(गा0क्षेत्र), उ0 प्र0 जल निगम(नगरीय) गाजियाबाद।
5. Director & DH, WQM-II Division Central Pollution Control Board, Delhi. को उनके कार्यालय के पत्रांक B-19123/WQM-III/LEGAL/NGT-2/CPCB/2020-21 दिनांक 16.03.2022 के संदर्भ में।
6. सम्बन्धित सहायक अभियंता।

परियोजना प्रबन्धक





## Annexure-IX

**West Bengal State NGRBA Program Management Group (SPMG)**  
**Urban Development & Municipal Affairs Department,**  
**Government of West Bengal**

MemoNo.: 3096-NGRBA/SPMG/Status of STP-332/2017

Date: 4-4-2022

To  
 The Member Secretary, CPCB,  
 Parivesh Bhawan, East Arjun Nagar,  
 Delhi-110032.

Subject: **Environmental Compensation for untapped drains and incomplete STP projects – reg.**Reference: **Hon'ble NGT orders dated 07/22,08/2019, 12/18,12/2019 & 13.08.2020 and 23.11.2021 in the matter of M. C. Mehta vs Union of India O. A. No.200/2014.**

Respected Sir,

With reference to the above subject, I would like to draw your kind attention to the following points :

1. As instructed in the said letter , steps have already been taken to re-confirm and verify the status of the drains and STPs, that have been proposed for levying EC for the state. *Prima-Facie*, it appears that the proposed calculation does not capture the factual position and thus require re verification of the report as it contains some serious discrepancies that must be addressed before imposition of any penalties. Hence to ascertain the quantum of discrepancies based on factual status and verifiable reports it has been decided that a survey of all the drains given in the list enclosed with your letter shall be conducted under the monitoring and supervision of a Task Force Committee which shall include senior Officials of the concerned Department including representatives from CPCB and WBPCB.
2. With reference to the above, I wish to quote the letter (F.N. B-19123/ WQM – II/ Gen./NGT -2/ CPCB/2020-21 dt. 03.02.2021) received from the Member Secretary, CPCB, HO. New Delhi (copy enclosed) stated as follows:
  - Total 56 drains was identified by joint monitoring with WBPCB and CPCB, Kolkata
  - Out of 56 drains, 25 nos. of drains were tapped.
  - 21 nos. of drains are not feasible for interim measures due to 11nos. of drains were under tidal influence and 10nos. of drains were irrigational canals.
  - Among the remaining 10 nos. of drains, interim measure was taken for 1no. drain (Jangirpur drain)
3. Letter received from CPCB (F. N. B-19119/WQM – II /Gen. Court/ 2020-21 dt. 24.9.2021) stated as follows (copy enclosed):

.....

‘Unnayan Bhawan’, 3rd Floor, DJ-11, Sector-II, Salt Lake City, Kolkata – 700 091  
 Phone : +91-33-2321 7371                      E-mail : spmg.programdirector@gmail.com





**West Bengal State NGRBA Program Management Group (SPMG)**  
**Urban Development & Municipal Affairs Department,**  
**Government of West Bengal**

- CPCB, RD, Kolkata has conducted the satellite based survey during December 2020 and identified 45 nos. of additional drains which discharges into River Ganga having flow range from 0.32 to 91.2 MLD. These 45 nos. of additional drains was monitored by teams from RD- Kolkata.
  - The letter also requested to the Member Secretary, WBPCB to monitor these additional 45 nos. of drains and information's may be given to CPCB, Kolkata for its incorporation in the list of Ganga main stem drains.
  - Accordingly WBPCB team have done joint monitoring of the additional 45 nos. of drains with CPCB and observations are as follows:
    - ❖ 19 nos. of drains are dry drains
    - ❖ 6 nos. of drains are irrigational canals
    - ❖ 4 nos. of drains are industrial outlet
    - ❖ 2 nos. of drains have less than 1 MLD discharge
    - ❖ 4 nos. of drains are already planned to be tapped in Maheshtala STP
    - ❖ 10 nos. of drains are having flow of more than 1 MLD
  - It may further be noted in this regard that the identification of additional 45 nos. of drains has been done through satellite imagery, which is the best tool for gathering ground information in shortest time. However the selection of satellite imagery depends on the purpose of information. Under the given situation, the satellite imagery should be preferably of the summer season i.e. March/April. High rating of discrepancy in the identification of drain reflects that the satellite imagery used may be of post-monsoon or monsoon season.
4. **A)** As per the guidelines of CPCB, the untapped drains of first (1<sup>st</sup>) order and its tributaries / sub-tributaries are considered for Environmental Calculation (EC). Whereas, STP outlets, 2<sup>nd</sup> order drains, canals and fresh storm water drains (BOD < 10mg / L) has been exempted from levying EC. From the list of drains provided by CPCB, which are being proposed for levying of EC for untapped drains (101+301) some major discrepancies are observed- this classification is not given hence the survey is extremely essential in order to get the correct picture of the polluting drains in the main stem of the Ganga in West Bengal.
- B)** Regarding the 301 drains that CPCB proposes to include in the EC regime, it may be mentioned that these minor drains were identified by KMDA as per guidance of NGT order OA. 606/208, Principal Bench, New Delhi dated 16-01-2019, Direction No.44.. It was advised that these drains should be fitted with nets to prevent the discharge of solid and plastic waste into Ganga..Accordingly KMDA has accomplished the work and complied the order., NO survey has been done by CPCB to ascertain the volume of discharge and the quality of discharge.
5. Under such circumstances, it becomes very important for CPCB to highlight the criteria for selection of major drains and to conduct the survey of these drains to ascertain the flow and discharge quality details for these drains.
6. The State is putting the top most priority for arresting pollution in river Ganga. Department of UD&MA has constituted a Task Force Committee vide Memo no. 14/Law/C-12/ Misc/NGT/2016 dated 25.03.2022 under the Chairmanship of CEO KMDA which includes top Officials of the concerned Department including representatives from CPCB and WBPCB. The committee will hold its first Meeting on 6<sup>th</sup> April 2022 at 11 AM and the Notice has already been served to all concerned. The purpose of the Task Committee is to identify the total number of drains discharging into river Ganga and also to monitor the ongoing pollution abatement work in river Ganga. The Department has given 'In-Principal' approval for engaging Professor Ashish Majumdar, Director, School of Water Resource, Jadavpur University for the purpose of identification and survey of the drains discharging into Ganga. It will be worthy to mention here in earlier occasion, the School of Water Resource has done the identification of drains in West Bengal.

.....

**'Unnayan Bhawan', 3rd Floor, DJ-11, Sector-II, Salt Lake City, Kolkata – 700 091**  
**Phone : +91-33-2321 7371**                      **E-mail : spmg.programdirector@gmail.com**





**West Bengal State NGRBA Program Management Group (SPMG)**  
**Urban Development & Municipal Affairs Department,**  
**Government of West Bengal**

Under these circumstances, I request you to favorably consider our prayer for withholding the imposition of penalty on untapped drains till the joint inspection with respect to survey and identification of all drains is complete.

Enclosure :

1. The order with respect to constitution of Task Force Committee.
2. The Meeting Notice scheduled on 6<sup>th</sup> April 2022 of the Task Force Committee.

  
 Program Director, WBSPMG  
 &  
 Chief Executive Officer, KMDA

**Memo No.: 3096/1(14)-NGRBA/SPMG/Status of STP-332/2017**

**Date : 4-4-2022**

Copy forwarded for information to:

1. Member Secretary, WBPCB, Paribesh Bhawan, 10A, LA Block, Sector III, Bidhannagar, Kolkata, West Bengal 700106.
2. Chairman, CPCB, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
3. Principal Secretary, Department of UD & MA, 'Nagarayan Bhawan', DF-8, Sector-I, Salt Lake, 5<sup>th</sup> Floor, Kolkata-700064.
4. Municipal Commissioner, Kolkata Municipal, 5, S.N. Banerjee Road, Kolkata-700013.
5. Special Commissioner (NG), Department of UD & MA, 'Nagarayan Bhawan', DF-8, Sector-I, Salt Lake, 4<sup>th</sup> Floor, Kolkata-700064 & APD, WBSPMG, 'Unnayan Bhawan, 2<sup>nd</sup> Floor, DJ-ii, Sector-II, Salt Lake, Kol 700091.
6. Joint Secretary, Environment Department, Pranisampad Bhawan, Block LB-II, Salt Lake, Sector III, Bidhannagar, Kolkata – 700 106.
7. Executive Director (Technical), NMCG, 1st Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi- 110002.
8. Regional Director, CPCB, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
9. Secretary, MED, Bikash Bhawan, 1<sup>st</sup> Floor, South Block, Kolkata-700091.
10. Chief Technical Advisor, Environment Department, Pranisampad Bhawan, Block LB-II, Salt Lake, Sector III, Bidhannagar, Kolkata – 700 106.
11. Chief Engineer, GAP Wing, W & S Sector, KMDA, 'Unnayan Bhawan, 2<sup>nd</sup> Floor, DJ-ii, Sector-II, Salt Lake, Kol 700091.
12. Chief Engineer, MED, Bikash Bhawan, 1<sup>st</sup> Floor, South Block, Kolkata-700091.
13. PS to Hon'ble MIC, 'Nagarayan Bhawan', DF-8, Sector-I, Salt Lake, 5<sup>th</sup> Floor, Kolkata-700064.
14. PS to Principal Secretary, Department of UD & MA, 'Nagarayan Bhawan', DF-8, Sector-I, Salt Lake, 5<sup>th</sup> Floor, Kolkata-700064.

  
 Program Director, WBSPMG  
 &  
 Chief Executive Officer, KMDA

.....  
 'Unnayan Bhawan', 3rd Floor, DJ-11, Sector-II, Salt Lake City, Kolkata – 700 091  
 Phone : +91-33-2321 7371                      E-mail : spmg.programdirector@gmail.com

Speed Post/E-mail

File No. 19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21

Date: 27.04.2022

To,

**Programme Director,  
West Bengal State NGRBA Programme Management Group (SPMG)  
Unnayan Bhawan, 3<sup>rd</sup> floor, DJ-11,  
Sec-II, Salt Lake City,  
Kolkata-700091 (WB)**

**Subject: Environmental Compensation for untapped drains and incomplete STP projects-reg.**

**Reference: West Bengal-SPMG Letter dated 04.04.2022**

Sir,

In the letter referred above, West Bengal SPMG asked CPCB to highlight the criteria for selection of major drains and to ascertain the volume of discharge and the quality of discharge of drains on which EC has been levied.

This is to inform you that, the EC was levied by CPCB for untapped drains and incomplete/under construction STP in pursuance of Hon'ble NGT order dated 07/22.08.2019, 12/18.12.2019, 13.08.2020 and 23.11.2021 in the matter of M.C. Mehta Vs Union of India, 2 OM, O.A. No. 200/2014, wherein no criteria for selection of major drains and to determine their flow and quality of discharge for levying EC is mentioned. Only first order drains of river Ganga and its tributaries/sub-tributaries are considered for EC calculations.

Yours faithfully,

(A.K. Vidyarthi)

Director and DH, WQM-II

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
निर्गत...  
दिनांक... 27/04/2022



Office of the Program Director  
State Program Management Group  
Namami Gange  
Dehradun, Uttarakhand

Letter No. 275 /SPMG/NGRBA/CPCB

Dated: 18/04/2022

Ganga's purity is our responsibility  
Save Ganga- Save Water- Save Life

To,

**A.K.Vidarthi,**  
**Additional Director & Divisional Head, WQM-II**  
**Central Pollution Control Board,**  
**Parivash Bhawan, East Arjun Nagar,**  
**New Delhi-110032.**

**Subject: Environmental Compensation for untapped drains and incomplete STP projects-reg.**

**Reference:F.No.B-19123/WQM-II/LEGAL/NG-2/PCB/2020-21, dt. 16.03.2022.**

Please refer to aforementioned letter, wherein CPCB has calculated Environmental Compensation (EC) for untapped drains discharging into river Ganga and its tributaries and incomplete/under construction Sewage Treatment Plant (STP) projects in Ganga front States.

2. In light of the above, responses for drains and the Sewerage Treatment Plants has ben received from the concerned departments and is hereby being forwarded to you for further reviewing of the Environmental Compensation.

**Encl. As above.**

  
**(Udayraj Singh)**  
**Program Director**

**Copy to:**

1. Secretary, Department of Drinking Water & Sanitation, GoUK for kind information.
2. Executive Director, (Technical), NMCG for kind information

  
**Program Director**



Office of the Program Director  
State Program Management Group  
Namami Gange  
Dehradun, Uttarakhand

Letter No. 275 /SPMG/NGRBA/ CPCB

Dated: 18/04/2022

Ganga's purity is our responsibility  
Save Ganga- Save Water- Save Life

To,

**A.K.Vidarthi,**  
**Additional Director & Divisional Head, WQM-II**  
**Central Pollution Control Board,**  
**Parivash Bhawan, East Arjun Nagar,**  
**New Delhi-110032.**

**Subject: Environmental Compensation for untapped drains and incomplete STP projects-reg.**

**Reference:F.No.B-19123/WQM-II/LEGAL/NG-2/PCB/2020-21, dt. 16.03.2022.**

Please refer to aforementioned letter, wherein CPCB has calculated Environmental Compensation (EC) for untapped drains discharging into river Ganga and its tributaries and incomplete/under construction Sewage Treatment Plant (STP) projects in Ganga front States.

2. In light of the above, responses for drains and the Sewerage Treatment Plants has ben received from the concerned departments and is hereby being forwarded to you for further reviewing of the Environmental Compensation.

**Encl. As above.**

(Udayraj Singh)  
Program Director

**Copy to:**

1. Secretary, Department of Drinking Water & Sanitation, GoUK for kind information.
2. Executive Director, (Technical), NMCG for kind information

Program Director

कार्यालय महाप्रबन्धक  
निर्माण मण्डल (गंगा)  
उत्तराखण्ड पेयजल निगम  
जगजीतपुर, पोस्ट-कनखल  
हरिद्वार-249408



Office of General Manager  
Construction Circle (Ganga)  
Uttarakhand Peyjal Nigam  
Jagjeetpur, Post-Kankhal  
Haridwar- 249408

Email:-gmgangahw@gmail.com

Letter No. 511 / NGT / 28

date 05/04/2022

सेवा में

कार्यक्रम निदेशक  
राज्य परियोजना प्रबन्धन गुप  
देहरादून।

विषय - एस०टी०पी० के उत्प्रवाह के सम्बन्ध में।

महोदय

उपरोक्त विषयक कार्यालय उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड, देहरादून के कक्ष में दिनांक 29.03.2022 को आहूत बैठक, जिसमें अधोहस्ताक्षरी एवं एस०पी०एम०जी०, उत्तराखण्ड पेयजल निगम के अधिकारियों द्वारा प्रतिभाग किया गया था एवं केन्द्रीय प्रदूषण नियंत्रण बोर्ड, नई दिल्ली तथा एन०एम०सी०जी० के अधिकारियों द्वारा वचुअल मॉड के माध्यम से प्रतिभाग किया गया। उक्त बैठक में केन्द्रीय प्रदूषण नियंत्रण बोर्ड, नई दिल्ली द्वारा उत्तराखण्ड राज्य के 36 नग एस०टी०पी० नॉन कम्पलाईंग एवं 04 नग एस०टी०पी० नॉन ऑपरेशनल कैटेगरी दर्शायी गयी थी, के सम्बन्ध में निम्नानुसार अवगत कराना है कि :-

(क) नॉन कम्पलाईंग एस०टी०पी० :- केन्द्रीय प्रदूषण नियंत्रण बोर्ड, नई दिल्ली द्वारा अधिकांश एस०टी०पी० पर विगत दो वर्षों से किए जा रहे निरीक्षण उपरान्त उपलब्ध आख्यानानुसार एस०टी०पी० के फीकल कॉलीफार्म अनुबन्ध में वर्णित मानकों से अधिक दर्शाए गए है। उक्त के क्रम में अवगत कराना है राज्य के समस्त सीवेज शोधन संयंत्रों के Influent एवं Treated Effluent को उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड, देहरादून द्वारा एवं विभाग द्वारा तृतीय पक्ष NABL Lab से निरन्तर सैम्पल की टेस्टिंग की जा रही है जो कि मानकों के अनुरूप ही आ रही है। यहां पर यह भी अवगत कराना है कि केन्द्रीय प्रदूषण नियंत्रण बोर्ड, नई दिल्ली द्वारा जहां पर Faecal coliform की मात्रा अधिक दिखाई गयी है वहां पर अपशिष्ट क्लोरिन दिखाये गये है जो कि विरोधाभास की स्थिति उत्पन्न करती है। (विवरण संलग्न, पताका-1)।

(ख) नॉन ऑपरेशनल एस०टी०पी० :-

1. 50 के०एल०डी० एस०टी०पी०, निकट नया पुल, कर्णप्रयाग।
2. 75 के०एल०डी० एस०टी०पी०, निकट अनूप नेगी स्कूल, रूद्रप्रयाग।
3. 1.0 एम०एल०डी० एस०टी०पी०, बद्रीनाथ।
4. 0.26 एम०एल०डी० एस०टी०पी०, बद्रीनाथ।

1. 50 के०एल०डी० एस०टी०पी०, निकट नया पुल, कर्णप्रयाग :-

केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा अपने पत्रांक-B-190200(Part)/STP-NPKC/WQM-II/CPCB/2020-21 Dated 01/02/2021 द्वारा Direction under section 5 of the environment (protection) act, 1986 for 50 KLD Sewage Treatment Plant (STP), at Naya Pul (BRO Bridge) Karanprayag, Uttarakhand जारी किया गया था, जिसके अन्तर्गत उनके द्वारा एस०टी०पी० निरीक्षण की दिनांक 24.11.2020 को एस०टी०पी० पर उत्प्रवाह न पहुंचने के कारण Non-Operational दर्शाया गया था। जिसके क्रम में इकाई द्वारा अवगत कराया गया है कि दिनांक 24.11.2020 को जब केन्द्रीय प्रदूषण नियंत्रण बोर्ड, नई दिल्ली के प्रतिनिधि द्वारा स्थलीय निरीक्षण किया गया तत्समय एस०टी०पी० पर कोई भी उत्प्रवाह (Influent) नहीं आ रहा था। उक्त एस०टी०पी० Electro-Coagulation तकनीक पर आधारित है। उक्त तकनीक के अन्तर्गत उत्प्रवाह के शोधन हेतु MLSS आदि उत्पन्न करने की आवश्यकता नहीं है। अतः एस०टी०पी० पर उत्प्रवाह प्राप्त होने पर ही एस०टी०पी० संचालित होती है। उक्त एस०टी०पी० पर सूक्ष्म मात्रा में उत्प्रवाह प्राप्त होता है। एस०टी०पी० लगातार संचालन में है एवं जिसकी टेस्टिंग उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड, देहरादून के द्वारा एवं विभागीय तृतीय पक्ष NABL Lab द्वारा भी टेस्टिंग निरन्तर की जाती है एवं अनुबन्ध



में वर्णित मानकों के अनुरूप ही एस०टी०पी० सुचारु रूप से कार्य कर रहा है (विवरण संलग्न, पताका-2 एवं 3)।

1- 0.075 एम०एल०डी० एस०टी०पी०, निकट अनुप नेगी स्कूल, रुद्रप्रयाग :- उक्त एस०टी०पी०



उत्तराखण्ड जल संस्थान, रुद्रप्रयाग को हस्तान्तरित है एवं उपरोक्त के संदर्भ में अवगत कराना है कि दिनांक 17.09.2021 को राज्य में भारी वर्षा एवं बादल फटने के कारण नदी का जलस्तर अचानक बढ़ने के फलस्वरूप उक्त एस०टी०पी० की कैरियर सीवेज लाईन क्षतिग्रस्त हो गयी थी एवं भारी भूस्खलन होने के फलस्वरूप एस०टी०पी० की नींव भी क्षतिग्रस्त हो गई। सुरक्षा की दृष्टि से उक्त एस०टी०पी० पर अधिष्ठापित वि०/यां० संयंत्रों को खोलकर सुरक्षित कर लिया गया है। उक्त एस०टी०पी० की क्षतिग्रस्त सीवेज कैरियर लाईन व क्षतिग्रस्त नींव की मरम्मत कार्य हेतु प्राक्कलन कार्यालय परियोजना प्रबन्धक, निर्माण एवं अनुरक्षण इकाई (गंगा), उत्तराखण्ड पेयजल निगम, श्रीनगर द्वारा विरचित कर स्वीकृति हेतु एन०एम०सी०जी०, नई दिल्ली को प्रेषित किया गया है, जिसकी स्वीकृति वर्तमान तक अपेक्षित है।

2- 0.26 एम०एल०डी० एस०टी०पी० एवं 1.0 एम०एल०डी० एस०टी०पी०, श्री बद्दीनाथ :- उक्त एस०टी०पी० केन्द्रीय प्रदूषण नियंत्रण बोर्ड, नई दिल्ली द्वारा माह नवम्बर-2020 से नॉन ऑपरेशनल दर्शायी गयी है। जबकि उक्त एस०टी०पी० क्रियाशील है एवं जिसकी माह नवम्बर-2020, सितम्बर-2021 एवं नवम्बर-2021 में उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड, देहरादून द्वारा निरीक्षण किया गया तथा निरीक्षण के दौरान एस०टी०पी० क्रियाशील पायी गयी। उक्त के अतिरिक्त एस०टी०पी० के Influent/Effluent की जाँच मासिक आधार पर NABL लैब से करायी जाती है। जिसके अनुसार एस०टी०पी० अनुबन्ध में वर्णित एवं मा० एन०जी०टी० द्वारा निर्धारित किए गए मानकों के अनुरूप कार्य कर रही है (विवरण संलग्न, पताका-4)।

यहां यह भी अवगत कराना है कि पिछले दो वर्ष में कोविड वैश्विक महामारी-2019 के दौरान यात्रा बाधित होने के कारण उक्त एस०टी०पी० पर flow प्राप्त न होने के कारण एस०टी०पी० क्रियाशील नहीं थे। वर्ष-2021 में सितम्बर माह से यात्रा प्रारम्भ होने के मध्य एस०टी०पी० क्रियाशील हुई।

(ग) उक्त के अतिरिक्त 75 के०एल०डी० एस०टी०पी०, शान्ति बाजार, देवप्रयाग, 100 के०एल०डी० एस०टी०पी०, निकट फोरेस्ट नाला, नन्दप्रयाग एवं 10 के०एल०डी० एस०टी०पी०, कीर्तिनगर पर बाई-पास देखे जाने की बात कही गयी है, के क्रम में निम्नानुसार अवगत कराना है कि :-

1. 75 के०एल०डी० एस०टी०पी०, शान्ति बाजार, देवप्रयाग एवं 10 के०एल०डी० एस०टी०पी०, कीर्तिनगर :- 75 के०एल०डी० एस०टी०पी०, शान्ति बाजार, देवप्रयाग पर फ्लो एस०टी०पी० की क्षमता से कम प्राप्त होता है एवं 10 के०एल०डी० एस०टी०पी०, कीर्तिनगर लगभग पूर्ण क्षमता पर कार्य कर रही है। उपरोक्त दोनों एस०टी०पी० पर मात्र वर्षा के ऋतु के दौरान ही टैप किए नालों में श्राव अधिक होने के कारण ओवर-फ्लो की सम्भावना रहती है।

2. 100 के०एल०डी० एस०टी०पी०, निकट फोरेस्ट नाला, नन्दप्रयाग :- उक्त एस०टी०पी० पर प्राप्त हो रहे अत्यधिक श्राव के सम्बन्ध में परियोजना प्रबन्धक, निर्माण एवं अनुरक्षण इकाई (गंगा), उत्तराखण्ड पेयजल निगम, गोपेश्वर द्वारा कार्यवाही की जा रही है (छायाप्रति संलग्न, पताका-5)।

अतः उक्त सीवेज शोधन संयंत्रों के संदर्भ में सादर अवगत कराना है कि वर्तमान में उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड, देहरादून तथा विभागी द्वारा तृतीय पक्ष NABL lab द्वारा सैम्पल के परीक्षण उपरान्त यह पाया गया कि राज्य के क्रियाशील लगभग सभी सीवेज शोधन संयंत्र (STP) MoEF द्वारा निर्धारित मानकों के अनुरूप शोधन कर रहे हैं।

43682/2022/LAW-HO

उक्त के अतिरिक्त यह भी अवगत कराना है कि गंगा नदी के मुख्य प्रवाह में गिरने वाले पूर्व चिन्हित 131 नालों के सापेक्ष 128 नालों को टैप कर एस0टी0पी0 के द्वारा शोधित किया जा रहा है एवं शेष 03 नालों को निर्माणाधीन 2.70 एम0एल0डी0 एस0टी0पी0 मारवाड़ी जोशिमठ में टैप किया जाना प्रस्तावित है जो कि माह जून-2022 में पूर्ण होने के उपरान्त टैप कर लिये जायें तथा चारधाम यात्रा को दृष्टिगत रखते हुए उक्त नालों हेतु बायारेमिडिशन कार्य दिनांक 01 मई 2022 से प्रारम्भ कर दिया जायेगा।

संलग्नक : उपरोक्तानुसार।

भवदीय  
  
 (दीपक मलिक)  
 महाप्रबन्धक

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. मुख्य अभियन्ता (मु0), प्रधान कार्यालय, उत्तराखण्ड पेयजल निगम, देहरादून।
2. समस्त परियोजना प्रबन्धक (सिविल/यांत्रिक), निर्माण एवं अनुरक्षण इकाई (गंगा), उत्तराखण्ड पेयजल निगम, हरिद्वार/श्रीनगर/गोपेश्वर/ऋषिकेश।

  
 महाप्रबन्धक

**Status of Drains for EC Calculation as on 31.01.2022, Uttarakhand**

S.No	S.No (CPCB)	Drains	Status of Drain (S-Sewage, SW-Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T-Tapped/ UT-Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
1.	7	Nav Ganga Drain, Joshimath	S	UT	No	40	190	230	The nala is tapped but during rainy season due to rise in discharge the whole discharge of nala can't be diverted to STP. During the rainy season the part of flow is allowed to discharge off the interception. However, at that time BOD remains <30 mg/l due to high dilution. In lean period the whole discharge of nala diverted to STP and discharged in river after treatment.
2.	9	Tehsil Nala, Joshimath	S	UT	No	40	190	230	The interception work on these nalas are already been completed but could not diverted to STP due to non-completion of STP which is under constructed and likely to be completed by the end of June-2022. However, the BOD of these
3.	10	Dronagiri Nala, Joshimath	S	UT	No	40	190	230	
4.	11	Kamet Lodge Nala, Joshimath	S	UT	No	40	190	230	



43682/2022/LAW-HO

S.N o	S.N o (CPCB)	Drains	Status of Drain (S- Sewage, SW- Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T- Tapped/ UT- Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
									nalas are being regularly monitored and found <30 mg/l. Although the bioremediation of these nalas will be started w.e.f. 15 April 2022 before the commencement of yatra season.*
5.	12	Ravi Gram Drain, Joshimath	S	UT	No	40	190	230	In previous years there was no discharge found in this nala during lean period but, at present the colony of NTPC has been established due to which some flow is occurring in nala, which is not reaching upto main stream. However, we are planning to divert and treat this nala for which DPR is being prepared and will be sent to NMCG at earliest for approval and allotment of fund and accordingly action will be taken.

43682/2022/LAW-HO

S.N o	S.No (CPCB)	Drains	Status of Drain (S- Sewage, SW- Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T- Tapped/ UT- Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
									Meanwhile bioremediation work will be started from 15 April 2022*.
6.	13	Pokhri Bend Drain, Chamoli Gopeshwar	S	UT	Yes	NA	190	190	The nala is tapped but during raining season due to rise in discharge the whole discharge of nala can't be diverted to STP. During the rainy season the part of flow is allowed to discharge off the interception arrangement. However, at that time BOD remains <30 mg/l. In lean period the whole discharge of nala diverted to STP and discharge in river after treatment.
7.	20	Stadium Drain, Chamoli- Gopeshwar	S	UT	No	40	190	230	It is a storm water drain, in which the flow occurs only in rainy season. It does not carry any waste water.

43682/2022/LAW-HO

S.No	S.No (CPCB)	Drains	Status of Drain (S-Sewage, SW-Storm water, D-Dry, SO-STP Outlet)	Tapping Status (T-Tapped/ UT-Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 (Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
8.	21	Leesa Bend Drain, Chamoli Gopeshwar	S	UT	No	40	190	230	It is a storm water drain, in which the flow occurs only in rainy season. It does not carry any waste water.
9.	22	Alkapuri Drain, Chamoli Gopeshwar	S	UT	No	40	190	230	It is a storm water drain, which does not carry any waste water. Usually it carry storm water particularly in rainy season.
10.	32	Naya Pul Drain, Karanprayag	S	UT	No	40	190	230	The said nala is damaged at several places before the tapping point, due to which less amount of discharge is reaching upto STP. This nala is property of Nagar Palika Karanprayag. Regarding the repair of the said nala several letters had already been written to Nagar Palika Karanprayag but no action has been taken till date. However, continuous efforts are being



43682/2022/LAW-HO

S.N o	S.N (CPCB)	Drains	Status of Drain (S- Sewage, SW- Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T- Tapped/ UT- Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
									done at our unit level for the pursuance regarding the repair of said nala.
11.	34	Anoop Negi Nala, Rudraprayag	S	UT	No	40	190	230	Nala and STP damaged in Sept-2021 due to heavy rain. For repair works estimate has already being sent to NMCG for approval and allotment of fund in Nov-2021 approval still awaited. During rainy season due to dilution the BOD was <30 mg/l. In Yatra season from 15 April 2022 the bioremediation of said nala will be started.*
12.	60	Uphalda Mohalla Drain,Srinagar	S	UT	No	40	190	230	Recently some discharge has been observed in this nala so diversion of treatment of this nala detailed DPR is being prepared. However,

43682/2022/LAW-HO

S.No	S.No (CPCB)	Drains	Status of Drain (S-Sewage, SW-Storm water, D-Dry, SO-STP Outlet)	Tapping Status (T-Tapped/ UT-Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
									bioremediation will be started w.e.f. 15 April 2022.*
13.	68	Kailash Ashram Drain,Uttarkashi	S	UT	No	40	190	230	Earlier this nala was storm water drain and no waste water was seen in this nala. Testing is being carried out if BOD comes >30 mg/l accordingly action will be taken.
14.	71	Shanta Nala, Devprayag	SW	UT	No	NA	NA	0	
15.	72	Bah Bazar,Devprayag	SW	UT	No	NA	NA	0	
16.	76	Koudiyala Nala,Koudiyala	SW	UT	No	NA	NA	0	
17.	97	Near Baraha manjil Bhawan nala,Swargasrham (Rishikesh)	D	UT	No	NA	NA	0	
18.	104	Darshan Maha Vidhalya Nala,Muni Ki Reti (Rishikesh)	D	UT	No	NA	NA	0	
19.	108	Police Guest House nala,Muni Ki Reti (Rishikesh)	D	UT	No	NA	NA	0	

43682/2022/LAW-HO

S.No	S.No (CPCB)	Drains	Status of Drain (S- Sewage, SW- Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T- Tapped/ UT- Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
20.	110	PWD Guest House nala, Muni Ki Reti (Rishikesh)	D	UT	No	NA	NA	0	
21.	119	IDPL STP Drain, Rishikesh	SO	BOD >10 mg/l	No	40	190	230	This drain is under Jurisdiction of IDPL Rishikesh.
22.	122	Sai Ghat Nala, Rishikesh	S	UT	No	40	190	230	The said nala is already been tapped and its discharge is being treated.
23.	127	Rawli rao Drain, Haridwar	S	UT	No	40	190	230	It is located in SIDCUL area of Haridwar and tapping of this drain is being dealt by SIDCUL.
24.	145	Kasai Nala, Haridwar	S	NI	NI	40	190	230	Kasai nala is the another name of Kassawan nala, whereas both are same. Kassawan nala had already been tapped and shown at serial no. 124 of this list, so this Kasai nala shown Sl. NO. 145 of list may be deleted.
25.	147	Ramrakha Park Nala, Haridwar	S	UT	No	40	190	230	Ramrakkha drain have already been tapped by this department before Nov-2019. Tapping of



43682/2022/LAW-HO

o	(CPCB)	Drains	Status of Drain (S- Sewage, SW- Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T- Tapped/ UT- Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
									this drain is now being maintained by Uttarakhand Jal Sansthan, Haridwar.
26.	148	Nala Saperabasti,Raiwala	S	UT	No	40	190	230	The bioremediation of said nala was being done w.e.f. 01-04-2021 to 30-06-2021 in lean period. In rainy season the discharge of said nala increased due to which the BOD of said nala remains <30 mg/l. The DPR for treatment of this nala had already been submitted to NMCG for approval and allotment of fund, So after approval the construction of STP for treatment of discharge of nala will be done. Meanwhile a bioremediation in lean period will be started w.e.f. 15 April 2022*.

43682/2022/LAW-HO

o	(CPCB)	Drains	Status of Drain (S- Sewage, SW- Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T- Tapped/ UT- Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
27.	149	Nala near BSF Camp, Raiwala	S	UT	No	40	190	230	The bioremediation of said nala was being done w.e.f. 01-04-2021 to 30-06-2021. In rainy season the discharge of said nala increased due to which the BOD of said nala remains <30 mg/l. The DPR for treatment of this nala had already been submitted to NMCG for approval and allotment of fund so, after approval construction of STP for treatment of discharge of nala will be done. Meanwhile a bioremediation in lean period will be started w.e.f. 15 April 2022*.
28.	150	Rispana, Dehradun	S	UT	No	40	190	230	The bioremediation of said nala was being done w.e.f. 01-04-2021 to 30-06-2021 in lean period. The work of tapping of small nalas

43682/2022/LAW-HO

o	(CPCB)	Drains	Status of Drain (S- Sewage, SW- Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T- Tapped/ UT- Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
									falling in Rispana river is under progress and out of 177 nalas diversion arrangement of 123 nalas had already been completed. The said work will be completed by the end of June-2022 so, after completion of this project no waste water will reach to Rispana river. Meanwhile, bioremediation work will be started w.e.f. 15 April 2022.*
29.	151	Bindal, Dehradun	S	UT	No	40	190	230	The bioremediation of said nala was being done w.e.f. 01-04-2021 to 30-06-2021 in lean period. The diversion work is almost complete and partial diversion of discharge is being done to 68 MLD Kargi STP, by the end of April-2022 full lean discharge will be diverted to STP. It is



43682/2022/LAW-HO

o	(CPCB)	Drains	Status of Drain (S- Sewage, SW- Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T- Tapped/ UT- Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
									<p>also relevant to mention here that these river confluences with river Suswa before reaching to river Ganga, which is almost 50 km away from river Ganga and water from several natural sources mix in river Suswa during its course upto Ganga, so due to dilution the BOD of said river Suswa remains &lt;30 mg/l, so it is very much clear from the above facts that river Suswa never polluted the main in this way the river Suswa never polluted to main stream of river Ganga. However, in view of 100% abatement of pollution of the river the bioremediation is being proposed.</p>

43682/2022/LAW-HO

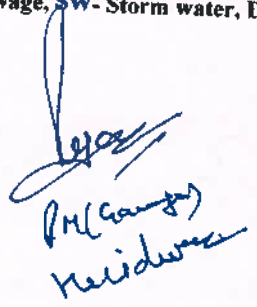
o	(CPCB)	Drains	Status of Drain (S- Sewage, SW- Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T- Tapped/ UT- Untapped/ NI- No Information/ BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
30.	152	Lakshar Drain,Laksar (Haridwar)	S	UT	No	40	190	230	Laksar drain joins the Baan Ganga River, a tributary of river Ganga near Laksar. This Laksar drain mostly contains ground water and BOD of this drain was found 10 mg/l, so there is no need of any treatment.
Amount in Lakh Rs.						400.00	1900.00	5250.00	
Total Amounts in Lakh (Rs.)									

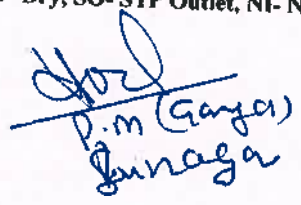
\* The bioremediation will be started w.e.f. 15 April 2022 subjected to approval of the estimate.

Drain list is provided by State Authorities (UKPCB, UK Jal Sansthan, UK Pey Jal Nigam etc.)

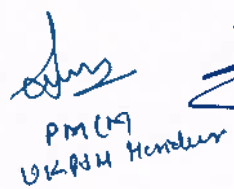
Abbreviation: S-Sewage, SW- Storm water, D- Dry, SO- STP Outlet, NI- No Information, NA- Not Applicable

  
P.M. (Ganga)  
Haridwar

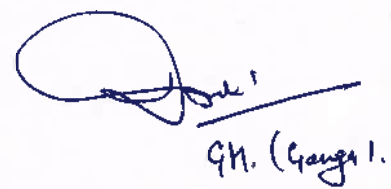
  
P.M. (Ganga)  
Haridwar

  
P.M. (Ganga)  
Jhansi

  
P.M. (Ganga)  
Meerut

  
P.M. (Ganga)  
Hapur

  
P.M. (Ganga)  
Dehra Dun

  
P.M. (Ganga)  
Ghazipur

Calculation of EC for under-construction/trial/not completed/non-operational/proposed STPs in Uttarakhand (February 2022)

S.No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculate d @Rs. 10 Lakh per month (Duration 01.07.20 20 to 31.1.202 2)	EC calculate d @Rs. 10 lakh per month (Duration 01.07.20 20 to 31.1.202 2)	Reply
								As on 30.6.2020	As on 31.1.2022			
16	BRO Bridge STP 04	Commision ed	1	0.05	Karanpray ag	Elcetrocoagulat ion	UKPJN	Operation al	Nonoperation al	Yes	190	STP situated near Naya pull (BRO bridge) Karanprayag is based on electrocoagulation technology and is operational since Nov-2020. The flow of nala is very less and intermittent due to damage of nala before the tapping point therefore sometimes the discharge does not reach to STP resulting in non-availability of



S.No.	Name of STP	Physical Status	No. of STPs	Design Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated @Rs. 10 lakh per month (Duration 01.07.2020 to 31.1.2022)	EC calculated @Rs. 10 lakh per month (Duration 01.07.2020 to 31.1.2022)	Reply
												influent at the time of visit of team of CPCB representative on dated 24-11-2022 and reply of same already sent to CPCB vide letter no. 154 / Nag. Anu. – STP /S5 dated 17-02-2022.
54	Marwari	Non commissioned	1	2.7	Joshimath	NA	UKPJN	Under construction	Under construction	Yes	190	This STP is under construction and will be taken on trial & run by the end of June-2022. Due to land slide

S.No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status	EC calculated @Rs. 10 Lakh per month (Duration 01.07.2020 to 31.1.2022)	EC calculated @Rs. 10 lakh per month (Duration 01.07.2020 to 31.1.2022)	Reply
											at previously proposed construction site, the site having change as well as due to Covid-19 pandemic and interruption by BRO in view of road widening in front of the STP construction site the work could not started

S.No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculate d @Rs. 10 Lakh per month (Duration 01.07.20 20 to 31.1.202 2)	EC calculate d @Rs. 10 lakh per month (Duration 01.07.20 20 to 31.1.202 2)	Reply
												on time and delayed. Now, the work is under progress and treatment will be started by the end of June-2022.
55	Kolagarh	Non commissioned	1	3	Dehradun	NA	UKPJN	Under construction	Under construction	Yes	190	The work of STP started on 09-12-2020 and completion date 8 April 2022. Due to



S.No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status	EC calculated @Rs. 10 Lakh per month (Duration 01.07.2020 to 31.1.2022)	EC calculated @Rs. 10 lakh per month (Duration 01.07.2020 to 31.1.2022)	Reply
											Covid-19 pandemic and land dispute there is little delay in a project and likely to be completed the end of June 2022. It is also relevant to mentioned here the most of the people having there own septic tank so,

S.No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated @Rs. 10 Lakh per month (Duration 01.07.2020 to 31.1.2022)	EC calculated @Rs. 10 lakh per month (Duration 01.07.2020 to 31.1.2022)	Reply
												they are not discharging there sewage in near by drain. The catchment of this area is towards Ashan Bairaj and not in any tributary of river Ganga.
73	Mussorie STP 1	Non commissioned	1	0.7	Mussoorie	NA	NA	Proposed	No information	Yes	190	The revised DPR of Mussoorie sewerage
74	Mussorie STP 2	Non commissioned	1	1.1	Mussoorie	NA	NA	Proposed	No information	Yes	190	

S.No.	Name of STP	Physical Status	No. of STPs	Design Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated @Rs. 10 Lakh per month (Duration 01.07.2020 to 31.1.2022)	EC calculated @Rs. 10 lakh per month (Duration 01.07.2020 to 31.1.2022)	Reply
75	Mussorie STP 3	Non commissioned	1	0.7	Mussoorie	NA	NA	Proposed	No information	Yes	190	scheme approved in the month of Dec-2021. Now, the tender for construction of these STP's are being invited so, with in a year these STP's will be constructed. It is also relevant to mention here that the old septic
76	Mussorie STP 4	Non commissioned	1	0.7	Mussoorie	NA	NA	Proposed	No information	Yes	190	
77	Mussorie STP 5	Non commissioned	1	0.05	Mussoorie	NA	NA	Proposed	No information	Yes	190	



S.No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status	EC calculate d @Rs. 10 Lakh per month (Duration 01.07.20 20 to 31.1.202 2)	EC calculate d @Rs. 10 lakh per month (Duration 01.07.20 20 to 31.1.202 2)	Reply
											tanks are present in Bilado, Arcadia and Company Garden and sewage discharge of these areas is not polluting any water stream in catchment.

*[Signature]*  
 P.M. (Rishikesh)

*[Signature]*  
 P.M. (Ganga)  
 Haridwar.

*[Signature]*  
 P.M. (Ganga)  
 Srinagar

*[Signature]*  
 P.M. (GANGA)  
 Teopethwar.

*[Signature]*  
 P.M. (M)  
 UKPSN (Haridwar)

*[Signature]*  
 P.M. (Ganga)

**OFFICE OF THE PROJECT MANAGER (MECH.), CONSTRUCTION & MAINTENANCE UNIT (GANGA),  
UTTARAKHAND PEYJAL NIGAM, HARIDWAR**

**Fecal Coliform complying as per norms of various STPs in Uttarakhand State**

S.No.	Town	Location	Result from CPCB			Result from UKPCB			Result from NABL Lab			Remark
			Date of collection of Sample	Date of Sample received at Lab	Fecal Coliform, (MPN/100ml)	Date of collection of Sample	Date of Sample received at Lab	Fecal Coliform, (MPN/100ml)	Date of collection of Sample	Date of Sample received at Lab	Fecal Coliform, (MPN/100ml)	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Badrinath	10 KLD STP	18-11-20	-	31x10 <sup>6</sup>	Nov-20	-	58	18-11-2020	19-11-2020	89	As per UKPCB and NABL lab report, value of faecal coliform for all STPs are within range. It may be possible that variations in report occur due to grab sampling. Reports of UKPCB and third party NABL lab is attached herewith for ready reference
2		0.26 MLD STP	19-11-20	-	14x10 <sup>4</sup>	Nov-20	-	94	18-11-2020	19-11-2020	87	
3	Joshimath	1.08 MLD STP	19-11-20	-	<1.8	Nov-20	-	94	15-11-2020	-	40	
4	Chamoli	50 KLD STP, Old Suspension Bridge	20-11-20	-	2x10 <sup>6</sup>	Nov-20	-	63	26-11-2020	-	97	
5		1.12 MLD STP, Dindayal Upadhyay Park, Vaiterni Ghat	20-11-20	-	78x10 <sup>2</sup>	Nov-20	-	49	26-11-2020	-	79	
6		0.76 MLD STP, Near Mahindra Show Room, Chamoli	20-11-20	-	14x10 <sup>6</sup>	Nov-20	-	43	26-11-2020	-	91	
7	Rudraprayag	100 KLD STP, Rudra Complex, Rudraprayag	23-11-20	-	2x10 <sup>5</sup>	Nov-20	-	58	26-11-2020	-	84	
8	Nandprayag	50 KLD STP, Sangam Nala	24-11-20	-	2x10 <sup>3</sup>	Nov-20	-	58	26-11-2020	-	78	
9	Karanprayag	50 KLD STP, Near Police Chowki, Karanprayag	24-11-20	-	2x10 <sup>2</sup>	Nov-20	-	43	26-11-2020	-	90	
10		50 KLD STP, Subhash Nagar, Karanprayag	24-11-20	-	12x10 <sup>2</sup>	Nov-20	-	58	26-11-2020	-	88	
11		100 KLD STP, Near Old Bridge, Karanprayag	24-11-20	-	4x10 <sup>6</sup>	Nov-20	-	48	26-11-2020	-	89	
12	Srinagar	3.5 MLD STP, Upgradation	27-12-20	-	92x10 <sup>6</sup>	Dec-20	-	140	10-12-2020	11-12-2020	80	
13	Kirtinagar	10 KLD STP, Kirtinagar	27-12-20	-	20x10 <sup>7</sup>	Dec-20	-	43	22-12-2020	22-12-2020	80	
14		50 KLD STP, Kirtinagar	27-12-20	-	20x10 <sup>7</sup>	Dec-20	-	46	22-12-2020	22-12-2020	94	
15	Devprayag	75 KLD STP, Shanti Bazar	28-12-20	-	4x10 <sup>9</sup>	Dec-20	-	150	15-12-2020	15-12-2020	80	
16	Rishikesh	5 MLD STP, Chorpani	07-12-20	-	39x10 <sup>3</sup>	Dec-20	-	46	21-12-2020	-	87	
17		26 MLD STP, Lakkarghat	07-12-20	-	110	Dec-20	-	34	10-12-2020	-	88	

S.No.	Town	Location	Result from CPCB			Result from UKPCB			Result from NABL Lab			Remark
			Date of collection of Sample	Date of Sample received at Lab	Fecal Coliform, (MPN/100ml)	Date of collection of Sample	Date of Sample received at Lab	Fecal Coliform, (MPN/100ml)	Date of collection of Sample	Date of Sample received at Lab	Fecal Coliform, (MPN/100ml)	
18	Haridwar	14 MLD STP, Sarai	08-12-20	-	70x10 <sup>6</sup>	Dec-20	-	39	08-12-2020	-	90	As per UKPCB and NABL lab report, value of faecal coliform for all STPs are within range. It may be possible that variations in report occur due to grab sampling. Reports of UKPCB and third party NABL lab is attached herewith for ready reference
19	Haridwar	68 MLD STP, Jagjeetpur	08-12-20	-	13x10 <sup>4</sup>	Dec-20	-	40	08-12-2020	08-12-2020	80	
20	Rudraprayag	100 KLD STP, Near SBI, Rudraprayag	28-03-21	-	2x10 <sup>4</sup>	Mar-21	-	84	23-03-2021	24-03-2021	70	
21	Devprayag	75 KLD STP, Shanti Bazar	16-03-21	-	21x10 <sup>3</sup>	Mar-21	-	110	23-03-2021	24-03-2021	80	
22		150 KLD STP, Sangam Bazar	16-03-21	-	35x10 <sup>4</sup>	Mar-21	-	94	23-03-2021	24-03-2021	70	
23	Rishikesh	26 MLD STP, Lakkarghat	10-03-21	-	310	Mar-21	-	38	24-03-2021	25-03-2021	70	
24		5 MLD STP, Chorpani	22-03-21	-	28x10 <sup>10</sup>	Mar-21	-	70	09-03-2021	09-03-2021	89	
25		7.5 MLD STP, Chandreshwar Nagar	22-03-21	-	12x10 <sup>5</sup>	Mar-21	-	40	25-03-2021	25-03-2021	98	
26	Haridwar	68 MLD STP, Jagjeetpur	18-03-21	-	<1.8	Mar-21	-	63	12-03-2021	12-03-2021	60	
27		14 MLD STP, Sarai	18-03-21	-	34x10 <sup>2</sup>	Mar-21	-	38	12-03-2021	12-03-2021	90	



कार्यालय परियोजना प्रबन्धक (यांत्रिक)  
निर्माण एवं अनुरक्षण इकाई (गंगा)  
उत्तराखण्ड पेयजल निगम  
जगजीतपुर, पोस्ट-कनखल  
हरिद्वार-249408



Office of Project Manager (Mech.)  
Construction & Maintenance Unit (Ganga)  
Uttarakhand Peyjal Nigam Jagjeetpur, Post-  
Kankhal, Haridwar-249408

E-Mail : pm.mech@live.in

Letter No. 272 / Karya-31 / 12 Date : 15/02/2021 Through - Email/Post

To,

**General Manager,**  
Construction Circle (Ganga),  
Uttarakhand Peyjal Nigam,  
Haridwar.

**Sub :** Direction under section 5 of the environment (protection) act, 1986 , for 50 KLD Sewage Treatment Plant (STP), at Naya Pul (BRO Bridge) Karanprayag, Uttarakhand-reg.

Dear Sir,

In reference to the subject matter above regarding correspondence of CPCB vide letter B-190200(Part)/STP-NPKC/WQM-II/CPCB/2020-21 Dated 01/02/2021 against their visit on dated 24/11/2020 please find our detailed point wise reply as per the following: -

Sr. No.	CPCB DIRECTIONS	REPLY
1.	STP was found non-operational at the time of visit on 24.11.2020 as no sewage was reaching STP.	STP is operational and this STP receives the influent from the nala tapping. The inflow of the nala is very less and influent is received at intervals. Therefore, no influent was available at the nala tapping at the time of the visit on 24/11/2020 which was observed by the visiting team of CPCB. Log book copy for the particular day enclosed for reference. <b>Annexure-I</b>
2.	Online Continuous Effluent Monitoring System (OCEMS) was not installed at the outlet of the STP.	An estimate for installation of OCEMS has already been sent to NMGC New Delhi vide SPMG letter no. 873/SPMG/Namami Gange/Online Monitoring <b>dated 05.11.2019</b> . After approval of the same installation of OCEMS will be done. Copy of letter is enclosed as <b>Annexure-II</b>
3.	Provision of bypass arrangement at STP was found near inlet after grit chamber.	There is no provision of by pass at inlet. However, there is a weir at Nala Tapping to

		take in the maximum flow of water as per the design of the STP. This weir is to control the required flow at the STP from the nala tapping and not to take in rain water during monsoon season.
4.	Influent and Effluent quality monitoring schedule (parameter wise) lab record not maintained.	Monthly testing of sample is done through NABL lab and testing is done. UKPCB collects the samples and conducts the tests and submits the reports with your respected office on regular intervals. Reports are attached. <b>Annexure-III</b>
5.	Sludge Drying Bed was not available at STP	As this STP is of small capacity and therefore sludge generation is very less. As per the design submitted, STP is equipped with Filter press. The sludge cake generated from the filter press is of 90% dryness, which in turn is handed over to ULB. Therefore, sludge drying bed is not required at this STP.
6.	No recirculation pit was found for silt removal near grit chamber, which may result in raw sewage flow to river at the time of silt removal.	The plant is constructed in the river bed in a hilly terrain. Therefore, the inlet and grit chamber are constructed at HFL level. It is pertinent to inform that construction of recirculation pit at the STPs in river beds is not feasible as they will be constructed in river beds below HFL which will be washed off during rise of level of water in the river.
7.	In house lab facility was not available for the analysis of relevant parameters.	As per the agreement in house lab provision is not available at any STP below 1 MLD, however a centralized town lab has been established on dated 01/12/2020 at STP, Subhash Nagar, Karanprayag and regular samples are being tested as per the agreement.
8.	Sample was not collected from the STP on the day of inspection dated 24.11.2020 because of no sewage reaching the STP.	There was no influent at the nala tapping therefore, the sample for the same could not be collected by the visiting team.

Sr. No.	CPCB SUGGESTIVE MEASURES	REPLY TO THE SUGGESTIVE MEASURES
1.	Sewage should reach STP and STP shall be made operational immediately.	The STP is in operational mode and operates on the receipt of influent only. This STP is based on Electrocoagulation technology which is not a biological process and does not require MLSS to be generated for treatment. On receipt of influent the plant begins operation catering to the treatment of the received influent. On dated 24/11/2021 the plant received 8m <sup>3</sup> of influent which was duly treated. (copy of log book of dated 24/11/2020 enclosed for your reference). <b>Annexure-IV</b> . The STP being based on Electrocoagulation technology can treat the influent in batches and does not require continuous flow of influent for treatment.
2.	STP shall inform in advance to SPCB, about shutdown of STP due to any maintenance work.	In the similar scenario as suggested, if any, SPCB will be informed in prior.
3.	Provision for Sludge Drying beds should be provided at STP.	We would like to bring to your kind notice as per the design submitted, we have installed filter presses at STP. The sludge cake generated from the filter presses is of 90% dryness, which in turn is handed over to ULB. Therefore, sludge drying beds are not required at our STPs. However, as per the suggestion we will again look in to the same and will take necessary measures.
4.	STP shall establish environmental laboratory for monitoring of treated sewage discharge quality.	A centralized town lab has been established on dated 01/12/2020 at STP, Subhash Nagar, Karanprayag and regular samples are being tested as per the agreement.
5.	OCEMS shall be installed and connected to CPCB/ UKPCB servers.	An estimate for installation of OCEMS has already been sent to NMGC New Delhi vide SPMG letter no. 873/SPMG/Namami Gange/Online Monitoring <b>dated</b>



		<b>05.11.2019.</b> After approval of the same installation of OCEMS will be done. Copy of letter is enclosed as <b>Annexure-II</b>
6.	STP shall made recirculation pit at grit chamber for silt removal.	The plant is constructed in the river bed in a hilly terrain. Therefore, the inlet and grit chamber is constructed at HFL level. It is pertinent to inform that construction of recirculation pit at the STPs in river beds is not feasible as they will be constructed in river beds below HFL which will be washed off during rise of level of water in the river. However, as per the suggestion we will again look in to the same and will take necessary measures.

We would like to ensure you that all suggestive measures recommended in letter of CPCB ; have been taken in to consideration and will be complied at the earliest and the same will be informed to your good office.

**Yours faithfully**

  
**(Sachin Kumar)**

**Project Manager**

**Endt. No. & Date : As above**

**Copy to the following:-**

1. Chief Engineer (Hq), Head Office, 11-Mohini Road Uttrakhand Peyjal Nigam, Dehradun.
2. Project Manager, Construction & Maintenance Unit (Ganga), Uttarakhand Peyjal Nigam, Gopeshwar.

  
**Project Manager**

S.No.	Town	Location	Lab	Date of Sample	Outlet of STP							
					pH (6.5-9.0)	Biological Oxygen Demand (BOD) ( $\leq 10$ mg/l)	Total Suspended Solid (TSS), ( $\leq 10$ mg/l)	Total Nitrogen (TN) ( $\leq 10$ mg/l)	Chemical Oxygen Demand (COD), ( $\leq 50$ mg/l)	Ammoniacal nitrogen (NH <sub>4</sub> -N), ( $\leq 5$ mg/l)	Phosphate (PO <sub>4</sub> -P), ( $\leq 2$ mg/l)	Fecal Coliform, (100 MPN/ 100ml)
1	Karanprayag	50 KLD STP-4 Bro bridge	NABL	29-11-20	7.10	8.10	9.50	2.20	48.70	4.20	1.91	94.00
			UKPCB	30-11-20	7.51	10.00	16.00	-	-	-	-	47.00
			NABL	01-12-20	7.10	8.20	8.90	3.30	25.70	3.90	1.30	93.00
			UKPCB	31-12-20	7.20	9.60	10.00	-	-	-	-	58.00
			NABL	30-01-21	7.33	8.50	6.50	5.50	44.00	2.80	1.35	80.00
			UKPCB	31-01-21	7.40	9.20	9.00	-	-	-	-	48.00
			NABL	20-02-21	7.32	6.20	7.40	4.90	32.00	3.40	1.30	70.00
			UKPCB	28-02-21	7.38	10.00	8.00	-	-	-	-	63.00
			NABL	23-03-21	7.46	6.70	6.00	5.60	37.00	3.30	1.60	80.00
			UKPCB	31-03-21	7.66	9.60	9.00	-	-	-	-	58.00
			NABL	20-04-21	7.46	6.00	6.80	4.20	36.00	3.20	1.10	60.00
			NABL	20-05-21	7.31	8.20	6.30	5.30	41.00	2.40	1.33	70.00
			NABL	28-08-21	7.35	6.40	6.70	5.90	44.30	2.80	1.39	80.00
			UKPCB	31-08-21	7.38	9.20	8.00	-	-	-	-	70.00
			NABL	29-09-21	7.41	8.90	7.40	5.20	48.20	3.10	1.23	90.00
			UKPCB	30-09-21	7.20	10.00	9.00	-	-	-	-	63.00
			NABL	29-10-21	7.26	8.20	7.00	5.30	40.20	2.40	1.43	90.00
			NABL	24-11-21	7.21	7.60	8.00	5.60	39.20	2.80	1.52	80.00
			NABL	23-12-21	7.39	9.00	8.50	4.34	48.00	3.22	1.20	80.00
			NABL	25-01-22	7.31	7.90	7.40	5.90	37.00	2.80	1.36	80.00
UKPCB	01-01-22	6.88	9.60	10.00	-	-	-	-	84.00			
NABL	26-02-22	7.48	9.00	9.50	6.40	42.00	4.80	1.20	80.00			
UKPCB	01-02-22	6.97	9.20	9.00	-	-	-	-	79.00			

S.No.	Town	Location	Lab	Date of Sample	Outlet of STP									
					pH (6.5-9.0)	Biological Oxygen Demand (BOD) (≤ 10 mg/l)	Total Suspended Solid (TSS), (≤ 10 mg/l)	Total Nitrogen (TN) (≤ 10 mg/l)	Chemical Oxygen Demand (COD), (≤ 50 mg/l)	Ammoniacal nitrogen (NH4-N), (≤ 5 mg/l)	T. Phosphorus (≤ 2 mg/l)	Fecal Coliform, (100 MPN/100ml)		
1	Shri Badrinath	0.26 MLD STP,	NABL	18-11-20	7.34	7.78	7.00	1.24	23.29	1.02	0.99	87.00		
			UKPCB	30-11-20	7.43	9.20	12.00	-	-	-	-	94.00		
			Seasonal Town Closed											
			NABL	21-06-21	7.01	7.30	3.00	1.09	21.92	0.90	0.56	80.00		
			NABL	10-07-21	7.01	7.12	2.00	0.81	24.30	0.67	0.78	87.00		
			NABL	09-08-21	7.22	6.12	3.00	0.81	23.30	0.67	0.68	78.00		
			NABL	16-09-21	7.76	7.70	7.00	0.61	23.26	0.50	0.89	77.00		
			UKPCB	30-09-21	-	-	-	-	-	-	-	-		
			NABL	18-10-21	7.30	6.89	2.00	1.16	17.65	0.96	0.67	79.00		
			NABL	08-11-21	7.44	6.29	9.00	0.72	19.28	0.59	0.81	83.00		
			UKPCB	01-11-21	7.56	8.80	8.00	-	-	-	-	40.00		
Seasonal Town Closed														
2	Shri Badrinath	1.0 MLD STP	NABL	18-11-20	7.38	6.15	7.00	0.93	21.94	0.77	1.20	74.00		
			UKPCB	30-11-20	6.80	9.60	18.00	-	-	-	-	84.00		
			Seasonal Town Closed											
			NABL	10-07-21	7.22	7.00	2.00	1.32	23.22	1.09	1.00	66.00		
			NABL	09-08-21	7.54	7.33	5.00	0.97	25.71	0.80	1.55	72.00		
			NABL	16-09-21	7.34	6.89	6.00	1.76	27.62	1.45	1.89	73.00		
			UKPCB	30-09-21	7.60	9.20	22.00	-	-	-	-	70.00		
			NABL	18-10-21	7.21	7.52	4.00	1.21	25.89	1.00	1.34	76.00		
			NABL	08-11-21	7.34	7.87	7.00	1.25	26.80	1.03	0.84	88.00		
			UKPCB	01-11-21	7.11	9.20	10.00	-	-	-	-	40.00		
			Seasonal Town Closed											



43682/2022/LAW-HO

कार्यालय परियोजना प्रबन्धक (यान्त्रिक)  
निर्माण एवं अनुरक्षण इकाई (गंगा)  
उत्तराखण्ड पेयजल निगम  
जगजीतपुर, पोस्ट-कनखल  
हरिद्वार-249408



Email:-  
pm.mech@live.in

Office of Project Manager (Mech.)  
Construction & Maintenance Unit (Ganga)  
Uttarakhand Peyjal Nigam  
Jagjeetpur, Post-Kankhal  
Haridwar PIN-249408

Letter No. 1957 / कार्य-31 / 65 date 01/12/2021 Through - Email/Post

सेवा में,

परियोजना प्रबन्धक,  
निर्माण एवं अनुरक्षण इकाई (गंगा)  
उत्तराखण्ड पेयजल निगम,  
गोपेश्वर।

<pmganga.gc@gmail.com>

**विषय :- 100 के०एल०डी० एस०टी०पी०, नन्दप्रयाग पर अत्यधिक श्राव प्राप्त होने के सम्बन्ध में।**

महोदय,

उपरोक्त विषय उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड, गौरा देवी पर्यावरण भवन, सहस्त्रधारा रोड़, देहरादून के पत्रांक-यूकेपीसीबी/से०लै०/Analysis report-07/2021/4673-922, दिनांक 17.11.2021 द्वारा प्राप्त माह अक्टूबर-2021 की रिपोर्ट के अनुसार 100 के०एल०डी० एस०टी०पी०, नन्दप्रयाग के सम्बन्ध में 'untreated effluent partially by-pass to Nandakini river' दर्शाया गया है। उक्त के संदर्भ में कार्यदायी फर्म द्वारा अवगत कराया गया है कि उक्त एस०टी०पी० पर क्षमता से अधिक मात्रा में सीवर प्राप्त हो रहा है। वर्तमान में उक्त योजना अधिशासी अभियन्ता, अनुरक्षण शाखा, उत्तराखण्ड जल संस्थान, गोपेश्वर को हस्तगत हो चुकी है, एवं उक्त का रखरखाव अधिशासी अभियन्ता, अनुरक्षण शाखा, उत्तराखण्ड जल संस्थान, गोपेश्वर द्वारा ही किया जा रहा है।

अतः आपसे अनुरोध है कि उक्त एस०टी०पी० पर प्राप्त हो रहे अत्यधिक श्राव के सम्बन्ध में अपने स्तर से आवश्यक कार्यवाही करने का कष्ट करेंगे।

संलग्नक : 34 रोबनानुसार।

भवदीय

(सचिन कुमार)

परियोजना प्रबन्धक

पृ०सं० एवं दिनांक :- तदैव।

प्रतिलिपि : निम्नलिखित को सादर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. महाप्रबन्धक, निर्माण मण्डल (गंगा), उत्तराखण्ड पेयजल निगम, हरिद्वार।
2. अधिशासी अभियन्ता, अनुरक्षण शाखा, उत्तराखण्ड जल संस्थान, गोपेश्वर।
3. M/s Jai Bhushan Malik, Contractors, 231/5, Sunder Nagar, Patiala-147001(Punjab), 1<sup>st</sup> Partner-Lead Partner (JBM) & M/s Confident Engineering India Pvt. Ltd., Sf. No. 678/1, Kurichi Village, Madukkarai Road, Sidco Industrial Post, Coimbatore-641021 2<sup>nd</sup> Partner (CEPL).

परियोजना प्रबन्धक



Email:-gmgangahw@gmail.com

Letter No. 403 / NGT / 18 date 24/03/2022

सेवा में

कार्यक्रम निदेशक  
राज्य परियोजना प्रबन्धन ग्रुप  
देहरादून।

**विषय - अनटैप नालों एवं अपूर्ण / निष्क्रिय सीवेज शोधन संयंत्रों पर अध्यारोपित पर्यावरण  
मुआवजा (Environmental compensation) के सम्बन्ध में।**

महोदय

उपरोक्त विषयक आपके कार्यालय ई-मेल दिनांक 22.03.2022 समय 04:25 के साथ संलग्न केन्द्रीय प्रदूषण नियंत्रण बोर्ड के पत्रांक संख्या 19123 / WQM-II/LEGAL/NGT-2/CPCB/2020-21 दिनांक 16.03.2022 के सम्बन्ध में इस कार्यालय से सम्बन्धित आख्या एवं कुमाऊँ मण्डल से प्राप्त सूचना संलग्न कर अग्रेत्तर आवश्यक कार्यवाही हेतु प्रेषित की जा रही है।

संलग्नक :- उपरोक्तानुसार।

भेषदीय  
24/3/2022  
(दीपक मलिक)  
महाप्रबन्धक

पृष्ठांकन एवं दिनांक तदैव।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. मुख्य अभियन्ता (मु0), प्रधान कार्यालय, उत्तराखण्ड पेयजल निगम, देहरादून।
2. अधीक्षण अभियन्ता, निर्माण मण्डल, उत्तराखण्ड पेयजल निगम, नैनीताल।

महाप्रबन्धक  
24/3/2022



**कार्यालय अधीक्षण अभियन्ता,**  
**निर्माण मण्डल, उत्तराखण्ड पेयजल निगम, हल्द्वानी**  
(आवासीय परिसर कॉलटैक्स, काठगोदाम, हल्द्वानी)

पत्रांक-1277 / 618 / 44 दिनांक 23 / 03 / 2022

सेवा में,

महाप्रबन्धक, निर्माण मण्डल (गंगा)  
उत्तराखण्ड पेयजल निगम,  
हरिद्वार,

प्रेषण का माध्यम	
डाक	
ई-मेल	

**विषय:- अनटैप नालों एवं अपूर्ण एवं निष्क्रिय सीवेज शोधन संयंत्रों के पर्यावरण मुआवजा (Environmental compensation) के सम्बन्ध में।**

महोदय,

उपरोक्त विषयक आपके कार्यालय पत्रांक 384/ NGT / 16 दिनांक 22.03.2022 एवं केन्द्रीय प्रदूषण नियन्त्रण बोर्ड के पत्र सं० 19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21 दिनांक 16.03.2022 के क्रम में अधिशासी अभियन्ता, निर्माण शाखा, उत्तराखण्ड पेयजल निगम, ऊधमसिंहनगर के पत्रांक 725/एन०जी०टी० नमामि गंगे/56 दिनांक 23.03.2022, अधिशासी अभियन्ता, पी०आई०यू० (अमृत), उत्तराखण्ड पेयजल निगम, हल्द्वानी के पत्रांक 496/28 एम०एल०डी० एस०टी०पी०/33 दिनांक 23.03.2022, अधिशासी अभियन्ता, पी०आई०यू० (अमृत), उत्तराखण्ड पेयजल निगम, काशीपुर के पत्रांक 679/नमामि गंगे/02 दिनांक 23.03.2022 एवं अधिशासी अभियन्ता, निर्माण शाखा, उत्तराखण्ड पेयजल निगम, रामनगर के पत्रांक 470/नमामि गंगे/37 दिनांक 22.03.2022 द्वारा प्राप्त आख्या संलग्न कर आपको सादर अग्रतर एवं आवश्यक कार्यवाही हेतु प्रेषित की जा रही है।

संलग्नक:-उपरोक्तानुसार।

भवदीय,

  
(डी०के० बन्सल)  
अधीक्षण अभियन्ता

पृ०सं० एवं दिनांक तदैव।

प्रतिलिपि :- अधिशासी अभियन्ता, निर्माण शाखा/पी०आई०यू० (अमृत), उत्तराखण्ड पेयजल निगम, ऊधमसिंहनगर/रामनगर/हल्द्वानी/काशीपुर को उनके उक्त पत्र के क्रम में सूचनार्थ प्रेषित।

  
अधीक्षण अभियन्ता



## Calculation of EC for under-construction / trial v/ not completed / non-operational / proposed STPs in Uttarakhand (February 2022)

S. No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	Reply
								As on 30-06-2020	As on 31-01-2022			
68	Ramnagar STP-1	Commissioned	1	7.00	Ramnagar	SBR	UKPJN	Under Trial from Jan-2021	Operational	Yes	190	7.00 MLD STP situated near transport nagar bridge is based on <b>SBR technology</b> . This plant is Commissioned & Functional from dated 03-07-2021. UKPCB Regional Office Haldwani (Nainital) has regularly monitoring and collecting test sample. Test report of effluent is found under as per NGT norms.
69	Ramnagar STP-2	Commissioned	1	1.50	Ramnagar	EAP	UKPJN	Under Construction	Operational	Yes	190	1.50 MLD STP situated near Puchhari Village is based on <b>EAP technology</b> . This plant is Commissioned & Functional from dated 07-10-2021. UKPCB Regional Office Haldwani (Nainital) has regularly monitoring and collecting test sample. Test report of effluent is found under as per NGT norms.

## 43682/2022/LAW-HO

S. No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	Reply
								As on 30-06-2020	As on 31-01-2022			
70	Indira Nagar	Non Commissioned	1	28.00	Haldwani	S.B.R.	UKPJN	Under construction	Under construction	Yes	190	The Construction of 28 MLD STP at Haldwani was proposed under the AMRUT Programme of Government of India. The Scheme has been sanctioned by Government of Uttarakhand by order No. 540/IV(2)-"k0fo0-2018-74 (lk0) 15-Vh0lho vi fnukad 23-05-2018. The tendering process of the scheme was initiated in the month of October 2018. The tender was finally awarded after 06th time of tendering in the month of January 2020. The Contractor firm was given date of start as 01-02-2020 with a time period of 02 years to execute the project. Presently the work is under construction. Overall physical progress of the work is 80% (All Civil, Electrical and Mechanical works) at site. The progress of work is hampered mainly due to delay in forest clearance from the concerning department which was finally received in the month of September, 2020 and also complete lockdown as well as labour problem arising on account of Covid-19 pandemic. However, the STP is now expected to be functional by the end of July 2022.

43682/2022/LAW-HO

S. No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	Reply
								As on 30-06-2020	As on 31-01-2022			
71	Kashipur	Non-commissioned	1	18.00	Kashipur	SBR	UKPJN	Under Construction	Under Construction	Yes	190	18 MLD STP was sanctioned in Kashipur under AMRUT Programme. This work was awarded by E-Tendering to M/s S.N Enviro. Tech Pvt. Ltd. New Delhi & a contract bond is formed between firm & department (C.B. No. 02/S.E/P.I.U (AMRUT) Kashipur /2017-18), date of start of the above project was 25.10.2017 & date of completion was 24.04.2019. Due to lack of fund availability in AMRUT, high water table problem at site & longer rainy season, on the request of firm, the time to complete the work was extended by the competent authority upto 24.12.2019. But due to poor planning of the executing firm & nonavailability of labour in proper numbers & due to lockdown imposed during covid-19 pandemic etc, progress of work was slowed down and ultimately this project got delayed. So the Competent departmental authority penalized the firm with Rs. 70.76 lacs penalty and subsequently on the request of the firm considering the lockdown period imposed due to Covid-19 Pandemic, the completion time was extended upto 23.06.2021. But the firm could not complete the project up to the IIInd extended time limit because of its poor planning & execution and because of IIInd wave of covid-19 pandemic and the subsequent lockdown imposed due to it. At present the construction of 18 MLD STP is under progress & present progress is about 80%. on the request of the firm the IIIrd time extension upto 23.03.2022 has been approved with an environmental compassion of amount Rs. 90.00 Lacs in compliance of the order of Hon. N.G.T. But like effects of Covid-19 Pandemic and the global slow-down of economy.
72	Narayan Nagar	Non Commissioned	1	0.45	Nainital	M.B.B.R.	UKPJN	Under construction	Trial Run	Yes	190	The construction of 0.45 MLD STP at Narayan Nagar, Nainital was proposed under the AMRUT Programme of Government of India. The Scheme has been sanctioned by Government of Uttarakhand by order No. 358/IV(2)-k0fo0-2017-74 (lko) 15-Vh0lh0 vI fnukad 12-04-2018. The tendering process of the scheme was initiated in the month of October 2018. The scheduled date of start as per the contract was 28-03-2019 with a time period of 1 year to execute the project. The Project was delayed mainly due to delay in forest clearance from the concerning department which was finally received in the month of July, 2019. The work was finally started at the site from August 2019. Physical progress of the work was also hampered due to complete lockdown a well as labour problem on account of Covid-19 pandemic. Presently, trial and testing of all the works have been completed and the plant is under operational phase. Domestic sewer connection work is in progress parallelly by Uttarakhand Jal Sansthan.



43687/2022/LAW-HO

S. No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	Reply
								As on 30-06-2020	As on 31-01-2022			
78	Kashipur	Non-commissioned	1	10.00	Kashipur	NA	NA	DPR Phase	Sanctioned vide letter no. F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021	Yes	190	DPR for I&D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. Work in Progress
79	Bazpur	Non-commissioned	1	10.00	Kashipur	NA	NA	DPR Phase	Sanctioned vide letter no. F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021	Yes	190	1. DPR for I&D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. 2. Government Land is not available for STP. Private land is identified. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.
80	Mukandpur	Non-commissioned	1	0.50	Kashipur	NA	NA	DPR Phase	Sanctioned vide letter no. F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021	Yes	190	1. DPR for I&D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. 2. Government Land is not available for STP. Private land is identified. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.
81	Beljuri	Non-commissioned	1	0.50	Kashipur	NA	NA	DPR Phase	Sanctioned vide letter no. F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021	Yes	190	1. DPR for I&D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. 2. Government Land is not available for STP. Private land is identified. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.

43687/2022/LAW-HO

S. No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	Reply
								As on 30-06-2020	As on 31-01-2022			
82	Gulariya	Non-commissioned	1	0.30	Kashipur	NA	NA	DPR Phase	Sanctioned vide letter no. F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021	Yes	190	1. DPR for I&D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. 2. Government Land is not available for STP. Private land is identified. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.
83	JaspurKhurd	Non-commissioned	1	1.00	Kashipur	NA	NA	DPR Phase	Sanctioned vide letter no. F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021	Yes	190	DPR for I&D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. Work in Progress
84	Hempur Ismail	Non-commissioned	1	2.00	Kashipur	NA	NA	DPR Phase	No information	Yes	190	1. DPR for I&D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. 2. Government Land is not available for STP. Private land is identified. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.

43687/2022/LAW-HO

S. No.	Name of STP	Physical Status	No. of STPs	Designed Capacity (MLD)	Ganga front Town	Technology	STP operating agency	Operational Status		EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	EC calculated @ Rs. 10 Lakh Per month (Duration 01-07-2020 to 31-01-2022)	Reply
								As on 30-06-2020	As on 31-01-2022			
85	Sitarganj	Non-commissioned	1	3.00	Sitarganj	NA	NA	DPR Phase	Sanctioned vide letter no. F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021	Yes	190	1. DPR for I&D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. 2. Government Land for STP is available. Proposal of land transfer is under process at DM U S Nagar Level.
86	Kiccha	Non-commissioned	1	3.00	Kiccha	NA	NA	DPR Phase	Sanctioned vide letter no. F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021	Yes	190	1-DPR for I&D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. 2.Government Land is not available for STP. Private land is identified. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.
87	Rudrapur	Non-commissioned	1	26	Rudrapur	NA	NA	DPR Phase	-	Yes	190	The DPR preparation for I&D and STP works of Kalyani river at Rudrapur is under progress and will be completed by April, 2022.The Kalyani River is heavily encroached on both sides so, there is very limited space for any treatment work. The work can be done after re-habilitation of nearby household. It is also relevant to mention here that most of the people are having their own septic tank so, they are not discharging there sewage in near by drain.
89	Rudrapur	Non-commissioned	1	18	Rudrapur	NA	NA	DPR Phase	-	Yes	190	The DPR preparation for I&D and STP works of Kalyani river at Rudrapur is under progress and will be completed by April, 2022.The Kalyani River is heavily encroached on both sides so, there is very limited space for any treatment work. The work can be done after re-habilitation of nearby household. It is also relevant to mention here that most of the people are having their own septic tank so, they are not discharging there sewage in near by drain.



**Status of Drains for EC Calculation as on 31.01.2022, Uttarakhand**

S.No.	Drains	Status of Drain (S- Sewage, SW-Storm water, D-Dry, SO- STP Outlet)	Tapping Status (T-Tapped/ UT- Untapped/NI- No Information/BOD for SO)	Interim Measures taken from 01.11.2019 to 30.06.2020 ( Yes/No/ NI-No Information)	EC Calculated from 01.11.2019 to 30.06.2020 @5.0 Lakh per month (8 Months)	EC Calculated from 01.07.2020 to 31.01.2022 @10.0 Lakh per month (19 Months)	Total EC Calculated (in Lakhs)	Reply
1	2	3	4	5	6	7	8	9
153	Drain No. 1,Kichha (Haldwani)	S	UT	No	40	190	230	<p>1. DPR for I&amp;D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022.</p> <p>2. The bioremediation has been done from 15.02.2021 to 10.06.2021. Bioremediation will be started again w.e.f. 15 April 2022.*</p> <p>3. Land is not available for STP. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.</p>
154	BadiMohalla ,Kichha (Haldwani)	S	UT	No	40	190	230	
155	BankhandiM andirNala (Left),Kichha (Haldwani)	S	UT	No	40	190	230	
156	BankhandiM andirNala (Right),Kichha (Haldwani)	S	UT	No	40	190	230	
157	Shiv Mandirwala Nala (Left),Kichha (Haldwani)	S	UT	No	40	190	230	
158	Shiv Mandirwala Nala (Right),Kichha (Haldwani)	S	UT	No	40	190	230	

159	BelijudiNala ,Kashipur	S	UT	No	40	190	230	<p>1. DPR for I&amp;D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022.</p> <p>2. Bioremediation will be started again w.e.f. 15 April 2022.*</p> <p>3. Land is not available for STP. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.</p>
160	Kalash Mandap Nala,Kashipur	S	UT	No	40	190	230	<p>This two drains are proposed to be tapped and their influent will be treated by 18MLD STP Kashipur which is under construction. Due to Covid-19 Pandemic, There is some delay in project &amp; now present progress of STP is approximate 80% and project is likely to be completed by end of June 2022. Although most of the residents of Kashipur are having their own Septic Tanks hence no fical discharge is going to the drains.</p>
161	Laxmipur minor Nala,Kashipur	S	UT	No	40	190	230	

162	GabiaNala,Kashipur	S	UT	No	40	190	230	<p>1. DPR for I&amp;D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. Work in Progress</p> <p>2. Bioremediation will be started again w.e.f. 15 April 2022.*</p>
163	Ice Factory Nala,Kashipur	S	UT	NO	40	190	230	<p>1. DPR for I&amp;D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022. Work in Progress</p> <p>2. Bioremediation will be started again w.e.f. 15 April 2022.*</p>



164	Mukundpur Nala, Kashipur	S	UT	NO	40	190	230	<p>1. DPR for I&amp;D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022.</p> <p>2. Bioremediation will be started again w.e.f. 15 April 2022.*</p> <p>3. Land is not available for STP. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.</p>
165	Ghoga Nala, Kashipur	S	UT	NO	40	190	230	<p>1. DPR for I&amp;D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022.</p> <p>2. Bioremediation will be started again w.e.f. 15 April 2022.*</p> <p>3. Land is not available for STP. Proposal of land purchase has been send to Government. EFC has been done. G.O. will be issued soon.</p>

166	Ukroulidra in,Sitarga nj	S	UT	NO	40	190	230	<p>1. DPR for I&amp;D and STP work has been sanctioned vide letter no F.No. Pr.12011/9/1919-O/o Dir. (T-III) NMCG dated 17-09-2021. Tender invited on 16.09.2021 and finalized on 04.12.2021. After agreement, date of start of work is 07.01.2022.</p> <p>2. The bioremediation has been done from 01.03.2021 to 10.06.2021. Bioremediation will be started again w.e.f. 15 April 2022.*</p> <p>3. Government Land for STP is available. Proposal of land transfer is under process at DM U S Nagar Level.</p>
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Letter No. 143 /SPMG/Namami Gange / Hon'ble NGT

Dated: 22.02.2022

Ganga's purity is our responsibility Save Ganga- Save Water- Save Life
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To,

The Registrar,  
Principal Bench, National green Tribunal,  
Faridkot House, Copernicus Marg,  
New Delhi-110001

**Subject: Compliance Report in response to Hon'ble NGT's directions in O.A. 200/2014 dated 08.02.2021.**

**Ref.: CPCB letter F.No.B-19123/WQM-II/Vidhi/NGT-2/CPCB/2020-21, dated: 03.02.2021**

Sir,

Most respectfully it is stated as under:-

This is in reference to the matter of M.C. Mehta Vs. Union of India in O.A. No. 200/2014 where in Hon'ble NGT has passed orders dated 08<sup>th</sup> February, 2021 issuing directions for imposition of Environmental Compensation for 04 under construction STPs projects and 22 number of untapped drains on main stem of river Ganga and its tributaries for non-implementation of bioremediation/phytoremediation as an interim measure in these drains.

2. In this context, response for delay in construction of 04 number of STPs and 22 untapped drains has been prepared in response to CPCB letter F.No. B-19123/WQM-II/Vidhi/NGT-2/CPCB/2020-21, dated: 03.02.2021, was submitted to NMCG vide Letter No. 439/SPMG/NGRBA/Hon'ble NGT dated 30.06.2021 for kind consideration.

3. Further as per the Judgment of Hon'ble NGT uploaded on 23.11.2021 on website states that "Compensation as directed in the last order may now be positively collected by CPCB and the NMCG within two months.

4. In light of above, the updated status and responses for delays in construction of 04 number of STPs and 22 untapped drains is being re-submitted as below: -

**SUMMARY OF UTTARAKHAND STPs FOR EC CALCULATION EC Calculation Period:  
01.07.2020 till 31.12.2020**

1.	Total no. of STPs	:	87
2.	Completed/Operational STPs	:	64
3.	Non-operational STPs	:	0
4.	Under Construction STPs	:	06
5.	Under Tendering/DPR/Proposed STPs	:	17
6.	No. of STPs considered for EC calculation	:	04
7.	<b>Calculated EC = No. of STPs x @10 lakhs/month/STP (Since 01.07.2020 till 31.12.2020)</b>	:	<b>04x 10 x 6 = 240 Lakhs</b>

\*\* Environmental Compensation (EC) to be calculated for under tendering/DPR/Proposed STPs (17 nos.) with effect from 01.01.2021



**Submission of Response for delay in completion of works related waste water treatment in compliance in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014: dated 08.02.2021.**

S. No	Location	Capacity of the plant in MLD	Physical progress in %	Completion Timeline	EC Imposed
1.	Kolagarh District-Dehradun	3.00	30%	April-2022.	Yes
2.	Haldwani (Indira Nagar) District-Nainital	28.00	70%	March-2022	Yes
3.	Narayan Nagar, Nainital District-Nainital	0.450	100%	Dec.-2021	Yes
4.	Kashipur District-US Nagar	18.00	75%	May-2022	Yes
	<b>Total</b>	<b>49.45</b>			

**In context to above following STP wise responses for delay in construction/completion of work are submitted as below:**

- i. Construction of 03 MLD STP Capacity at Kaulagarh, Dehradun:** An Estimate of construction and E&M works of 3 MLD capacity STP at Kaulagarh, construction of 3 Nos. SPS and laying of sewer line at different area in Dehradun, amounting Rs. 1481.06 lakh was sanctioned by Government of Uttarakhand vide letter no. 864/ IV(2)-श0वि0-219-74(सा0) 15-टी0सी0 V part I दिनांक 30.10.2019 of the work.

Initially the tender was invited by Uttarakhand Peyjal Nigam, Dehradun vide letter no. 7298/Nivida/708 dated 23-10-2019, for above work but due to single bid tender was cancelled vide letter no. 500/ Go. Nivida / 28 dated 26.12.2019.

Subsequently, second time tender was called for the above work vide letter no. 8434/Nivida/965 dt. 16.12.2019, in which two bids were received but both bidders were technically disqualified, so again tender was cancelled vide letter no. 619/Nivida/76 dated 31.01.2020. Third time tender was invited vide letter no. 614/nivida/84 dt. 04.02.2020 and again tender was cancelled due to technical disqualification of the bidders, vide letter no. 1630 / Nivida /145 dt. 18.05.2020. Then again fourth time tender was invited vide letter no. 2346/Nivida/169 dt. 27.06.2020. The work was awarded to M/s V.R & Company, R-14/114, Rajnagar, Gaziabad for which date of start of work is as 09.12.2020 and scheduled date of completion of work is 08.04.2022.

In view of this, the delay occurred due to non-availability of responsive bid (technically not qualified bidders) and department had to go for retendering 04 times which was beyond the control of Department. Therefor the delay in award of work leading to delay in completion as per the earlier set timelines may kindly be considered.

- ii. Construction of 28 MLD STP Haldwani:- The Construction of 28 MLD STP at Haldwani** was proposed under the AMRUT Programme of Government of India. The Scheme has been sanctioned by Government of Uttarakhand by order No. 540/IV(2)-श0वि0-2018-74(सा0) 15-टी0सी0VI दिनांक 23-05-2018. The tendering process of the scheme was initiated in the month of October



2018. The tender was finally awarded after 06<sup>th</sup> time of tendering in the month of January 2020. The Contracted firm was given date of start as 01.02.2020 with a time period of 02 years to execute the project. Presently the work is under construction. Physical progress of the work is 70% at site. The progress of the work is hampered mainly due to complete lockdown as well as labour problem on account of Covid-19 pandemic. However, the work is expected to be completed by March 2022.

In the light of above-mentioned unexpected circumstances, it is requested to consider the delay in completion of work for construction of 28 MLD STP Haldwani and wave off the environmental compensation as imposed in the Hon'ble NGT's Order dated 08.02.2021.

**iii. Construction of 0.45 MLD STP at Narayana Nagar, Nainital:** The construction of 0.45 MLD STP at Narayan Nagar, Nainital was proposed under the AMRUT Programme of Government of India. The Scheme has been sanctioned by Government of Uttarakhand by order No.358/IV(2)-शावि०-2017-74(सा०) 15-टी०सी० VI दिनांक 12.04.2018. The tendering process of the scheme was initiated in the month of October, 2018. The scheduled date of start as per the contract was 28.03.2019 with a time period of 1 years to execute the project. The Project was delayed mainly due to delay in forest clearance from the concerning department which was finally received in the month of July, 2019. The work was finally started at the site from August, 2019. Physical progress of the work was also hampered due to complete lockdown as well as labour problem on account of Covid-19 pandemic. Presently the works have been completed and the plant is under operational phase.

In the light of above facts, it is requested to wave off the environmental compensation as imposed in the Hon'ble NGT's Order dated 08.02.2021.

**iv. Construction of 18 MLD STP at Kashipur, US Nagar under AMRUT Programme:-** 18 MLD STP was sanctioned in Kashipur under AMRUT Programme. This work was awarded by E-Tendering to M/s S.N Enviro. Tech Pvt. Ltd. New Delhi & a contract bond is formed between firm & department (C.B. No. 02/S.E/P.I.U (AMRUT) Kashipur /2017-18), date of start of the above project was 25.10.2017 & date of completion was 24.04.2019. Due to lack of fund availability in AMRUT, high water table problem at site & longer rainy season, on the request of firm the time to complete the work have been extended by the competent authority upto 24.12.2019. But due to poor planning of the executing firms & non-availability of labour in proper nos. etc. progress of work was slowed and ultimately project got delayed. Competent departmental authority penalized the firm with Rs. 70.76 lakh penalty and subsequently on the request of the firm considering the lockdown period imposed due to COVID-19 Pandemic, the completion time was extended 23.06.2021. But the firm could not complete the project upto the 2<sup>nd</sup> extended time limit because of delay of works due to second wave of COVID-19. Hence Rs 90 lacs as a penalty has been further imposed on the contracting firm. At present the construction of 18 MLD STP is under progress and civil work is almost completed and the entire work is likely to be completed by 23.03.2022.

In the light of above facts, it is requested to wave off the environmental compensation as imposed in the Hon'ble NGT's order dated 08.02.2021.

As per direction issued by Hon'ble National Green Tribunal O.A. 673/2018 dated 06.12.2019 to provide temporary remediation solution for the treatment of drains in the polluted stretches, 05 projects have been approved for In-situ Treatment for Rs 2.59 Crore in 19 drains and work has been executed. Details of the drains proposed for Bio-remediation is as below: -

S.No	Town	Drain	Measures to be taken for Interception and Diversion and Treatment	
			Temporary In-situ Treatment by Bio-remediation	By Interception and Diversion works
1	Kichha (Haldwani)	1. Drain No. 1 (Bedi Mohalla) 2. Bankhandi Mandir Nala (Left) 3. Bankhandi Mandir Nala (Right) 4. Shiv Nagar mandi wala Nala (Left) 5. Maharanpratap Chowk to Khatima Nalla-1 6. Maharanpratap Chowk to Khatima NALLa-2	Work has been executed in the month of February, 2021 for the period of 05 months. Doon University has submitted TPI report. Further for an interim measures proposal of bioremediation	AA&ES sanctioned on 16 <sup>th</sup> December, 2021 from NMCG. Tender has been awarded and has been completed within the period of two years as per the timelines mentioned in the AA&ES sanctions from NMCG. <i>Annexure - 02</i>
2	Raiwala (Dehradun)	1. Nala Saperabasti 2. Nala near BSF Camp	has been prepared and submitted to NMCG for AA&ES sanction.	The estimate for I&D works and treatment works amounting to Rs. 58.65 Cr. has been framed and submitted to NMCG for allocation for funds.
3	Dehradun	1. Rispana 2. Bindal		I&D work Rispana and Bindal is under Progress in Namami Gange program and likely to be completed by June, 2022.
4	Kashipur	1. Belijudi Nala 2. Gulariya Nallah-01 3. Gulariya Nallah-02 4. Gabia Nala 5. Ice Factory Nala 6. Mukundpur Nala 7. Ghoga Nala		AA&ES sanctioned on 16 <sup>th</sup> December, 2021 from NMCG. Tender has been awarded and has been completed within the period of two years as per the timelines mentioned in the AA&ES sanctions from NMCG.
5	Sitarganj	1. Ukrouli darin		AA&ES sanctioned on 16 <sup>th</sup> December, 2021 from NMCG. Tender has been awarded and has been completed within the period



			of two years as per the timelines mentioned in the AA&ES sanctions from NMCG.
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As regards to 04 drains, 01 drain at Swargashram is intercepted for treatment and with respect to other 03 drains at Joshimath, their water quality is being monitored regularly and their BOD level is reported to be less than 30 mg/L, hence, bioremediation is not required in these 03 drains. Monthly analysis reports is Annexed in **Annexure-01**.

**5.** In order to ensure the integrated and sustained cleanliness of tributary of river Ganga by Tapping above mentioned drains, NMCG has accorded Administrative Approval and Expenditure sanction dated 16<sup>th</sup> September, 2021 for the project "Interception & Diversion (I&D) and STP works of 06 number of polluted stretches to rejuvenate River Bhela, Dhela, Kicha, Nadhore, Pilakhar and Kashipur Sewerage (I&D) scheme (Dhela River) Phae-1 of District Udham Singh Nagar, Uttarakhand" at an estimated cost of Rs 199.36 Crore under DBOT mode for which tender has been awarded, Letter of award (LoA) has been issued to the contractor. The work will be started at the site in the 1<sup>st</sup> week of January, 2022 after signing the contract agreement. It is assured that the projects shall be completed as per the extended timelines given above. The period of completion of the project is 24 months after the award of works.

**6.** It is therefore kindly prayed to Hon'ble Tribunal through Registrar General to consider the delay in construction of projects because of the above project wise cited reasons and 'COVID-19' Pandemic which have affected the smooth execution of works for almost 02 year. Hon'ble NGT is requested on behalf of Uttarakhand to wave of the compensation imposed for delay in work completion for the above projects.

The undersigned shall ever remain grateful to Hon'ble NGT for this act of kindness.

**Regards,**

  
**(Uday Raj Singh)**  
**Additional Secretary**

**Copy to:**

1. Secretary, Department of Drinking Water & Sanitation, GoUK for kind information.
2. Staff Officer to Chief Secretary, GoUK for kind information of Chief Secretary.
3. Executive Director (Technical) for kind information.
4. Member Secretary, CPCB for kind information.
5. Member Secretary, SPCB Uttarakhand for kind information.

  
**Additional Secretary**

43687/2022/LAW-HO  
Dr. Prashant Gargava  
Member Secretary  
डॉ. प्रशांत गार्गव  
सदस्य सचिव



केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार  
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE GOVT. OF INDIA

स्पीड पोस्ट / ई-मेल

फा.स. बी-19123/डब्ल्यूक्यूएम-11/विधि/एनजीटी-2/सीपीसीबी/2020-21

दिनांक : 03.02.2021

सेवा में,

मुख्य सचिव,  
उत्तराखण्ड सरकार,  
#4, सुभाष रोड, उत्तराखण्ड सचिवालय,  
देहरादून, उत्तराखण्ड-248001

विषय: अप्रयुक्त नालों (untapped Drains) और अपूर्ण एसटीपी हेतु पर्यावरणीय प्रतिकर के संबंध में।  
संदर्भ: एम.सी.मेहता बनाम भारत संघ, ओ.ए. सं.200/2014 मामले में माननीय राष्ट्रीय हरित अधिकरण का दिनांक 07/22.08.2019, 12/18.12.2019 एवं 13.08.2020 का आदेश।

कृपया माननीय राष्ट्रीय हरित अधिकरण के उपरिवर्णित संदर्भित आदेशों को देखने का कष्ट करें जिसके द्वारा केंद्रीय प्रदूषण नियंत्रण बोर्ड को अप्रयुक्त नालों(untapped drains) और अपूर्ण/निर्माणाधीन एसटीपी हेतु पर्यावरणीय प्रतिकर की गणना करने तथा मुख्य सचिव से इसकी मांग करने का निदेश दिया है।

तदनुसार, संबंधित राज्य एजेंसियों से प्राप्त सूचनाओं के आधार पर अप्रयुक्त नालों (untapped Drains) और अपूर्ण/निर्माणाधीन एसटीपी परियोजनाओं हेतु पर्यावरणीय प्रतिकर की गणना की गई है। विवरण संलग्न है।

यह अनुरोध है कि संबंधित एजेंसियों को पर्यावरणीय प्रतिकर की राशि का सत्यापन करने और टिप्पणी, यदि कोई हो तो, 15 दिनों के भीतर केंद्रीय प्रदूषण नियंत्रण बोर्ड को भेजने के लिए कहा जाए। यह भी अनुरोध है कि पर्यावरणीय प्रतिकर केंद्रीय प्रदूषण नियंत्रण बोर्ड के खाते में जमा किया जाए।

संख्या 1091/मुख्य सचिव/04/2021  
दिनांक 04/02/2021

भवदीय,

संख्या: 371/नि0स0-स0/2121  
दिनांक : देहरादून 04/2/2021

प्रशांत गार्गव



'परिवेश भवन', सी.बी.डी.-कम-ऑफिस कॉम्प्लेक्स, पूर्वी अर्जुन नगर, दिल्ली-110 032  
'PARIVESH BHAWAN', C.B.D.-CUM-OFFICE COMPLEX, EAST ARJUN NAGAR, DELHI-110 032  
PHONE: 011-22303655 TEL./FAX: 91-11-22307078, e-mail : prashant.cpcb@gov.in | mscb.cpcb@gov.in



**Environmental Compensation for untapped drains discharging untreated effluent into river Ganga and under construction STPs**

Hon'ble NGT in the matter of MC Mehta VS Union of India & Ors., vide its order dated 7/22.08.2019 and subsequent orders dated 12/18.12.2019 and 13.08.2020 has directed CPCB to calculate *environmental compensation* for untapped drains discharging untreated water into river Ganga and under-construction/delayed STP projects.

*Verbatim of the Hon'ble NGT order dated 7/22.08.2019 is as follows:*

*"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 State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB.....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.*

*18. With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further, with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019."*

Hon'ble NGT vide its subsequent order dated 13.08.2020 has further directed:

*"34. Other aspect dealt with in the report of the CPCB is the calculation of compensation per drain for failure of the States to prevent discharge of untreated pollutants by providing treatment plants or taking interim treatment measures. In this regard, further verification of status of failure may be necessary. On account of lockdown, some more time may be required to be given. Thus, this aspect is deferred till the next date...."*



In pursuance to Hon'ble NGT orders, based on the information received from the State agencies in the meetings held on 07.12.2020, & 12.01.2021 and the records available with the CPCB, environmental compensation has been calculated for untapped drains discharging untreated effluent to the river Ganga and for incomplete/under construction STP projects with effect from 1<sup>st</sup> July, 2020 @Rs. 10 Lakhs per Month per drain or per STP. Revised calculations of EC have been done from 1<sup>st</sup> Nov 2019 till 30<sup>th</sup> June, 2020 @Rs. 5 Lakhs per month per drain for untapped drains where interim measures have not been taken.

Details of calculations are enclosed.

## SUMMARY OF UTTARAKHAND DRAINS FOR EC CALCULATION (Annexure-1)

EC Calculation Period: 01.07.2020 till 31.12.2020

1. Drains Discharging into River Ganga	:	138
2. Tapped Drains	:	127
3. Drains, where interim measures not required (Dry drains-03, Drains with Eutrophication-02, STP Outlet drains-02)	:	07
4. Untapped Drains, where interim measures required	:	04
5. Untapped Drains, where interim measures taken	:	0
6. No. of drains considered for EC calculation	:	04
7. Calculated EC = No. of drains × @10 lakhs/month/drain (Since 01.07.2020 till 31.12.2020)	:	$04 \times 10 \times 6 = 240$ Lakhs

EC Calculation Period: 01.11.2019 till 30.06.2020

1. Drains Discharging into River Ganga	:	142
2. Tapped Drains	:	118
3. Drains, where interim measures not required (Dry/Stagnant/STP Outlet)	:	07
4. Untapped Drains, where interim Measures not feasible (BOD <40mg/l)	:	08
5. Untapped Drains, where interim measures required	:	09
6. Untapped Drains, where interim measures taken	:	09
7. No. of drains considered for EC calculation	:	0
8. Calculated EC = No. of drains X @5 lakhs/month/drain (Since 01.11.2019 till 30.06.2020)	:	0

## SUMMARY OF UTTARAKHAND STPs FOR EC CALCULATION (Annexure-2)

EC Calculation Period: 01.07.2020 till 31.12.2020

1. Total no. of STPs	:	87
2. Completed/Operational STPs	:	64
3. Non-operational STPs	:	0
4. Under Construction STPs	:	6*
5. Under Tendering/DPR/Proposed STPs	:	17
6. No. of STPs considered for EC calculation	:	4
7. Calculated EC = No. of STPs × @10 lakhs/month/STP (Since 01.07.2020 till 31.12.2020)	:	7 x 10 x 6 = 420 Lakhs

\*Under Construction STP project at Haldwani and Nainital getting delayed due to COVID-19 outbreak and labor shortage (Annexure-A)

\*\* Environmental Compensation (EC) to be calculated for Under tendering/DPR/Proposed STPs (17 nos.) with effect from 01.01.2021

## Note:

- Relevant lists of Drains and STPs are enclosed as annexure.
- EC may be deposited in favour of CPCB, Account no. 532702050000164 (Bank: Union of India, I.P. Extension Branch, Vikas Marg Extension, Delhi, IFSC; UBIN0553271) within one month from the date of issue of this letter as per Hon'ble NGT order.



Annexure - 1

S.N o.	City/Town	Name of drain	Average Flow /Discharge (in MLD)	Discharge to	Whether drain is Tapped to STP/ Untapped	If not tapped, any interim measures taken till 01.07.2020 YES/ NO (If yes, provide details)	Name of STP	Capacity of STP (in MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated
1	Uttarkashi	Tiloth Nalla	-	Bhagrathi	Tapped	-					No
2	Uttarkashi	Tambakhani Drain	-	Bhagrathi	Tapped	-	Gyansu STP	2.00	Operational		No
3	Uttarkashi	Collectoriate Drain	-	Bhagrathi	Tapped	-					No
4	Uttarkashi	Valmiki Vasti Drain	-	Bhagrathi	Tapped	-					No
5	Uttarkashi	Kailash Ashram Drain	-	Bhagrathi	Dry	-					No
6	Srinagar	Tiwari Mohalla Drain	-	Alaknanda	Tapped	-	Srinagar old bus stand STP	3.5	Operational		No
7	Devprayag	Shanta Nalla	-		Tapped	-	Shanti Bazar STP	0.075	Operational		No
8	Koudiyala	Koudiyala Nalla	-		Dry	-					No
9		Triveni Drain	-	Ganga	Tapped	-					No
10		Lakkar Ghat STP Drain	22.68	Ganga	STP Outlet	NA	Lakkarghat STP Outlet	26	Operational		No
11	Rishikesh	IDPL Drain	-	Ganga	Eutrophication	No	IDPL STP	14	Operational		No
12		Swarg Ashram Drain	-	Ganga	Dry	NA	NA	NA	NA		No
13		Jagjeetpur STP Drain	166.41	Ganga	STP Outlet	NA	Jagjeetpur STP Outlet	68	Operational		No
14		Matra Sadan Drain	-	Ganga	Tapped	-					No
15	Haridwar	Kassavan Drain	-	Ganga	Tapped	-					No
16		Pandey Wala Drain	-	Ganga	Tapped	-	Sarai STP	14	Operational		No
17		Rawlirao Drain	-	Ganga	Eutrophication	No	NA	NA	NA		No
18	Uttarkashi	Nagar Palika Nala	0.03	Bhagrathi	Untaped	No	NA	NA	NA		Yes
19		Loknath Nala	2.80	Ganga	Tapped	-			Operational		No
20		Sapsarovar Nala	0.10	Ganga	Tapped	-					No
21		Bheemgoda Nala	0.97	Ganga	Tapped	-					No
22		Karoli Nala	0.05	Ganga	Tapped	-					No
23		Railway Nala	0.05	Ganga	Tapped	-					No
24		Karnwal Nala	0.05	Ganga	Tapped	-					No



54		Water Tank Nala	0.025	Nandakini	Tapped	-	STP-1+3: - Forest Office - 0.10 MLD	0.1	Operational	No
55	Nandprayag	Sangam Road Drain	0.025	Nandakini	Tapped	-				No
56		Forest Office Drain	0.025	Nandakini	Tapped	-	STP-2: - Sangam Road - 0.05 MLD	0.05	Operational	No
57		Police Chowki Drain	0.025	Pindar	Tapped	-	STP-1: - Police Chowki - 0.05 MLD	0.05	Operational	No
58	Karanprayag	SBI ATM Drain	0.029	Pindar	Tapped	-				No
59		Saraswati Shishu Mandir Drain	0.032	Pindar	Tapped	-	STP-2: Purana Pul (PWD Bridge) - 0.10 MLD	0.1		No
60		Subhash Nagar Drain	0.025	Pindar	Tapped	-	STP-3: Subhash Nagar - 0.05 MLD	0.05	Operational	No
61		Ward No. 1 Drain	0.03	Pindar	Tapped	-				No
62		Ward No. 3 Drain	0.033	Pindar	Tapped	-	STP-5: Ward No. 1 & 3 - 0.10 MLD	0.1	Operational	No
63		Naya Pul Drain	0.024	Pindar	Tapped	-	STP-4: BRO Bridge - 0.05 MLD	0.05	Operational	No
64	Kirtinagar	Near new Bridge Drain	0.022	Alaknanda	Tapped	-	STP-1: 0.05 MLD	0.05	Operational	No
65		Near main Market Temple Drain	0.007	Alaknanda	Tapped	-	STP-2: 0.01 MLD	0.01	Operational	No
66		Kothar Nala	0.700	Alaknanda	Tapped	-				No
67	Srinagar	New Bus Station Nala	0.308	Alaknanda	Tapped	-				No
68		Convent School Drain	0.039	Alaknanda	Tapped	-				No
69		Keshav Rai Math Drain	0.098	Alaknanda	Tapped	-				No
70		Police Station Drain	0.046	Alaknanda	Tapped	-				No
71		Balmiki Temple Nala	0.294	Alaknanda	Tapped	-				No
72		Dam Colony Drain	0.022	Alaknanda	Tapped	-				No
73		SSB Drain	0.108	Alaknanda	Tapped	-				No
74		Kedar Ghat Drain	0.017	Alaknanda	Tapped	-				No
75		Pragati Vihar Drain	0.060	Alaknanda	Tapped	-				No
76		Hanuman Mandir Drain	0.040	Alaknanda	Tapped	-				No
77	Jal Colony Drain	0.101	Alaknanda	Tapped	-				No	
78	Irrigation Colony Nala	0.022	Alaknanda	Tapped	-				No	
79	Mahadev Temple Drain	0.202	Alaknanda	Tapped	-				No	





106	Near Shanta Bhawan nala	0.058	Ganga	Tapped	-	3 MLD STP Swaragashram	3	No																																		
107	Near Geeta bhawan PNB	0.058	Ganga	Tapped	-			3 MLD STP Swaragashram	3	No																																
108	Near Handicraft emporium	0.072	Ganga	Tapped	-					3 MLD STP Swaragashram	3	No																														
109	Near Geeta bhawan Gali no.-1	0.086	Ganga	Tapped	-							3 MLD STP Swaragashram	3	No																												
110	Near Ravi Daily Needs nala	0.086	Ganga	Tapped	-									3 MLD STP Swaragashram	3	No																										
111	Near Ganga Hair dresser nala	0.014	Ganga	Tapped	-											3 MLD STP Swaragashram	3	No																								
112	Near Laxman Jhula SPS nala	0.014	Ganga	Tapped	-													3 MLD STP Swaragashram	3	No																						
113	Back side of Choti wala hotel nala	0.072	Ganga	Tapped	-															3 MLD STP Swaragashram	3	No																				
114	Near Shumani Bhawan nala	0.072	Ganga	Tapped	-																	3 MLD STP Swaragashram	3	No																		
115	Near Chouhan hotel nala	0.057	Ganga	Tapped	-																			3 MLD STP Swaragashram	3	No																
116	Near Baraha manjil Bhawan nala	0.043	Ganga	Tapped	-																					3 MLD STP Swaragashram	3	No														
117	Near Laxaman Jhula nala	0.021	Ganga	Tapped	-																							3 MLD STP Swaragashram	3	No												
118	Near Narayan Kunj nala	0.021	Ganga	Tapped	-																									3 MLD STP Swaragashram	3	No										
119	Near Laxman Jhula PO nala	0.028	Ganga	Tapped	-																											3 MLD STP Swaragashram	3	No								
120	Darshan Maha Vidhalya Nala	0.036	Ganga	Tapped	-																													26 MLD STP Lakkarghat	26	Operational						
121	Pracheen Hanuman Mandir nala	0.036	Ganga	Tapped	-																															26 MLD STP Lakkarghat	26	No				
122	Sarwanik Sochalya nala	0.036	Ganga	Tapped	-																																	26 MLD STP Lakkarghat	26	No		
123	Asian Gems and Handicraft	0.022	Ganga	Tapped	-																																			26 MLD STP Lakkarghat	26	No
124	Police Guest House nala	0.038	Ganga	Tapped	-																																					26 MLD STP Lakkarghat
125	Shivanand Bhawan nala	0.072	Ganga	Tapped	-	26 MLD STP Lakkarghat	26																																			
126	PWD Guest House nala	0.086	Ganga	Tapped	-			26 MLD STP Lakkarghat	26																																	
127	Nav Ghat nala	0.002	Ganga	Tapped	-					26 MLD STP Lakkarghat	26																															

Swargashram

Muni Ki Reti







SI No	City	Name of STP	Capacity of STP (in MLD)	Current Status of STP (Commissioned/Operational/Under Construction/DPR Phase/Under Tendering/Proposed)	Proposed date of completion	Operating agency	EC Calculated
1	Haridwar	Sarai	18.0	Operational	-	UJS	No
2	Haridwar	Jagjeetpur	27.0	Operational	-	UJS	No
3	Haridwar	Jagjeetpur	18.0	Operational	-	UJS	No
4	Haridwar	Sarai -II	14.0	Operational	-	UKPJN	No
5	Haridwar	Jagjeetpur	68.0	Operational	-	UKPJN	No
6	Swargashram	Swargashram (Rishikesh)	3.0	Operational	-	UJS	No
7	Rishikesh	Lakkad Ghat 26 MLD (Rishikesh)	26.0	Operational	-	UKPJN	No
8	Muni-ki Reti	Chandreshwar	7.5	Operational	-	UKPJN	No
9	Muni-ki Reti	Chorpani	5.0	Operational	-	UKPJN	No
10	Tapovan	Tapovan	3.5	Operational	-	UJS	No
11	Devprayag	Baah Bazar	1.4	Operational	-	UJS	No
12	Devprayag	Shanti Bazar	0.1	Operational	-	UKPJN	No
13	Devprayag	Sangam Bazar	0.2	Operational	-	UKPJN	No
14	Kirtinagar	STP-1	0.1	Operational	-	UKPJN	No
15	Kirtinagar	STP-2	0.0	Operational	-	UKPJN	No
16	Srinagar	Srinagar	3.5	Operational	-	UKPJN	No
17	Srinagar	Near ITI	1.0	Operational	-	UKPJN	No
18	Srikot	Taulia	0.1	Operational	-	UKPJN	No
19	Srikot	Junior	0.1	Operational	-	UKPJN	No
20	Rudraprayag	Near Anup Negi School	0.1	Operational	-	UKPJN	No
21	Rudraprayag	Near Rudra Complex	0.1	Operational	-	UKPJN	No
22	Rudraprayag	Near Bus Stand	0.1	Operational	-	UKPJN	No
23	Rudraprayag	SBI Maszid	0.1	Operational	-	UKPJN	No
24	Rudraprayag	steel bridge	0.1	Operational	-	UKPJN	No
25	Rudraprayag	Belani	0.1	Operational	-	UKPJN	No
26	Kamprayag	Police Choki	0.1	Operational	-	UKPJN	No
27	Kamprayag	Purana Pull	0.1	Operational	-	UKPJN	No
28	Kamprayag	Ward No. 1 & 3	0.1	Operational	-	UKPJN	No
29	Kamprayag	Subhash nagar	0.1	Operational	-	UKPJN	No
30	Kamprayag	Nayapul	0.1	Operational	-	UKPJN	No
31	Nandprayag	Forest Office	0.1	Operational	-	UKPJN	No
32	Nandprayag	Sangam Road	0.1	Operational	-	UKPJN	No
33	Gopeshwar	Chamoli Ghat	0.8	Operational	-	UKPJN	No
34	Gopeshwar	Vivekanand Colony	1.2	Operational	-	UKPJN	No
35	Gopeshwar	Near Old Suspension Bridge	0.1	Operational	-	UKPJN	No
36	Gopeshwar	Pokhri Band	1.3	Operational	-	UKPJN	No
37	Gopeshwar	Dindayal upadhayak	1.1	Operational	-	UKPJN	No
38	Joshimath	Pokhri	1.1	Operational	-	UKPJN	No
39	Badrinath	Near suspension bridge	1.0	Operational	-	UKPJN	No
40	Badrinath	Temple Area	0.0	Operational	-	UKPJN	No
41	Badrinath	Bamni Gaon	0.3	Operational	-	UKPJN	No
42	Tehri	Bhagirathipuram, New Tehri	5.0	Operational	-	UJS	No
43	Uttarkashi	Gyansu	2.0	Operational	-	UJS	No
44	Uttarkashi	Gangotri	1.0	Operational	-	UJS	No
45	Dehradun	Kargi, Dehradun	68.0	Operational	-	UJS	No
46	Dehradun	Mothrowala -1	20.0	Operational	-	UKPJN	No
47	Dehradun	Vijay Colony	0.4	Operational	-	UKPJN	No
48	Dehradun	Salawala	0.7	Operational	-	UKPJN	No
49	Dehradun	Indira Nagar	5.0	Operational	-	UKPJN	No
50	Dehradun	Mothrowala -2	20.0	Operational	-	UKPJN	No
51	Dehradun	Jakhan	1.0	Operational	-	UKPJN	No
52	Mussoorie	Kulari Sarai	0.9	Operational	-	UJS	No
53	Mussoorie	Landaur North	0.8	Operational	-	UJS	No
54	Mussoorie	Landaur South	1.3	Operational	-	UJS	No
55	Mussoorie	Bhatta Fall	3.1	Operational	-	UJS	No
56	Mussoorie	Happy Vally	1.2	Operational	-	UJS	No

57	Nanital	Harinagar	0.5	Operational	-	UJS	No
58	Nanital	Krishnapur	0.8	Operational	-	UJS	No
59	Nanital	Roosi	10.0	Operational	-	UJS	No
60	Bhintal	Bhintal	1.3	Operational	-	UJS	No
61	Almora	Bakh, Almora	2.0	Operational	-	UJS	No
62	Pithoragarh	Z-1	5.0	Operational	-	UKPJN	No
63	Pithoragarh	Z-2	1.3	Operational	-	UKPJN	No
64	Joshinath	Marwari	2.70	Under construction	March' 2021	UKPJN	No
65	Dehradun	Kolagarh	3.00	Under construction	Nov' 2021	UKPJN	Yes ✓
66	Ramanagar	STP-1	1.50	Under Trial from Jan 2021	-	UKPJN	Yes ✓
67		STP-2	7.00	Under construction	March' 2021	UKPJN	No
68	Haldwani	Indira Nagar	28.00	Under construction	NA	UKPJN	Yes ✓
69	Kashipur	Kashipur	18.00	Under construction	NA	UKPJN	Yes ✓
70	Nanital	Narayan Nagar	0.45	Under construction	NA	UKPJN	Yes ✓
71	Mussoorie	NA	0.7	Proposed	NA	NA	No
72	Mussoorie	NA	1.1	Proposed	NA	NA	No
73	Mussoorie	NA	0.7	Proposed	NA	NA	No
74	Mussoorie	NA	0.7	Proposed	NA	NA	No
75	Mussoorie	NA	0.05	Proposed	NA	NA	No
76	Kashipur	Kashipur	10.000	DPR Phase	NA	NA	No
77	Kashipur	Bazpur	8.500	DPR Phase	NA	NA	No
78	Kashipur	Mukandpur	0.310	DPR Phase	NA	NA	No
79	Kashipur	Bejuri	0.310	DPR Phase	NA	NA	No
80	Kashipur	Gulariya	0.140	DPR Phase	NA	NA	No
81	Kashipur	Jaspur Khurd	1.550	DPR Phase	NA	NA	No
82	Kashipur	Hempur Ismail	0.700	DPR Phase	NA	NA	No
83	Sitarganj	Sitarganj	2.000	DPR Phase	NA	NA	No
84	Kiccha	Kiccha	2.000	DPR Phase	NA	NA	No
85	Rudrapur	Rudrapur	26.000	DPR Phase	NA	NA	No
86	Nanital	Rusi Village	18.000	DPR Phase	NA	NA	No
87	Rudrapur	Rudrapur	18	DPR Phase	NA	NA	No

\*\*Lakkad Ghat (Rishikesh): 6.0 MLD Stabilisation Pond is decommissioning due to new 26 MLD STP operational



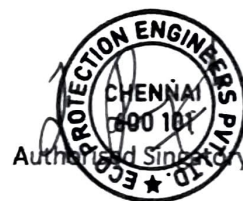
**TEST REPORT**

<b>Name &amp; Address of Office:</b>			
Office of Project manager, Construction & Maintenance unit (Ganga), Uttarakhand Peyjal Nigam, Gopeshwar - 246401			
<b>Location of Lab</b>	1.08MLD STP ,Joshimath	<b>Date of Sampling</b>	16/01/2022
<b>Sample Description</b>	Nala Effluent sample	<b>Reporting date</b>	22/01/2022
<b>Sample Location</b>	Tehsil Drain	<b>Period of Testing</b>	16/01/2022 to 21/01/2022
<b>Sample Quantity</b>	2Ltrs	<b>Parameters required</b>	As per norms of CB

**TEST RESULTS**

S.No	Parameters	Results	Units	Protocal Used
1	pH	7.85	-	APHA 23 <sup>rd</sup> Ed.2012-4500H+B
2	COD	74	Mg/l	APHA 23 <sup>rd</sup> Ed.2012-5220B
3	BOD	30	Mg/l	IS:3025(P-44)1993, Refirmed 1999
4	TSS	60	Mg/l	APHA

  
Lab Incharge





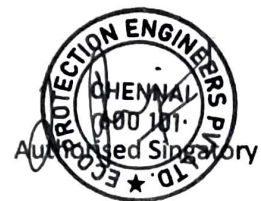
## TEST REPORT

<b>Name &amp; Address of Office:</b>			
Office of Project manager, Construction & Maintenance unit (Ganga), Uttarakhand Peyjal Nigam, Gopeshwar - 246401			
<b>Location of Lab</b>	1.08MLD STP ,Joshimath	<b>Date of Sampling</b>	16/01/2022
<b>Sample Description</b>	Nala Effluent sample	<b>Reporting date</b>	22/01/2022
<b>Sample Location</b>	Komet Lodge Drain	<b>Period of Testing</b>	16/01/2022 to 21/01/2022
<b>Sample Quantity</b>	2Ltrs	<b>Parameters required</b>	As per norms of CB

## TEST RESULTS

S.No	Parameters	Results	Units	Protocol Used
1	pH	7.70	-	APHA 23 <sup>rd</sup> Ed.2012-4500H+B
2	COD	68	Mg/l	APHA 23 <sup>rd</sup> Ed.2012-5220B
3	BOD	29	Mg/l	IS:3025(P-44)1993, Refirmed 1999
4	TSS	66	Mg/l	APHA

Lab Incharge





## TEST REPORT

<b>Name &amp; Address of Office:</b>			
Office of Project manager, Construction & Maintenance unit (Ganga), Uttarakhand Peyjal Nigam, Gopeshwar - 246401			
<b>Location of Lab</b>	1.08MLD STP ,Joshimath	<b>Date of Sampling</b>	16/01/2022
<b>Sample Description</b>	Nala Effluent sample	<b>Reporting date</b>	22/01/2022
<b>Sample Location</b>	Dronagiri Drain	<b>Period of Testing</b>	16/01/2022 to 21/01/2022
<b>Sample Quantity</b>	2Ltrs	<b>Parameters required</b>	As per norms of CB

## TEST RESULTS

S.No	Parameters	Results	Units	Protocol Used
1	pH	8.87	-	APHA 23 <sup>rd</sup> Ed.2012-4500H+B
2	COD	58	Mg/l	APHA 23 <sup>rd</sup> Ed.2012-5220B
3	BOD	26	Mg/l	IS:3025(P-44)1993, Refirmed 1999
4	TSS	70	Mg/l	APHA

Lab Incharge



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 Plot No. 943, 54th Street, TVS Colony, Anna Nagar West Extn., Chennai-600 101  
 Phone : 044-2654 5180-82, Fax: 044-2654 5183 e-mail:mail@ecotecton.in

www.ecoprotection.in

CIN :- U41000TIN2009PTC072382





## TEST REPORT

<b>Name &amp; Address of Office:</b>			
Office of Project manager, Construction & Maintenance unit (Ganga), Uttarakhand Peyjal Nigam, Gopeshwar - 246401			
<b>Location of Lab</b>	1.08MLD STP ,Joshimath	<b>Date of Sampling</b>	15/02/2021
<b>Sample Description</b>	Nala Effluent sample	<b>Reporting date</b>	22/02/2021
<b>Sample Location</b>	Tehsil Drain	<b>Period of Testing</b>	15/02/2021 to 21/02/2021
<b>Sample Quantity</b>	2Ltrs	<b>Parameters required</b>	As per norms of CB

## TEST RESULTS

S.No	Parameters	Results	Units	Protocol Used
1	pH	7.90	-	APHA 23 <sup>rd</sup> Ed.2012-4500H+B
2	COD	78	Mg/l	APHA 23 <sup>rd</sup> Ed.2012-5220B
3	BOD	29	Mg/l	IS:3025(P-44)1993, Refirmed 1999
4	TSS	66	Mg/l	APHA

Lab Incharge



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CIN :- U41000TIN2009PTC072382



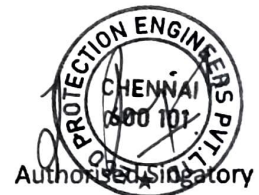
## TEST REPORT

<b>Name &amp; Address of Office:</b>			
Office of Project manager, Construction & Maintenance unit (Ganga), Uttarakhand Peyjal Nigam, Gopeshwar - 246401			
<b>Location of Lab</b>	1.08MLD STP ,Joshimath	<b>Date of Sampling</b>	15/02/2021
<b>Sample Description</b>	Nala Effluent sample	<b>Reporting date</b>	22/02/2021
<b>Sample Location</b>	Komet Lodge Drain	<b>Period of Testing</b>	15/02/2021 to 21/02/2021
<b>Sample Quantity</b>	2Ltrs	<b>Parameters required</b>	As per norms of CB

## TEST RESULTS

S.No	Parameters	Results	Units	Protocal Used
1	pH	7.75	-	APHA 23 <sup>rd</sup> Ed.2012-4500H+B
2	COD	76	Mg/l	APHA 23 <sup>rd</sup> Ed.2012-5220B
3	BOD	28	Mg/l	IS:3025(P-44)1993, Refirmed 1999
4	TSS	74	Mg/l	APHA

Lab Incharge



Authorised Signatory



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 Phone : 044-2654 5180-82, Fax: 044-2654 5183 e-mail: mail@ecotection.in

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## TEST REPORT

<b>Name &amp; Address of Office:</b>			
Office of Project manager, Construction & Maintenance unit (Ganga), Uttarakhand Peyjal Nigam, Gopeshwar - 246401			
<b>Location of Lab</b>	1.08MLD STP ,Joshimath	<b>Date of Sampling</b>	15/02/2021
<b>Sample Description</b>	Nala Effluent sample	<b>Reporting date</b>	22/02/2021
<b>Sample Location</b>	Dronagiri Drain	<b>Period of Testing</b>	15/02/2021 to 21/02/2021
<b>Sample Quantity</b>	2Ltrs	<b>Parameters required</b>	As per norms of CB

## TEST RESULTS

S.No	Parameters	Results	Units	Protocol Used
1	pH	8.80	-	APHA 23 <sup>rd</sup> Ed.2012-4500H+B
2	COD	70	Mg/l	APHA 23 <sup>rd</sup> Ed.2012-5220B
3	BOD	27	Mg/l	IS:3025(P-44)1993, Refirmed 1999
4	TSS	87	Mg/l	APHA

Lab Incharge



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Phone : 044-2654 5180-82, Fax: 044-2654 5183 e-mail:mail@ecotection.in

www.ecoprotection.in

CIN :- U41000TIN2009PTC072382



**F. No.: Pr.12011/9/19-O/o Dir (T-III) NMCG**  
**National Mission for Clean Ganga**  
**Department of Water Resources, River Development & Ganga Rejuvenation**  
**(Ministry of Jal Shakti)**

1<sup>st</sup> Floor,  
 Major Dhyan Chand National Stadium,  
 India Gate, New Delhi – 110002  
 Dated: **16<sup>th</sup> September 2021**

To,  
 The Program Director,  
 SPMG,117, Indira Nagar, Dehradun,  
 Uttarakhand- 248001

**Sub: Administrative Approval and Expenditure Sanction for the project "Interception & Diversion (I&D) and STP work of 06 nos. Polluted River Stretches to Rejuvenate River Bhela, Dhela, Kichha, Kosi, Nandhore, Pilakhar and Kashipur Sewerage (I&D) Scheme (Dhela River) Phase-1 of District Udham Singh Nagar, Uttarakhand" under Namami Gange Programme at an estimated cost of Rs. 199.36 Crore under DBOT mode.**

Sir,

I am directed to convey the grant of Administrative Approval and Expenditure Sanction (AA&ES) for the project "Interception & Diversion (I&D) and STP work of 06 nos. Polluted River Stretches to Rejuvenate River Bhela, Dhela, Kichha, Kosi, Nandhore, Pilakhar and Kashipur Sewerage (I&D) Scheme (Dhela River) Phase-1 of District Udham Singh Nagar, Uttarakhand" under Namami Gange Programme at an estimated cost of Rs. 199.36 Crore (Rupees One Hundred Ninety-Nine Crore and Thirty-Six Lakh only) including GST with 100% central funding with the following major project components:

- 17 Nos. I&D of drains in 06 polluted river stretches mainly Bhela, Dhela, Kichha, Kosi, Nandhore, Pilakhar and Kashipur Sewerage (I&D) Scheme phase-1on (Dhela River).
  - 09 Nos of Sewage Treatment Plant (STP) having total capacity of 30.30 MLD to rejuvenate River Bhela 02 STPs (03 MLD), Dhela 03 STPs (10.80 MLD), Kichha 01 STP (3.0 MLD), Kosi 01 STP (0.50 MLD), Nandhore 01 STP (3.0 MLD) and Pilakhar 01 STP (10.00 MLD).
  - Operation & Maintenance (O&M) for 15 Years
2. The project detailed cost break-up and list of identified drains is at **Annexure-I**.
  3. Administrative Approval and Expenditure Sanction for the project is granted subjected to the conditions as per **Annexure –II**.
  4. The period of completion of the project is 24 (Twenty-four) months after the award of works. The detailed scheduled of the project implementation and PERT Chart is given in **Annexure – III A & B**.
  5. Any procurement of goods, works and consultancy if required by UK PJN as part of implementing the project proposal shall be made strictly as per the prevailing procurement guidelines Govt. of India / NMCG.

61 → 17/09/2021

कै.एल. अहुजा / K.L. AHUJA  
 अवर सचिव / Under Secretary  
 जल संसाधन, नदी विकास एवं गंगा संरक्षण मंत्रालय  
 Ministry of Water Resources, River Development  
 & Ganga Rejuvenation  
 भारत सरकार/Government of India  
 शम शक्ति भवन, नई दिल्ली/Sham Shakti Bhawan, New Delhi-110001

6. The grantee institution i.e. 'State Ganga Council, i.e. State Programme Management Group (SPMG), is a registered society of the State Government constituted with the objective of serving as the dedicated institution for effective implementation of the Namami Gange Programme activities at the State level, and the State is responsible in the long term for the conservation and health of the State's stretch of the river Ganga & its tributaries.
7. The funds for expenditure on the schemes would be debitible to National Ganga Plan (NGP) account of the NMCG. The NMCG /Government of India reserve the right to withdraw the sanction at any stage, if it is convinced that the fund has not been properly utilized or appropriate progress is not being made.
8. In case of violation of any of the conditions of the letter of award or in case of closure or dissolution of the Executing Agency, the Government shall take possession of all the assets of the organization acquired out of the Government funds and use them in any manner deemed appropriate or to recover from the organization the value of such assets at its discretion.
9. This AA&ES is issued based on the appraisal and sanction of the Executive Committee (EC) vide its 36<sup>th</sup> meeting held on 16<sup>th</sup> July 2021, and under the financial powers delegated vide Statuary Order published vide Notification of Ministry of Water Resources, River Development & Ganga Rejuvenation dated 7<sup>th</sup> October 2016, with the approval of Director General – National Mission for Clean Ganga vide **Note # 57** dated **15.09.2021** and concurrence of Executive Director (Finance) vide **Note # 55** dated **15.09.2021**.

Yours faithfully,

के.एल. अहुजा / K.L. AHUJA  
अवर सचिव / Under Secretary  
जल संसाधन, नदी विकास एवं गंगा संरक्षण मंत्रालय  
Ministry of Water Resources, River Development  
& Ganga Rejuvenation  
भारत सरकार / Government of India  
श्रम शक्ति भवन, नई दिल्ली / Shram Shakti Bhawan, New Delhi-110001  
(Krishan Lal Ahuja)  
Under Secretary, NMCG

**Copy forwarded for information & compliance of above mentioned conditions to: -**

- 1) The Chief Secretary, Government of Uttarakhand, 4 Subhash Road, Uttarakhand Secretariat, 4<sup>th</sup> Floor, New Building, Dehradun, Uttarakhand 248001.
- 2) The Managing Director, Uttarakhand, Pey Jal Nigam (UKPJN), 11, Mohini Road Dehradun, Uttarakhand 248001.

**Copy forwarded for information to: -**

- 1) PS to Hon'ble Minister (MoJS), Shram Shakti Bhawan, New Delhi-110001
- 2) PPS to Secretary, DoWR, RD & GR, Shram Shakti Bhawan, New Delhi-110001
- 3) PS to Director General, NMCG
- 4) Executive Director (Finance), NMCG,
- 5) Executive Director (Projects), NMCG,
- 6) Executive Director (Technical), NMCG,
- 7) Executive Director (Admin), NMCG,
- 8) NMCG Officials / Sanction Folder /Guard File/Computer Cell, MIS/ NMCG.

के.एल. अहुजा / K.L. AHUJA  
अवर सचिव / Under Secretary  
जल संसाधन, नदी विकास एवं गंगा संरक्षण मंत्रालय  
Ministry of Water Resources, River Development  
& Ganga Rejuvenation  
भारत सरकार / Government of India  
श्रम शक्ति भवन, नई दिल्ली / Shram Shakti Bhawan, New Delhi-110001

(Krishan Lal Ahuja)  
Under Secretary, NMCG

2 of 12

## Annexure-I.

Summary of cost for the project of "Interception & Diversion (I&D) and STP work of 06 nos. Polluted River Stretches to Rejuvenate River Bhela, Dhela, Kichha, Kosi, Nandhore, Pilakhar and Kashipur Sewerage (I&D) Scheme (Dhela River) Phase-1 of District Udham Singh Nagar, Uttarakhand" under Namami Gange Programme.

S. No	River /River Stretches	Description of Work	Amount (Rs. In Lacs)	
			Capital Cost	O&M Cost (for 15 Years)
1	Bhela / Kashipur to Rajpura Tunda U.P.	Nala Tapping – 03 Nos., Sewer line – 300 mtr., STP - 02 Nos. (2 MLD & 1 MLD),	1050	1300
2	Dhela / Kashipur to Garhuwala, Thakurdwara Kashipur Sewerage (I&D) Scheme Phase-I / I&D of Nallas Beljudi & Gulriya Village	Nala Tapping – 04 Nos.,  Sewer line – 2085 mtr.,  STP - 03 Nos. (10.00 MLD, 500 KLD & 300 KLD),	2600  635.82	2330  500
3	Kichha / Along Kichha	Nala Tapping – 05 Nos., Sewer line – 540 mtr., STP - 01 Nos. (3.00 MLD)	950	1050
4	Kosi / Sultanpur to Pattikalan	Nala Tapping – 03 Nos., Sewer line – 539 mtr., STP - 01 Nos. (500 KLD),	395	300
5	Nandhor / Along Sitarganj	Nala Tapping – 01 Nos., Sewer line – 60 mtr., STP - 01 Nos. (3.00 MLD),	930	1020
6	Pilakhar / Downstream of Bazpur	Nala Tapping – 01 Nos., Sewer line – 160 mtr., STP - 01 Nos. (10 MLD),	2600	1803
7	<b>Sub Total (A)</b>		<b>9160.82</b>	<b>8303</b>
8	Other Works GAAP, PAAPP & ESMP @ 2.0%		183.22	
9	Cost of Project preparation @ 4% as per NGRBA guidelines on Capital Cost		366.43	
10	Cost of Supervision @ 4% as per NGRBA guidelines on Capital Cost		366.43	
11	GST @12% on Capital & O&M Cost		1099.30	456.36*
12	<b>Sub Total (B)</b>		<b>11176.2</b>	<b>8759.36</b>
<b>Grand Total (A+B)</b>			<b>19935.56</b>	
<b>Say Rs. In Cr</b>			<b>199.36</b>	

\*The GST only recommended on manpower and other expenses (excluding the power / electricity for 45 crores out of 83.03 crores of total O&M cost)

के.एल. अहुजा  
17/09/2021



**List of Identified Drains in 06 Polluted River Stretches of Udham Singh Nagar  
Uttarakhand**

S. No.	River Name	River Stretch	Priority	I&D of Drains	
1	Bhela	Kashipur to Rajpura Tanda U.P.	I	Jaspur Khurd Nala	
				Hempur Ismail Nala-1	
				Hempur Ismail Nala-2	
			<b>Total</b>	<b>3</b>	
2	Dhela	Kashipur to Garhuwala, Thakurdwara	I	Beljudi Nala	
				Gularia Nala-1	
				Gularia Nala-1	
				<b>Total</b>	<b>3</b>
			Kashipur Sewerage (I&D) Scheme (Dhela River) Phase-1	I	Gabiya Nala
Ice factory Nala					
			<b>Total</b>	<b>2</b>	
3	Kichha	Along Kichha	II	Drain no.1 (Bedi Mohalla) Ward no.6	
				Maharana Pratap chowk se Khatima ki aur jane wala Nala-1	
				Maharana Pratap chowk se Khatima ki aur jane wala Nala-2	
				Near Bankhandi Mandir (Purani Mandi wala Nala-1) Ward no.17	
				Near Bankhandi Mandir (Purani Mandi wala Nala-2) Ward no.17	
				Shivnagar Mandi wala Nala (Ward no.17)	
4	Nandhor (Kailash)	Along Starganj	IV	Ukrouli (Tharu - Bhanori) Drain	
				<b>Total</b>	<b>1</b>
5	Pilakhar	Downstream of Bazpur	IV	Ghoga Nala	
				<b>Total</b>	<b>1</b>
6	Kosi	Sultanpur to Pattikalan	IV	Mukundpur Nala	
				<b>Total</b>	<b>1</b>
<b>Grand Total</b>				<b>17</b>	

61 → 17/09/2021

के.एल. अहुजा / K.L. AHUJA  
अवर सचिव / Under Secretary  
जल संसाधन, नदी विकास एवं गंगा संरक्षण मंत्रालय  
Ministry of Water Resources, River Development  
& Ganga Rejuvenation  
भारत सरकार / Government of India  
श्रम शक्ति भवन, नई दिल्ली / Shram Shakti Bhawan, New Delhi-110001

Annexure-IIConditions on Administrative Approval and Expenditure Sanction for the project on "Interception & Diversion (I&D) and STP work of 06 nos. Polluted River Stretches to Rejuvenate River Bhela, Dhela, Kichha, Kosi, Nandhore, Pilakhar and Kashipur Sewerage (I&D) Scheme (Dhela River) Phase-1 of District Udham Singh Nagar, Uttarakhand" under Namami Gange Programme.**1. Specific Conditions:**

- i. State government should ensure the availability of land in their possession before awarding the works. State Government will bear all expenses in relation to land acquisition, environmental clearances etc.
- ii. Though the Central Government is giving funding for O&M of the sewerage assets for 15 years, the appropriate tax should be collected regularly as usual by ULBs and kept in a corpus fund, which should be used by ULBs for O&M of all these assets after 15 years exclusively.
- iii. State Government should adopt a policy document and endeavor & implement scheme for reuse treated wastewater accordingly.
- iv. All infrastructure projects need to conduct project specific IEC activities and detail plan for such activities to be submitted to NMCG.
- v. "Namami Gange" signage to be placed at all the project sites approved under Namami Gange programme.
- vi. Cost of getting statutory clearance will be provided as a reimbursement on the basis of supporting documents.
- vii. After implementation of this project, no untreated drains will fall in the Bhela, Dhela, Kichha, Kosi, Nandhore and Pilakhar river stretches from the district of Udham Singh Nagar area.
- viii. State / Executing agency will ensure the installation of trash arresting rack and its regular O&M at the mouth of all drains identified in the 06 Nos. polluted river stretches in district Udham Singh Nagar area.
- ix. The project cost also includes the comprehensive Sludge management on the line of Muni Ki Reti sludge management project for both 10 MLD STPs and Septage handling and treatment facility as co-treatment (2% of the STP capacity) in the STPs capacity more than 1 MLD has been made part of the project for implementation. Advance sludge management technology same as the Muni Ki Reti needs to be incorporated in the project scope.
- x. State Government / Executing Agency shall comply with the recommendation of TPA agency, for packaged STPs up to 500 KLD capacity, advanced anaerobic – aerobic type of on-site treatment system (Johkasou) as given in para 9.3.8 of CPHEEO manual shall be adopted as these small packaged STPs are able to meet the nutrient removal requirement and require very less maintenance. Necessary technology from the Johkasou technology provider has to be included in the project scope.
- xi. State Government / Executing Agency will ensure the commissioning of packaged STPs, at much shorter period and executing agency shall consider a 10-12 months' time line for the construction of packaged STPs.
- xii. State Government / Executing Agency shall comply with all the observations / recommendation of NMCG, Third Party Agency (TPA) before the finalization of bid document and during implementation / execution of the works wherever possible.
- xiii. State Govt need to submit a revised DPR, before bidding, based on TPA's recommendations complete with detailed designs and hydraulics analysis.

- xiv. State Government will pari-passu implement the project for utilization of treated wastewater from the project for irrigation & industrial purpose as per its policy.
- xv. State Govt need to expedite the bidding process for the project. The entire bidding process including award of work for the project shall be completed within 6 months from date of AA&ES, failing which the AA&ES may stand cancelled.
- xvi. The modification and extension work should not demolish the existing old structures of historical importance. Also repair of damage work shall be done matching with existing works.

## 2. General & Technical Conditions:

- I. 'Uttarakhand State Programme Management Group (SPMG), which is a registered society, shall be responsible for overall planning, management and effective implementation of the project at state level.
- II. 'Nagar Palika Parishad of Kashipur, Khatima, Kichha, Gadarpur, Sitarganj and Bazpur' i.e. 'Municipal Council of district Udham Singh Nagar shall be the Urban Local bodies (ULBs) responsible for ensuring commitment to ownership, commitment to reforms for sustainable O & M, and community involvement.
- III. The Uttarakhand Pey Jal Nigam (UKPJN) shall be the Executing Agency (EA) of the project to be implemented under the guidance of the SPMG, in coordination and consultation with the ULBs and overall monitoring of the National Mission for Clean Ganga (NMCG) as per provisions laid down in the NGRBA programme framework.
- IV. The project will be executed in DBOT mode with Operation and Maintenance support for a period of 15 years. The O&M works would include basic cleaning works, service management for the proposed service area of I&D and STP operation. After 15 years, operation and maintenance of the assets shall be the responsibility of the State government / ULBs.
- V. The I&D and STP project to be executed needs to be suitably aligned with the 'Strategic Sanitation Plan'/ 'City Sanitation Plan'/ 'Master Plan' for the respective area. Also, synergy shall be ensured with other Central/State sponsored Programme like JnNURM, UIDSSMT etc. in the district Udham Singh Nagar to avoid any overlap / duplication.
- VI. The compliance with the observations of TPA & NMCG will be ensured by SPMG at the time of finalization of Bid Document including submission of supplementary / revised final DPR. Further, UKPJN may ensure that there are no overlaps with the works being undertaken by GoUK and obtain necessary NOCs, including land availability, from the State required for the project before awarding the contract.
- VII. SPMG need to take steps to prepare bid documents in line with the Model Bid Document (MBD) for the project funded under National Gange Plan & NGRBA.
- VIII. No untreated municipal / domestic wastewater should be allowed to fall in river Dhela, Bhela, Kichha, Kosi, Nandhor and Pilakhar stretches of respective Nagar Palika Parishad boundary. This project is for addressing pollution abatement works in 06 polluted river stretches as a single package. Splitting of works may not be permitted without prior approval of the Competent Authority, NMCG.
- IX. The detailed project implementation plan, detailed design and engineering of the project shall be undertaken by UKPJN based on extensive survey and investigation should be carried out before execution to achieve economy in the proposal as well as to avoid any shortfall in the design. Choice of technology should be left open (for STPs more than 1 MLD capacity) and decide during the bidding process. Disaster management concerns shall also be taken into account while executing the project.



- X. Standard procedure as indicated in the CPHEEO manual on sewerage & sewage treatment, NGRBA Guideline and code of practice of BIS will be strictly followed during project implementation.
- XI. Progress of implementation of the project shall be closely monitored by the State Government of Uttarakhand /SPMG, so as to ensure that the project is completed within the stipulated period of time. In addition, the progress (physical & financial, including funds utilization certificate) need to be reported to NMCG on regular basis and as and when requested.
- XII. Any cost escalation or time overrun will be brought to the notice of NMCG. Decision of cost overrun and time overrun will be granted based upon discussion in Executive Committee (EC) of NMCG. Cost overrun, if any will be borne by the Central Government.
- XIII. The treated sewage must meet the standards prescribed by MoEF&CC / as per direction of NMCG for the treated effluent for BOD, TSS & Coliform and in case where EC has specifically recommended, need higher standards and disinfect the treated effluent before disposal.
- XIV. The condition assessment of the existing civil structure for possible use is to be included in the bid document.
- XV. The actual project cost shall be the awarded cost. If the awarded cost within the sanctioned estimated cost, then state government is not required to take NOC from NMCG.
- XVI. In case the final / negotiated cost of a contract exceed the value put to tender up to 5% (i.e. up to overall Rs. 25 Cr.) of the estimated cost, the Executing Agency can award the works following the due procurement guidelines of state government. Justification of the increase in cost must be submitted by the Executing Agency through SPMG to NMCG (post award of contract) for information and issuance of revised AA&ES.
- XVII. In case the final/negotiated quote of a contract exceeds the estimated cost by more than 10% (i.e. up to overall Rs. 50 Cr.) the work shall be awarded by Executing Agency only after obtaining approval of NMCG. In such case, necessary justification shall be provided to NMCG by SPMG for approval of this additional cost.
- XVIII. The state is advised to consider charging people on a monthly basis for sewerage system to recover at-least O&M cost as the charges per household would be quite low. Suitable sewage cess / tariff/ tax and sewer connection fees may be imposed on the beneficiaries to recover the O&M at the least to start with. However, the full project cost recovery should be aimed at.
- XIX. To impart training to all personnel engaged on construction and O&M for quality construction and O&M of works.
- XX. Regular monitoring of the project implementation in accordance with the NGRBA framework.
- XXI. Guidelines issued by Ministry of Finance and other governing organization regarding disaster management as applicable be adhered to during project execution.
- XXII. The SPMG shall ensure appointment of agency (ies) for third party inspection (TPI) / evaluation of the project.
- XXIII. Water supply rate and sewage generation estimation shall confirm to CPHEEO guidelines as per their manual.
- XXIV. All components of the project shall be completed within specified time limits and the resources and outputs and outcomes are to be ensured as envisaged in the

- approved project. Completion Report shall be submitted to NMCG on completion of the project.
- XXV.** Any additional component relevant for project or any component require modification or deletion, may be added or modified or deleted as the case may be, only with the prior approval of the Competent Authority.
- XXVI.** Staffs that may be employed for preparation, execution or operation of the project by the EA are not to be treated as employees of the SPMG/ NMCG. The deployment of such staff at the time of completion or termination of the project will not be the concern or responsibility of the SPMG/ NMCG.
- XXVII.** Optimal utilization of the assets relating to the project and created under Ganga Action Plan or any other Central/ State Plan shall also be ensured by the SPMG/ EA/ ULBs.
- XXVIII.** All data, records, documents and material related to the project shall be stored properly and catalogued by the SPMG/ EA for reference and retrieval including regular uploading/ disclosure/ updating of such data on website.
- XXIX.** The State/ SPMG/ EA shall ensure that all provisions of the RTI Act 2005 are adhered to as far as information pertaining to the project is concerned
- XXX.** The State/ SPMG/ ULBs shall ensure that public is informed in the State/ City of district Udham Singh Nagar regarding implementation of the project and soliciting their co-operation and views as applicable.
- XXXI.** For the provision made under IEC activities, the SPMG shall make suitable arrangements with respective Nagar Palika Parishad of district Udham Singh Nagar for executing the 'Communication and Public Outreach' programmed under its supervision towards sensitization of people for abatement of pollution.
- XXXII.** All the specific conditions and generic conditions mentioned in the AA&ES are to be complied by the SPMG through their Executing Agency. The SPMG will ensure fulfillment of such conditions before finalizing the bid (s) by the EA.

**The release of funds is subject to the following terms and conditions: -**

**2.1 Annual Plan and Procurement Plan:**

- i. The Annual Plan and yearly Procurement Plan shall be prepared by the month of November every year for the next financial year as per the provisions made in the NGRBA programme framework and submitted by the SPMG to the NMCG for necessary approval and budget allocations.
- ii. The SPMG shall furnish to the NMCG annually a report of its work within three months from the closing of the respective financial year.

**2.2 Financial Aspects:**

- i. Funds shall be made available to the agencies strictly as per the 'Financial Management Manual (FMM)' of the NGRBA programme framework.
- ii. The SPMG/ ULBs shall take all necessary legal and executive measures to ensure adequate resources available for operation & maintenance of the assets created under the Project to fulfill its mandate.
- iii. The funds released for the project shall be held in a separate (interest earning) project bank account of the SPMG (the mother account). The interest thus earned shall be credited to the project and reflected in the utilization certificate from time to

62 ← JAS  
17/09/2021

के.एल. अहुजा / K.L. AHUJA  
अवर सचिव / Under Secretary  
जल संसाधन, नदी विकास एवं गंगा संरक्षण मंत्रालय  
Ministry of Water Resources, River Development  
& Ganga Rejuvenation  
भारत सरकार/Government of India  
श्रम शक्ति भवन, नई दिल्ली/Shram Shakti Bhawan, New Delhi-110001

- time and shall be adjusted towards future funds release for the project. For any diversion of funds, the signatory of the bank account(s) shall be held responsible.
- iv. The SPMG/ EA are not permitted to seek or utilize funds for the same purpose from any other organization (Government, semi-Government, autonomous or private) without prior approval of the competent authority.
  - v. The sanctioned cost of the project will be borne under the 'National Ganga Plan'. The sanctioned amount should be spent exclusively thereon as per the scope of the project and within the stipulated time. The liability of NMCG may not exceed the amount sanctioned for the project. For carrying forward any work(s)/ activities beyond the specified time limit prior approval of the NMCG should be obtained.
  - vi. It is the responsibility of the SPMG / EA / ULBs to ensure that the assets are exclusively used for the purpose for which the grant is sanctioned and to maintain the assets and their records properly.
  - vii. All the assets acquired/created out of the grants shall not be disposed of, encumbered, or utilized for any purpose other than that for which sanctioned without prior approval of the Government.
  - viii. O&M cost will be considered for release only after the project construction completed and realistic plan for use of O&M cost based upon actual sewerage load to be submitted.
  - ix. Any payment made on account of project preparation by NMCG relating to this project shall be adjusted accordingly from the project preparation head.

### 2.3 Audit:

- i. The Comptroller & Auditor General of India (the External Auditor) at his discretion shall have the right of access to the project related books and accounts of the SPMG / EA for the purpose of Audit.
- ii. The books of accounts of the grantee, relating to this grant, shall be open to Audit by the Internal Auditor of the SPMG and the External Auditor.
- iii. The overall auditing arrangements to cover both periodical internal and annual external audit of project shall be ensured as per the 'Financial Management Manual (FMM)' of the NGRBA programme framework.

### 2.4 Flow of Funds:

The fund releases by the NMCG shall be remitted by Electronic transfer to the SPMG account. The fund shall flow from the SPMG account to a separate sub-project specific zero balance bank account (the 'child account') of the EA in the same bank of SPMG. The following details may be kept updated from time to time to enable electronic remittance: -

- i. Bank account details of EA, both in figures and words, to SPMG.
- ii. Bank account details of EA and SPMG both in figures and words to NMCG.
- iii. MICR Code and IFSC Code of the Bank Branch (es).
- iv. Necessary authorization by the SPMG to its Bank to receive the remittances on its behalf and to issue necessary bank receipt to the NMCG's bank for receipt of funds.
- v. Necessary authorization by the EA to its bank and under such authorization, to issue payment instruction to pay contractors | suppliers | service providers for undertaking project activities.
- vi. The SPMG Bank will transfer funds from the SPMG's account (mother account) to the child account of EA as soon as payment instruction is issued by the EA to its banker for transfer funds to contractors / suppliers / service providers account on the



same date through 'Real Time Gross Settlement (RTGS)' and thus at the end of any given day, the EA child account will always have a zero balance.

### 2.5 Submission of Monthly and Quarterly Physical Progress Report (MPPR / QPPR):

- i. The Monthly Physical Progress Reports (MPPRs) shall be submitted by the 10th day of every month regularly by the EA to the SPMG and by the 20th day of every month regularly by the SPMG to the NMCG. The Quarterly Physical Progress Reports (QPPRs) shall be submitted to the Uttarakhnad State Ganga River Conservation Authority' and NMCG within 30 days from the end of each quarter.
- ii. The MPPRs in standard format, to be developed by the EA in consultation with SPMG, shall be signed by at least two designated officers of the EA, one of whom will be Chief Project Coordinator, UKPJN and also by at least two designated officers of the SPMG, one of whom will be the Programme/ Project Director.
- iii. The signing officers will indicate her/ his name and designation in full in capital letters and affix official seal under the signature. While MPPR submitted by fax will be acceptable for commencement of processing the case, ink-signed MPPR must follow by Post.
- iv. Consistency between physical progress and expenditure shall be maintained and reasons for substantial variations i.e., more than 10% shall be appropriately explained against each item.

### 2.6 Submission of Accounting and Financial Reports (AFR) by the EA:

- i. The EA shall furnish monthly 'Accounting and Financial reports (AFRs)' by the 10th day of every month with all relevant documents and materials as per the 'Financial Management Manual (FMM)' of the NGRBA programme framework after commencement of the project to the SPMG and by the 20th day of every month regularly by the SPMG to the NMCG.
- ii. The 'Accounting and Financial Report (AFR)' in standard format, to be developed by the EA in consultation with SPMG, shall be signed and stamped by the Head of the Accounts Department and Head of the Organization, UKPJN.
- iii. The name and designation of the officers signing the AFR shall be clearly mentioned in full and in capital letters. While AFR submitted by fax will be acceptable for commencement of processing the case, ink-signed AFR must follow by Post.
- iv. As part of the AFR, the EA shall submit the followings to the SPMG:
  - a) Invoices of suppliers/ contractors against which online payment instructions issued by the EA in the previous month.
  - b) A list of invoices received and not paid during the previous month.
  - c) A list of contracts signed during the previous month.

### 2.7 Submission of Utilization Certificates (UCs):

- i. The quarterly Utilization Certificates (UCs) in the prescribed format (GFR 12A) shall be furnished by the EA to the SPMG in respect of grant-in-aid received during the various quarters within 30 days from the end of quarter, duly signed and stamped by

61-200  
17/09/2021

के.एल. अहुजा / K.L. AHUJA  
अवर सचिव / Under Secretary  
जल संसाधन, नदी विकास एवं गंगा संरक्षण मंत्रालय  
Ministry of Water Resources, River Development  
& Ganga Rejuvenation  
भारत सरकार/Government of India  
श्रम शक्ति भवन, नई दिल्ली/Shram Shakti Bhawan, New Delhi-110001

the Head of the Organization, Head of the Accounts Department and field level functionary at executive engineer level I Principal Investigator, as applicable.

- ii. The SPMG shall submit quarterly UCs, duly countersigned and stamped by the Head of the SPMG and the State authorities within 15 days on receipt of the same from the EA.

## 2.8 Inspection and Monitoring:

- i. The 'State Ganga Council' and its Standing Executive Committee shall monitor the project from time to time. The State Programme Management Group (SPMG) shall ensure close monitoring and evaluation of progress of the project, and also monitor implementation performance of the EA.
- ii. The SPMG shall ensure appointment of agency (ies) for third party inspection (TPI) / evaluation of the project strictly as per letter No. A-12012/2/2010-NRCD-II dated 16th September, 2010. The EA through the SPMG shall submit copies of the TPI Reports along with their responses/comments to the NMCG. Releases of funds will be subject to compliance of TPI reports.
- iii. City level Citizen's Monitoring Committees (CMC) shall be constituted in the town to serve as a transparency mechanism on flow of project / programme related information to citizens and key stakeholders and to garner their feedback on project / programme processes, as described in the NGRBA programme framework. Social audit will be conducted by the CMC as per the provisions of the NGRBA programme framework.
- iv. NMCG may depute any person to visit the SPMG/ EA for the purpose of monitoring its work and accounts of the SPMG. Full co-operation shall be provided by the EA to the persons deputed for inspection.
- v. Time and cost overrun leading to delay in implementation of projects is viewed with serious concern by the Central Government and as per instructions contained in Cabinet Secretary's D.O. letter No. 261/1/10/2000-Cabinet, dated June 4, 2001 read with Planning Commission's D.O. letter No. O-14015/2/98-PAMD, dated 19.08.1998 (kindly visit NGRBA website/ 'Project Monitoring' for details), mandatory review of the project must be carried out from time to time so as to assess the expenditure trend and time schedule of the project and appropriate action against those responsible for delay shall be taken, in accordance with the instructions.
- vi. The Director General, NMCG may monitor overall progress of project periodically from time to time.

621 → *[Signature]*  
17/09/2021

के.एल. अहुजा / K.L. AHUJA  
अवर सचिव / Under Secretary  
जल संधारण व नदी विकास विभाग / Ministry of Water Resources, Irrigation & Power Development  
भारत सरकार / Government of India  
असतोके गेट, नई दिल्ली-110007 / New Delhi-110007

**Annexure-III A**

Project Implementation schedule for the period of 24 months' is as per the following:

S. No.	Description of Activities	Time Period in Months	Cumulative Time in Months
1	Site Development works	3	3
2	Construction of I&D Works, Sewer Line etc.	12	15
3	Construction of Sewage Treatment Plant	18	21
4	Testing & Commissioning of Work	3	24

61-  
17/09/2021

के.एल. अहुजा / K.L. AHUJA  
अवर सचिव / Under Secretary  
जल संसाधन, नदी विकास एवं गंगा संरक्षण मंत्रालय  
Ministry of Water Resources, River Development  
& Ganga Rejuvenation  
भारत सरकार/Government of India  
श्रमशक्ति भवन, नई दिल्ली/Shram Shakti Bhawan, New Delhi-110001







GOVERNMENT OF WEST BENGAL  
Public Health Engineering Department  
N.S. Buildings, (7<sup>th</sup> Floor), I, K. S. Roy Road, Kolkata- 700001

Memo No. PHE/EIC/599/2022

Dated Kol. the 22<sup>nd</sup> April, 2022

To  
Mr. A. K. Vidyarthi,  
Director & DH,  
WQM-II Division,  
Central Pollution Control Board,  
Government of India.

Sub.: Environmental compensation for untapped drains and  
Incomplete Sewage Treatment Plant (STP)

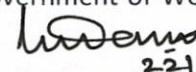
Ref.: Your letter F No. B-19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21 dtd.  
16.3.2022..

Sir,

In inviting a reference to the subject mentioned above, vide your letter F No. B-19123/WQM-II/LEGAL/NGT-2/CPCB/2020-21 dtd. 16.3.2022. it is learnt that in compliance to Hon'ble NGT orders, an Environmental Compensation of Rs. 190.00 lakh has been levied on PHE Department, Government of West Bengal, for the Murshidabad Sewage Treatment Plant (STP), considering that the STP is non-functioning and discharging the waste water into river Ganga.

In this connection, it is clarified that the Murshidabad Sewage Treatment Plant (STP) of capacity 1.96 MLD is functioning since 2008. Presently the STP is operating at a much lower capacity due to non-functioning of the connected drainage network of Murshidabad Municipality, which is under the control of the concerned Municipal Authority. The treated sewage water, thus generated, is not sufficient enough to be discharged in the river Ganga and is presently being discharged in the stabilization pond.

Therefore, the Environmental compensation, as levied on PHED, Government of West Bengal by CPCB, is not applicable for the said STP.

  
22/04/22  
Engineer-in-Chief,  
PHE Department.  
Government of West Bengal

Memo No. PHE/EIC/599/(1-2)/2022

Dated Kol. the 22<sup>nd</sup> April, 2022

Copy forwarded for information to:

1. The Chief Engineer, Headquarters, PHE Dte.
2. The Chief Engineer (Civil), Northern Zone, PHE Dte.

  
22/04/22  
Engineer-in-Chief,  
PHE Department.  
Government of West Bengal

Memo No. PHE/EIC/599/(3)/2022

Dated Kol. the 22<sup>nd</sup> April, 2022

Copy forwarded for information to :

1. The Sr. PA to Principal Secretary, PHE Department.

  
22/04/22  
Engineer-in-Chief,  
PHE Department  
Government of West Bengal.

**Table1. PRIMARY WATER QUALITY CRITERIA FOR BATHING WATER  
(Water used for organized outdoor bathing)**

CRITERIA		RATIONALE
1. Faecal Coliform (MPN/100 ml)	500 (desirable) 2500 (Maximum permissible)	To ensure low sewage contamination. Faecal coliform and faecal streptococci are considered as they reflect the bacterial pathogenicity.
2. Faecal Streptococci (MPN/100 ml)	100 (desirable) 500 (Maximum Permissible)	The desirable and permissible limits are suggested to allow for fluctuation in environmental conditions such as seasonal change, changes in flow conditions etc.
3. pH	Between 6.5-8.5	The range provides protection to the skin and delicate organs like eyes, nose, ears etc. which are directly exposed during outdoor bathing.
4. Dissolved Oxygen (mg/L)	5 mg/L or more	The minimum dissolved oxygen concentration of 5 mg/l ensures reasonable freedom from oxygen consuming organic pollution immediately upstream which is necessary for preventing production of anaerobic gases (obnoxious gases) from sediment.
5. Biochemical Oxygen Demand (3 <sup>rd</sup> day, at 27°C) (mg/L)	3 mg/L or less	The Biochemical Oxygen Demand of 3 mg/l or less of the water ensures reasonable freedom from oxygen demanding pollutants and prevent production of obnoxious gases".



Water Quality Data of 2020

## 1. Water quality of river Ganga in Uttarakhand

## Water quality of river Ganga in Uttarakhand w.r.t DO

Station Code	Station name	DO (mg/l) in Uttarakhand (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1491	BAGIRATHI AT GANGOTRI	-	-	-	-	-	-	-	-	-	-	9.8	-	-	-	-	-
1485	MANDAKINI B/C ALAKNANDA, RUDRAPRAYAG	10.6	-	-	-	-	-	-	-	10	-	9.4	-	9.8	-	9.6	-
1484	ALAKNANDA B/C MANDAKINI, RUDRA PRAYAG	-	-	-	-	-	-	-	-	9.6	-	9.2	-	10.4	-	9.2	-
1486	ALKANANDA A/C MANDAKINI, RUDRAPRAYAG	-	-	-	-	-	-	-	-	10	-	10.2	-	10.8	-	10	-
1488	BHAGIRATHI B/C ALAKNANDA, DEVPRAYAG	-	-	-	10.2	12	9.6	11	9.4	8.8	-	8.8	-	10	-	10	-
1487	ALAKNANDA B/C BHAGIRATHI, DEVPRAYAG	-	-	-	8.6	11	9.4	11.4	10.4	9	-	12.8	-	10	-	9.8	-
1489	ALAKNANDA A/C BHAGIRATHI, DEVPRAYAG	-	-	-	10.6	10.6	10.8	11.8	9.8	10.2	-	10.4	-	10.8	-	10.2	-
20048	GANGA AT SWARG ASHRAM-1	10	9.8	10.8	9.6	10	-	8.6	9	8.4	8.8	8.4	8.6	9.8	-	8.4	9.8
1060	U/S RISHIKESH	11	10.8	11.6	10.6	11	10.6	9.8	9.4	10.8	10	10.2	9.2	11.6	-	8.8	10.8
20049	GANGA AT LAKKAR GHAT-OXIDATION PONDS	10.4	10	10.8	9	8.6	-	8	8.2	9.8	9	9	9.4	9	-	8	8.8
10147	RISHIKESH D/S	10.6	10.4	10.4	9.8	9	9.4	9.2	9.6	10	9.4	8.8	9.8	10	-	8.8	9.8
2725	A/C SONG NEAR SATYANARAYAN TEMPLE, D/S RAIWALA	10.2	10	10.8	10.6	8.4	8.6	8.8	8.2	10.6	9	8.2	8.6	8.4	-	10.6	9.2
10148	HAR-KI- PAURI GHAT	10	10.2	9.8	10.2	9.8	10	8.8	9.6	10.6	9.6	8.4	8	10.8	-	9	8.8
1061	HARIDWAR D/S	9.6	9.4	9.6	10	9.2	9	8.4	8.4	9.4	8.6	8	8.4	10.6	-	9.4	9
20050	GANGA AT JAGJITPUR	9.8	9.6	9.8	10	9.4	-	8.6	10	9.6	8.4	8.8	9.8	11.6	-	9	9
2727	ROORKEE D/S	10.4	9.8	10	9.4	9.6	-	8.2	8.8	9.6	8.8	-	8	9.4	-	9.2	9.8

## Water quality of river Ganga in Uttarakhand w.r.t BOD

Station Code	Station name	BOD (mg/l) in Uttarakhand (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1491	BAGIRATHI AT GANGOTRI	-	-	-	-	-	-	-	-	0	-	1.5	-		-		-
1485	MANDAKINI B/C ALAKNANDA, RUDRAPRAYAG	1	-	-	-	-	-	-	-	1	-	1	-	1	-	1	-
1484	ALAKNANDA B/C MANDAKINI, RUDRA PRAYAG	-	-	-	-	-	-	-	-	1	-	1	-	1	-	1	-
1486	ALAKNANDA A/C MANDAKINI, RUDRAPRAYAG	-	-	-	-	-	-	-	-	1	-	1	-	1	-	1	-
1488	BHAGIRATHI B/C ALAKNANDA, DEVPRAYAG	-	-	-	0.4	1	1	1	1	1	-	1	-	1	-	1	-
1487	ALAKNANDA B/C BHAGIRATHI, DEVPRAYAG	-	-	-	1	1	1	1	1	1	-	1	-	1	-	1	-
1489	ALAKNANDA A/C BHAGIRATHI, DEVPRAYAG	-	-	-	0.8	1	1	1	1	1	-	1	-	1	-	1	-
20048	GANGA AT SWARG ASHRAM-1	1	1	1.2	0.8	1	-	1.2	1	1	1	1.2	1.2	1	-	1	1.2
1060	U/S RISHIKESH	1	1	1	0.6	1	0.4	1	1	1	1	1	1	1	-	1	1
20049	GANGA AT LAKKAR GHAT-OXIDATION PONDS	1	1	1.2	1	1.2	-	1.2	1.4	1.4	1.2	1.2	1.2	1.2	-	1.2	1.4
10147	RISHIKESH D/S	1	1	1	0.8	1	1	1	1	1	1	1	1	1	-	4	1
2725	A/C SONG NEAR SATYANARAYAN TEMPLE, D/S RAIWALA	1	1	1.2	1.2	1	1.2	1.2	1.6	2	1.6	1.2	1.2	1	-	1.2	1.4
10148	HAR-KI- PAURI GHAT	1	1	1	0.6	1	0.6	1.2	1.2	1	1.2	1	1	1	-	1.2	1
1061	HARIDWAR D/S	1	1	1.2	1	1.2	1.4	1.2	1.4	1.6	2.2	1.2	1	1.2	-	1.2	1.4
20050	GANGA AT JAGJITPUR	1	1	1	1	1	-	1	1.2	1.6	2	1.2	1.2	1.2	-	1.2	1.2
2727	ROORKEE D/S	1	1	1	1.2	1	-	1.4	1.6	1.4	1.6	-	1.2	1	-	1.4	1.2

## Water quality of river Ganga in Uttarakhand w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Uttarakhand (2020)																
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec		
										First round	Second round	First round	Second round	First round	Second round	First round	Second round	
1491	BAGIRATHI AT GANGOTRI	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-
1485	MANDAKINI B/C ALAKNANDA, RUDRAPRAYAG	2	-	-	-	-	-	-	-	1.8	-	1.8	-	1.8	-	1.8	-	-
1484	ALAKNANDA B/C MANDAKINI, RUDRA PRAYAG	-	-	-	-	-	-	-	-	1.8	-	1.8	-	1.8	-	1.8	-	-
1486	ALAKNANDA A/C MANDAKINI, RUDRAPRAYAG	-	-	-	-	-	-	-	-	1.8	-	1.8	-	1.8	-	1.8	-	-
1488	BHAGIRATHI B/C ALAKNANDA, DEVPRAYAG	-	-	-	2	1.8	2	1.8	1	1.8	-	1.8	-	1.8	-	1.8	-	-
1487	ALAKNANDA B/C BHAGIRATHI, DEVPRAYAG	-	-	-	-	1.8	2	1.8	1	1.8	-	1.8	-	1.8	-	1.8	-	-
1489	ALAKNANDA A/C BHAGIRATHI, DEVPRAYAG	-	-	-	2	1.8	2	1.8	1	1.8	-	1.8	-	1.8	-	1.8	-	-
20048	GANGA AT SWARG ASHRAM-1	40	30	30	27	22	-	26	30	34	27	25	26	32	-	1.8	14	
1060	U/S RISHIKESH	8	12	17	12	14	12	17	17	17	14	14	12	10	-	1.8	10	
20049	GANGA AT LAKKAR GHAT-OXIDATION PONDS	34	34	30	26	17	-	26	30	27	22	17	22	26	-	1.8	17	
10147	RISHIKESH D/S	26	30	26	17	26	22	17	26	27	17	14	24	17	-	1.8	12	
2725	A/C SONG NEAR SATYANARAYAN TEMPLE, D/S RAIWALA	30	40	30	40	50	40	40	70	70	84	63	84	70	-	1.8	63	
10148	HAR-KI- PAURI GHAT	27	30	26	26	30	27	60	50	40	47	32	46	32	-	1.8	32	
1061	HARIDWAR D/S	60	70	60	60	50	40	40	70	80	110	63	84	63	-	1.8	58	
20050	GANGA AT JAGJITPUR	40	50	40	40	40	-	40	60	70	90	43	84	58	-	1.8	58	
2727	ROORKEE D/S	34	40	40	40	30	-	50	60	80	70	-	70	84	-	1.8	46	



## Water quality of river Ganga in Uttarakhand w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Uttarakhand (2020)																			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec					
										First round	Second round	First round	Second round	First round	Second round	First round	Second round				
1491	BAGIRATHI AT GANGOTRI	Not monitored								-	-	2	-	-	-	-	-				
1485	MANDAKINI B/C ALAKNANDA, RUDRAPRAYAG									1.8	-	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-
1484	ALAKNANDA B/C MANDAKINI, RUDRA PRAYAG									1.8	-	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-
1486	ALAKNANDA A/C MANDAKINI, RUDRAPRAYAG									1.8	-	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-
1488	BHAGIRATHI B/C ALAKNANDA, DEVPRAYAG									1.8	-	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-
1487	ALAKNANDA B/C BHAGIRATHI, DEVPRAYAG									1.8	-	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-
1489	ALAKNANDA A/C BHAGIRATHI, DEVPRAYAG									1.8	-	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-
20048	GANGA AT SWARG ASHRAM-1									1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	-	1.8	1.8
1060	U/S RISHIKESH	1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	-	1.8	1.8								
20049	GANGA AT LAKKAR GHAT-OXIDATION PONDS	1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	-	1.8	1.8								
10147	RISHIKESH D/S	1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	-	1.8	1.8								
2725	A/C SONG NEAR SATYANARAYAN TEMPLE, D/S RAIWALA	1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	-	1.8	1.8								
10148	HAR-KI- PAURI GHAT	1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	-	1.8	1.8								
1061	HARIDWAR D/S	1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	-	1.8	1.8								
20050	GANGA AT JAGJITPUR	1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	-	1.8	1.8								
2727	ROORKEE D/S	1.8	1.8	-	1.8	1.8	-	1.8	1.8	1.8	-	1.8	1.8								

## 2. Water quality of river Ganga in Uttar Pradesh

## Water quality of river Ganga in Uttar Pradesh w.r.t DO

Station Code	Station name	DO (mg/l) in Uttar Pradesh (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10150	MADHYA GANGA BARRAGE (BIJNOR)	9.8	9.9	9.9	9	8.6	8.2	8.5	9.2	9	8.5	8.2	8	8.7	8.2	9.6	8.8
10149	U/S BRIJGHAT, GARHMUKTESHWAR	9.4	9.9	9.3	9.6	9	9.9	9.8	7.5	8.5	7.9	9.2	9.2	8.6	8.5	11.2	10.7
1062	BRIJGHAT D/S, GHARMUKTESHWAR	9.3	9.8	9.2	8.9	8.8	9.8	9.6	7.1	8	7.5	8.5	9.2	8.8	8.4	10.8	10.1
2488	U/S ANOOPSHAHAR	9.1	9.2	9.1	8.7	8.4	8.8	8.7	7.5	7.9	7.8	7.8	8.2	8.5	8.5	8.5	8.6
2489	ANOOPSHAHAR D/S	8.9	9.3	9.3	8.8	8.6	8.9	8.6	7.6	8	7.9	8	8.3	8.6	8.4	8.6	-
1145	NARORA (BULANDSAHAR)	9.2	9.4	9	9	8.9	8.7	8.4	7.8	8.1	8.1	7.9	8.1	8.6	8.6	8.8	-
2490	KACHHLA GHAT (ALIGARH)	10	10.3	10.6	10.7	10.5	10.5	10	10.5	10.3	8.8	9.5	9.5	10.1	-	10.4	-
10151	FARRUKHABAD	10.7	10.9	9.9	8.4	8.8	8.6	8.1	7.2	7.2	8.1	8.8	8.2	8.9	9.4	11.5	10.8
1063	U/S KANNAUJ (RAJGHAT)	10.5	10.8	9.6	8.1	8.6	8.5	7.8	6.7	7	7.9	8.1	7.7	8.4	9.2	11	10.1
1066	KANNAUJ D/S	10.2	10.6	9.2	8.1	8.4	8.2	7.6	6.3	6.7	7.6	7	7.4	8.2	8.5	7.8	9.6
1146	BITHOOR (KANPUR)	10.4	11.2	8.7	8.2	7.4	7.5	6.9	6.4	6.2	7.8	8.6	-	8.5	8.8	11.2	12
1067	U/S KANPUR (RANIGHAT)	11.7	11.4	9	8.1	7.9	7.2	6.5	6.2	6.3	7.4	8.6	8.6	8.6	8.2	11.5	12.1
10154	U/s SHUKLAGANJ /BATHING GHAT (BHARAOGHAT)	10.8	11	8.8	7.6	7	7.6	6.7	6.5	6	7.2	8.4	8.1	8.3	8.3	10.5	11.8
10155	SHUKLAGANJ D/S	11.4	11.1	8.7	8	7.7	6.9	6.3	6.2	6	7	8	7.8	8.5	8.4	10.6	11.7
10156	BATHING GHAT (GOLA GHAT)	9	10	8.3	7.3	7.1	6.6	6.4	6.1	5.7	7.2	7.2	7.9	8.2	8.2	11.5	11
10157	BATHING GHAT (JAJMAU BRIDGE)	9.2	10.6	8.2	7.1	7.2	6	6.1	5.9	6.1	6.7	7.6	7.4	8.6	8.3	11.3	10.6
1068	KANPUR D/S (JAJMAU PUMPING STATION)/JANE VILL.	9.1	10.2	8	7	6.8	6.2	6.2	6	6.9	-	7.4	7.1	7.8	8	10.9	9.8
1147	DALMAU (RAI BAREILLY)	10.5	10.2	10.3	-	10	8.5	7.6	8.2	8.2	8.5	8.8	9.3	9.2	9.4	10.1	10.3
2498	KALA KANKAR (RAI BAREILLY)	10.6	10	10.4	-	9.8	8.6	7.8	8.2	8	8.6	9	-	9.5	9.8	10.2	10.4
2487	KADAGHAT (PRAYAGRAJ)	10.9	11.7	8.8	-	8.5	8.6	7	7.3	8.4	8.6	8.5	8.2	8.5	8.2	9.4	-
1046	PRAYAGRAJ (RASOOLABAD)	11.7	12.5	9.4	8.6	8.4	8.5	7.9	7.6	8	7.9	8.1	8.2	8.8	8.3	9.7	-
1049	PRAYAGRAJ D/S (SANGAM)	11	11.8	8.6	8.7	8.4	8	7.3	7.4	7.1	7.6	7.7	7.5	7.9	7.7	9	-
10158	A/C TAMAS RIVER (SIRSA)	11.2	12	8.9	9.1	8.8	8.7	7.7	8	8.8	7.7	7.9	7.8	8.3	8.2	9.1	-
2485	U/S, VINDHYACHAL (MIRZAPUR)	9.7	9.9	9.4	8.8	8.5	7.7	7.9	6.6	6.4	6.8	7.6	8.6	8.5	8.8	8.5	9.1
2486	D/S, MIRZAPUR	8.8	8.7	8.5	8.1	7.9	7	6.6	5.9	5.8	6.2	6.5	7.3	7.6	7.6	7.4	7.7
10153	CHUNAR	9.1	9	8.8	8.6	8.2	7.4	7.2	6.2	6.4	6.4	8.2	8.2	8.3	8.4	8.2	8.5
1070	U/S VARANASI (ASSIGHAT)	9.3	9.7	9.3	10.4	9.6	8	7.8	7.5	6.5	6.8	7	8.3	8.7	8.8	8.6	8.9
1071	VARANASI D/S (MALVIYA BRIDGE)	8.4	8.8	8.4	9.5	8.8	7.3	7.2	6.8	5.8	6.2	6.5	7.2	7.5	7.3	7.5	7.8
10152	A/C GOMTI RIVER (BHUSAULA)	8.8	9.1	9	9.9	8.3	7.7	7.1	7.2	6.3	6.5	7.5	6.8	8.6	8.5	8.5	8.6
1073	TARIGHAT (GHAZIPUR)	8.6	8.9	8.9	9	8.5	7.4	6.9	6.5	5.7	6	6.2	7	7.4	7.7	7.7	7.9

## Water quality of river Ganga in Uttar Pradesh w.r.t BOD

Station Code	Station name	BOD (mg/l) in Uttar Pradesh (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10150	MADHYA GANGA BARRAGE (BIJNOR)	1	1	1	1.1	1.2	1.3	1.1	-	-	-	1.5	1.1	1.2	1.3	1.1	0.9
10149	U/S BRIJGHAT, GARHMUKTESHWAR	1.6	1.8	2	1.6	1	1.2	1.6	1.6	2.1	1.2	1	1	1.4	1.3	1.4	1
1062	BRIJGHAT D/S, GHARMUKTESHWAR	1.9	2	2.6	2.2	1	9.8	2.3	2.2	2.7	2.3	1.5	1	2.5	2	2.4	1.8
2488	U/S ANOOPSHAHAR	1.1	1.3	1.8	1.2	1.1	1	1.4	2.7	1	1.2	1.5	1.2	1.1	1.1	1.1	1.2
2489	ANOOPSHAHAR D/S	1.3	1	1.9	1	1.2	1.2	1.5	2.6	1.3	1.4	1.3	1.1	1	1.3	1.3	-
1145	NARORA (BULANDSAHAR)	1	0.9	1.7	1.3	1.3	1.4	1.5	2.4	1.2	1	1.6	1.3	1.1	1.5	1	-
2490	KACHHLA GHAT (ALIGARH)	1.6	1.4	1	0.9	1	1	1.3	1.3	1.2	1.1	1.1	1.1	1.6	-	1.4	-
10151	FARRUKHABAD	2	2.1	1.6	1.2	1.4	1.6	1.7	2.5	2.2	2.1	2.6	2.4	2.1	2.2	2	2.1
1063	U/S KANNAUJ (RAJGHAT)	2.8	2.3	2.6	1.7	2	2.3	2	2.7	2.5	2.3	2.8	2.7	2.6	2.6	2.7	2.6
1066	KANNAUJ D/S	3.1	2.7	2.9	2	2.4	2.5	2.2	2.9	2.6	2.6	3	2.9	2.9	2.9	3	3.1
1146	BITHOOR (KANPUR)	2.6	2.8	3.2	2.4	2.6	2.8	2.4	3.2	2.7	2.8	3	-	3.1	3.2	3.2	3.1
1067	U/S KANPUR (RANIGHAT)	3	2.9	3.1	2.5	2.4	3	2.9	3	6.3	3.4	3.6	3.6	3.4	3.3	3.4	3.5
10154	U/s SHUKLAGANJ /BATHING GHAT (BHARAOGHAT)	3.1	3	3.4	2.6	2.7	2.9	2.5	3.4	2.9	3.1	3.3	3.1	3.3	3.3	3.3	3.2
10155	SHUKLAGANJ D/S	3.4	3.1	3.3	2.7	2.6	3.4	3.2	3.6	3.2	3.6	3.8	3.5	3.7	3.5	3.6	3.7
10156	BATHING GHAT (GOLA GHAT)	4	4.4	4.2	2.6	2.9	3.6	3.6	3.8	3.6	3.9	2.5	3.7	3.8	3.7	3.9	3.8
10157	BATHING GHAT (JAJMAU BRIDGE)	3.9	4	4.4	3	2.7	4	4.2	4.2	4.5	4.4	4.2	4.1	4	3.9	4	4.1
1068	KANPUR D/S (JAJMAU PUMPING STATION)/JANE VILL.	4.2	4.2	4.6	3	3.2	3.8	4	4.1	4.2	-	4.4	4.2	4.3	4.2	4.3	4.4
1147	DALMAU (RAI BAREILLY)	3.4	0	4	-	3.5	4	4.2	3.8	3.8	3.9	3.9	3.8	3.9	3.8	3.5	3.7
2498	KALA KANKAR (RAI BAREILLY)	3.3	0	3.9	-	3.7	3.8	4	3.8	3.9	3.8	3.8	-	3.8	3.7	3.7	3.6
2487	KADAGHAT (PRAYAGRAJ)	2.9	2.6	2.6	-	2	2.3	2.7	2.6	2.1	2.2	2.1	2	2	2.1	2.2	-
1046	PRAYAGRAJ (RASOOLABAD)	2.5	2.8	2.7	2.5	2.2	2	2.7	2.8	2.2	2	2.8	2.3	3.2	2.2	2.3	-
1049	PRAYAGRAJ D/S (SANGAM)	2.6	2.7	2.7	2.4	2.3	2.3	2.6	2.5	2.5	2.1	2.5	2.7	2.4	2.3	2	-
10158	A/C TAMAS RIVER (SIRSA)	2.5	2.6	2.4	2.2	2.1	2.1	2.4	2.5	2.4	2.1	2.4	2.3	2.2	2.3	2.1	-
2485	U/S, VINDHYACHAL (MIRZAPUR)	1.8	1.7	2.1	2.8	2.8	2.8	2.6	3.7	14.4	3.1	2.8	2.6	2.7	2.2	2.5	2.2
2486	D/S, MIRZAPUR	3.2	3.4	3.6	3.1	3.6	3.7	4	4.4	4.1	3.9	3.6	3.4	3.4	3.4	3.8	3.5



Station Code	Station name	BOD (mg/l) in Uttar Pradesh (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10153	CHUNAR	2.8	3	3.2	3.1	3.2	3	3.5	4.1	3.3	3.5	2.8	2.8	3.2	3.1	3.3	3.1
1070	U/S VARANASI (ASSIGHAT)	2.2	2.1	2.6	2.6	2.3	2.8	2.7	2.8	6.5	3	2.7	2.5	2.4	2.2	2.4	2.3
1071	VARANASI D/S (MALVIYA BRIDGE)	3.6	3.7	3.7	4	3.6	4.1	3.8	4.1	4.2	3.8	3.5	3.7	3.5	3.6	3.8	3.7
10152	A/C GOMTI RIVER (BHUSAULA)	2.9	2.8	3	3.2	3.5	3.8	3.4	3.5	3.5	3.3	3.2	3.4	3	3.1	3.2	3
1073	TARIGHAT (GHAZIPUR)	3.5	3.4	3.5	3.4	3.8	4	4.2	4.2	4.3	4	3.8	3.9	3.5	3.4	3.7	3.5

### Water quality of river Ganga in Uttar Pradesh w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Uttar Pradesh (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10150	MADHYA GANGA BARRAGE (BIJNOR)	-	-	-	-	-	-	-	-	1300	-	1100	1000	1200	1000	1100	700
10149	U/S BRIJGHAT, GARHMUKTESHWAR	170	220	-	130	170	210	140	920	350	7.9	150	150	240	120	220	240
1062	BRIJGHAT D/S, GHARMUKTESHWAR	210	540	-	170	220	280	350	7000	920	240	430	150	540	140	350	350
2488	U/S ANOOPSHAHAR	170	150	-	-	-	-	-	-	930	920	930	920	780	680	780	680
2489	ANOOPSHAHAR D/S	280	220	-	-	-	-	-	-	1400	1200	1100	1100	930	780	1300	-
1145	NARORA (BULANDSAHAR)	430	540	-	-	-	-	-	-	1300	1100	1100	1400	920	930	1100	-
2490	KACHHLA GHAT (ALIGARH)	270	220	170	140	260	260	220	220	220	220	220	220	260	-	320	-
10151	FARRUKHABAD	1000	940	1500	820	940	680	920	2100	2100	2100	930	1100	1200	920	1000	1400
1063	U/S KANNAUJ (RAJGHAT)	1300	1700	1700	1400	1700	1200	1700	2300	3300	2300	2100	1300	11000	1700	1500	1700
1066	KANNAUJ D/S	2500	2700	2400	2100	2600	1400	2000	3300	4600	3300	2700	1700	1700	2100	2000	2100
1146	BITHOOR (KANPUR)	1800	2100	1800	1700	1700	1700	1400	1700	2100	1700	4900		2100	1100	2100	2600
1067	U/S KANPUR (RANIGHAT)	1800	1400	2200	1400	2100	2200	2600	9200	3300	2300	6800	6800	7900	2600	2700	3100
10154	U/s SHUKLAGANJ /BATHING GHAT (BHARAOGHAT)	2100	1700	2100	2000	2200	2100	2100	1300	13000	13000	9700	7900	2200	2200	2200	2200
10155	SHUKLAGANJ D/S	2100	2200	2500	1700	3900	3300	3300	12000	21000	17000	11000	14000	15000	3000	2500	2600
10156	BATHING GHAT (GOLA GHAT)	6800	7000	5400	2600	3900	3900	4000	14000	22000	23000	2100	12000	12000	12000	10000	9200
10157	BATHING GHAT (JAJMAU BRIDGE)	15000	17000	26000	4100	4900	7000	7900	17000	21000	17000	17000	21000	9200	17000	17000	15000

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Uttar Pradesh (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1068	KANPUR D/S (JAJMAU PUMPING STATION)/JANE VILL.	21000	22000	31000	6300	7000	9400	9400	24000	22000	-	22000	22000	11000	23000	27000	26000
1147	DALMAU (RAI BAREILLY)	2800	2900	3100	-	1100	1600	2200	1400	1300	1400	1400	1400	1400	1300	1400	1400
2498	KALA KANKAR (RAI BAREILLY)	2700	2800	3000	-	1300	1600	2100	1300	1300	1300	1300	-	1300	1300	1300	1300
2487	KADAGHAT (PRAYAGRAJ)	1700	2200	2100	-	780	680	910	1300	2100	1700	930	700	1400	1300	1200	-
1046	PRAYAGRAJ (RASOOLABAD)	1700	2100	1700	830	680	610	910	2100	2300	2200	2100	790	1100	1100	1100	-
1049	PRAYAGRAJ D/S (SANGAM)	2200	1700	1700	820	780	790	680	1400	3300	3300	920	1100	1100	1300	930	-
10158	A/C TAMAS RIVER (SIRSA)	2100	1300	1700	790	610	680	610	2100	3300	2300	780	780	1400	1100	1300	-
2485	U/S, VINDHYACHAL (MIRZAPUR)	500	1100	1300	600	800	1300	1300	2300	1700	1300	1300	1100	1300	1100	1100	800
2486	D/S, MIRZAPUR	8000	8000	8000	5400	11000	11000	11000	17000	17000	17000	11000	8000	13000	13000	13000	11000
10153	CHUNAR	5000	5000	5000	3300	5000	8000	8000	13000	1700	11000	6000	6000	8000	7000	8000	5000
1070	U/S VARANASI (ASSIGHAT)	1300	1300	1100	700	500	500	1100	1400	1300	1300	1300	900	800	800	1100	800
1071	VARANASI D/S (MALVIYA BRIDGE)	11000	14000	14000	9400	7000	11000	14000	13000	17000	13000	14000	13000	11000	13000	13000	14000
10152	A/C GOMTI RIVER (BHUSAULA)	4000	5000	4000	2100	5000	9000	13000	11000	13000	8000	8000	11000	5000	5000	9000	8000
1073	TARIGHAT (GHAZIPUR)	13000	14000	13000	4300	11000	13000	17000	17000	14000	11000	13000	14000	11000	13000	13000	13000

### Water quality of river Ganga in Uttar Pradesh w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Uttar Pradesh (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10150	MADHYA GANGA BARRAGE (BIJNOR)	Not monitored								14	-	8	7	-	8	1.8	5
10149	U/S BRIJGHAT, GARHMUKTESHWAR									140	110	130	130	94	220	280	280
1062	BRIJGHAT D/S, GHARMUKTESHWAR									240	120	220	130	170	430	540	430
2488	U/S ANOOPSHAHAR									1.8	1.8	1.8	1.8	1.8	1.8	-	1.8
2489	ANOOPSHAHAR D/S									45	20	1.8	1.8	1.8	1.8	20	-
1145	NARORA (BULANDSAHAR)									1.8	1.8	20	20	20	20	20	-
2490	KACHHLA GHAT (ALIGARH)									-	-	1.8	1.8	1.8	-	-	-
10151	FARRUKHABAD									1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1063	U/S KANNAUJ (RAJGHAT)									1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1066	KANNAUJ D/S									1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8

43687/2022/LAW-HO

1146	BITHOOR (KANPUR)		45	68	45	-	40	40	45	45
1067	U/S KANPUR (RANIGHAT)		20	20	45	20	20	20	20	20
10154	U/s SHUKLAGANJ /BATHING GHAT (BHARAOGHAT)		68	45	45	68	78	68	68	68
10155	SHUKLAGANJ D/S		20	20	1.8	20	20	20	20	20
10156	BATHING GHAT (GOLA GHAT)		1.8	1.8	1.8	20	1.8	1.8	1.8	1.8
10157	BATHING GHAT (JAJMAU BRIDGE)		20	20	20	20	20	20	20	20
1068	KANPUR D/S (JAJMAU PUMPING STATION)/JANE VILL.		1.8	-	1.8	1.8	1.8	1.8	1.8	1.8
1147	DALMAU (RAI BAREILLY)		20	20	20	20	-	-	20	20
2498	KALA KANKAR (RAI BAREILLY)		20	20	20	-	-	-	20	20
2487	KADAGHAT (PRAYAGRAJ)		1.8	1.8	1.8	1.8	1.8	1.8	-	-
1046	PRAYAGRAJ (RASOOLABAD)		1.8	1.8	1.8	1.8	40	1.8	45	45
1049	PRAYAGRAJ D/S (SANGAM)		20	1.8	1.8	20	20	1.8	-	-
10158	A/C TAMAS RIVER (SIRSA)		20	20	20	20	20	20	-	-
2485	U/S, VINDHYACHAL (MIRZAPUR)		1300	1700	1100	900	-	1.8	4900	4600
2486	D/S, MIRZAPUR		1100	0	9000	7000	6300	-	8000	8000
10153	CHUNAR		-	-	-	4300	4300	-	5000	6300
1070	U/S VARANASI (ASSIGHAT)		1300	1100	-	1100	900	700	6300	4900
1071	VARANASI D/S (MALVIYA BRIDGE)		1100	0	9000	1100	7000	9000	11000	1100
10152	A/C GOMTI RIVER (BHUSAULA)		8000	6300	5000	7000	6300	5000	7000	6300
1073	TARIGHAT (GHAZIPUR)		9000	8000	9400	8000	8000	7000	9000	8000



## 3. Water quality of river Ganga in Bihar

## Water quality of river Ganga in Bihar w.r.t DO

Station Code	Station name	DO (mg/l) in Bihar (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1074	BUXAR, CHAUSA KARMNASA	9	9.3	9.8	9.7	10.6	8	7.2	5.9	5.8	5.2	8.8	9.5	9.6	8.8	9.2	9.1
10113	U/S JAIL GHAT, BUXAR ( A/C THORA RIVER)	8	8.7	9.5	9.4	9.8	6.5	6.4	5.7	5.6	5.7	8.1	9.2	9.6	8.3	8.9	7.5
2551	BUXAR, RAMREKHAGHAT	9	8.8	9.3	9.5	9.5	7	7	5.9	5.6	5.9	8.4	9	10.1	8.5	7.5	7.7
3113	BUXAR D/S, NEAR GANGA BRIDGE	8.4	8.2	9.2	8.9	9.2	6.7	6	6.1	5.4	5.4	8.5	9	10.1	8.2	7.2	7.2
10162	ARRAH-CHAPRA ROAD BRIDGE, U/S DORIGANJ	9.5	9.4	8.6	-	-	10	6.8	6	5.6	5.9	7.9	9.4	9.5	9.9	8.4	-
2564	C/F OF SONE RIVER AT DORIGANJ, CHAPRA	9.8	9.4	7.4	-	-	6.2	6.6	5.8	6	5.7	7.6	7.6	7.5	8.9	-	-
10114	MAA AMBIKA ASTHAN, DORIGANJ D/S (SARAN)	8.6	9.5	8	-	8.8	6.1	6.2	6	5.8	5.8	8	8	7.1	8.6	8.1	-
3114	DANAPUR, NEAR PIPAPUL	-	-	8.3	8.6	9	7.8	5.1	-	-	5	-	-	-	9.5	-	-
1077	KURJI AT DIGHA GHAT, U/S PATNA	-	9.8	10	8.5	8.7	7.5	6.5	5.8	5.6	8	5.9	7.6	7.8	8.3	-	-
2552	NIT GHANDHI GHAT ( PATNA)	-	9.7	8.2	8.6	8.7	6.3	6.6	5.8	5.4	7	5.7	7.3	8.5	8.9	-	6.9
10115	GULBI GHAT (PATNA)	-	9.8	7.5	7.6	9.8	6	6.4	5.6	5.4	7	5.6	7.2	8	8.6	-	6.6
1079	PATNA D/S (GANGA BRIDGE)	-	9.5	9	8.4	9.4	7.5	6.5	6	5.5	6.4	5.8	7.7	-	8.2	-	5.9
3122	MALSALAMI (PATNA)	-	9.8	9	8.5	8.8	7.4	-	-	-	-	-	7.5	9	9.8	-	8.7
4297	GANGA AT KACHCHI-DARGAH-BIDUPUR ROAD BRIDGE, PATNA	-	9.6	9.5	8.6	9.4	7.8	6	5.6	-	6	6.1	7.7	8.5	9.2	-	5.8
10122	TRIVENI GHAT, B/c OF RIVER PUNPUN	-	9.8	7.4	8.5	9.4	7	6.2	6	5.4	6.1	6.3	8.2	7.1	9.5	-	10.4
2553	FATUHA, A/c OF RIVER PUNPUN	-	9.1	6.3	8.7	6.3	6.4	6	5.2	5.4	6	5.6	6.5	7.5	8.7	-	6.2
4301	BAKHIYARPUR-TAJPUR BRIDGE ON GANGA, ATHMAGOLA, PATNA	9.7	9.1	-	8.7	7.8	9.4	6.4	6.8	5.4	5.7	7	-	7.9	8.2	7.3	8.7
3115	BARH, NEAR UMANATH TEMPLE	9.7	9	-	-	7.7	7.4	6.7	5.5	5.2	6.4	6.2	-	7.2	-	6.9	7.2
10130	NAWADAGHAT D/S (WATER INTAKE OF NTPC) BARH	9.8	9.5	-	-	7.5	9.5	6.4	5.3	5.6	6.2	7.5	-	7.6	8.5	7.4	8.2
10131	U/S BARAHPUR BINDTOLI	9.6	9.4	-	-	8.4	9.4	6.3	-	-	6	-	-	7.5	8.1	6.2	8.1
1817	U/S MOKAMA	9.8	9.5	-	8.8	7.6	9.4	6.7	5.8	-	6.4	6.9	-	7.7	7.2	8.7	8.7
1815	MOKAMA D/S (D/S RAJENDRA BRIDGE)	9.5	9.8	7.2	-	8.5	8.1	6.6	6	5.1	6.3	6.8	-	6.9	-	6.7	7.6
3123	BARAHIA	9.8	9.5	-	-	8.8	8.8	6.5	5.4	5.5	6.5	6.9	-	7.8	7.4	10.5	9
3116	U/S MUNGER	9.8	8.9	-	-	8.8	9.2	7.5	5.4	6.1	6.3	6.2	7.2	7.8	8.5	-	9.2
1818	MUNGER	9.7	8.7	-	-	9.1	9	7	5.1	6.2	6.2	6	7.6	7.2	8.5	9.1	-
3117	U/S SULTANGANJ	9.6	9.5	-	-	9	6.3	-	5	6	6.9	6.8	7.5	8.1	8.3	8.1	-
2554	SULTANGANJ (BHAGALPUR)	9.6	9.2	-	-	9.1	8.7	6.5	5.2	-	6.1	6.6	6.9	7.9	8.3	8.3	-
4398	WATER INTAKE POINT, BHAGALPUR	9.8	7.8	-	-	9.2	8.8	6.4	6	5.8	6.5	6.6	7.1	8.3	-	7.4	-
10138	CHAMPANAGAR	9.2	9.5	-	-	-	6	-	6.2	-	5.8	5.5	7	-	6.5	8.6	-
1819	BHAGALPUR	9.8	9.5	-	-	8.1	9.1	6.2	6.5	6.5	6.5	7.1	6.3	7.1	6.9	9.7	-
3118	U/S BHAGALPUR	9.8	7.9	-	-	9.4	9.5	6	6.1	5.9	6.3	5.8	7.2	8	-	4.3	-

43687/2022/LAW-HO

Station Code	Station name	DO (mg/l) in Bihar (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1816	KAHALGAON	9.8	9.2	-	-	9.5	9.2	-	6.6	6	6.2	-	-	8.4	-	9.5	-
10143	KAHALGAON D/S, NEAR CREMATION GHAT	9.8	9	-	-	9.4	9	-	6.2	6	7.2	-	-	8.2	-	9.4	-

### Water quality of river Ganga in Bihar w.r.t BOD

Station Code	Station name	BOD (mg/l) in Bihar (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1074	BUXAR, CHAUSA KARMNASA	1.4	1.6	1.4	1.4	1.9	1.5	1.8	2	1.6	1.2	1.6	1.2	1.6	1.6	1.4	1.6
10113	U/S JAIL GHAT, BUXAR ( A/C THORA RIVER)	1.6	1.8	1.4	1.6	1.4	2.2	1.9	2.1	1.9	1.6	1.4	1.2	1.6	1.5	1.4	1.8
2551	BUXAR, RAMREKHAGHAT	1.4	2	1.4	1.9	1.3	1.4	2	2.4	2.2	1.5	1.7	1.6	1.6	1.6	1.7	1.8
3113	BUXAR D/S, NEAR GANGA BRIDGE	1.6	2.2	1.7	2	2	2.1	2.2	1.7	2.1	1.1	1.6	1.8	1.4	1.8	1.8	1.6
10162	ARRAH-CHAPRA ROAD BRIDGE, U/S DORIGANJ	1.6	1.6	1.6	-	-	2.6	3	2	2.3	1.8	1.6	1.2	1.6	1.5	1.8	-
2564	C/F OF SONE RIVER AT DORIGANJ, CHAPRA	1.5	1.6	1.7	-	-	2.3	1.7	2.3	1.8	2.2	1.4	1.4	1.9	1.7	-	-
10114	MAA AMBIKA ASTHAN, DORIGANJ D/S (SARAN)	1.7	1.5	1.4	-	2.1	2.3	1.5	1.9	1.9	1.7	1.6	1.7	1.8	1.6	2	-
3114	DANAPUR, NEAR PIPAPUL	-	-	1.6	1.4	1.1	1.5	1.5	-	-	2.6	-	-	-	3	-	-
1077	KURJI AT DIGHA GHAT, U/S PATNA	-	1.6	1.4	1.6	1.3	1.6	1.8	2.2	2	1.6	2.4	1.5	1.4	1.7	-	-
2552	NIT GHANDHI GHAT ( PATNA)	-	1.7	1.9	1.9	1.4	4	2	2.4	2.3	1.6	2	1.9	1.8	1.7	-	2.8
10115	GULBI GHAT (PATNA)	-	1.5	2	2.1	1.8	1.9	2.2	2.3	1.9	1.9	1.8	1.8	1.4	1.9	-	2.9
1079	PATNA D/S (GANGA BRIDGE)	-	1.9	1.6	1.8	1.3	1.9	1.9	2	1.4	1.8	2.2	2	1.5	1.7	-	3
3122	MALSALAMI (PATNA)	-	1.7	1.6	1.7	1.1	1.9	-	-	-	-	-	1.7	1.5	1.5	-	1.6
4297	GANGA AT KACHCHI-DARGAH-BIDUPUR ROAD BRIDGE, PATNA	-	2	1.5	1.6	1.2	1.7	2.3	2.2	-	1.9	2	1.8	1.7	1.4	-	3
10122	TRIVENI GHAT, B/c OF RIVER PUNPUN	-	1.8	2.4	2	1.4	2.2	1.9	2.1	2.3	2.2	1.8	1.6	1.8	1.7	-	2.3
2553	FATUHA, A/c OF RIVER PUNPUN	-	1.9	2.6	1.9	2.4	1.8	2.1	2.4	2.4	1.7	2.2	2.1	1.4	1.8	-	3
4301	BAKHIYARPUR-TAJPUR BRIDGE ON GANGA, ATHMAGOLA, PATNA	1.2	1.9	-	1.5	1.8	1.7	1.6	1.8	2.4	2	1.5	-	1.6	1.7	1.8	2
3115	BARH, NEAR UMANATH TEMPLE	1.2	1.8	-	-	2	1.6	1.4	2.3	2.1	1.9	1.7	-	1.7		1.6	2.1
10130	NAWADAGHAT D/S (WATER INTAKE OF NTPC) BARH	1.3	1.7	-	-	2.1	1.8	1.4	2.2	2	2.2	1.4	-	1.7	1.5	1.8	1.6
10131	U/S BARAHPUR BINDTOLI	1.3	1.6	-	-	2.2	2.6	1.6	-	-	2.1	-	-	1.9	1.8	2	1.8
1817	U/S MOKAMA	1.2	1.7	-	1.5	1.9	2.2	1.5	2	-	1.8	1.5	-	2.7	2.7	1.6	1.4
1815	MOKAMA D/S (D/S RAJENDRA BRIDGE)	1.5	1.5	1.7	-	1.6	1.4	1.4	1.9	2	2	1.7	-	2		2	1.4

43687/2022/LAW-HO

Station Code	Station name	BOD (mg/l) in Bihar (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
3123	BARAHIA	1.3	1.7	-	-	2.2	2.2	1.6	2.4	1.9	2.1	2	-	1.8	1.9	1.9	1.4
3116	U/S MUNGER	1.4	2	-	-	2.3	1.2	3.3	2.2	1.7	1.7	2	1.9	1.8	1.6	-	1.6
1818	MUNGER	1.3	2	-	-	1.8	1.3	1.9	2.5	2	1.4	2.5	1.7	1.9	1.6	1.8	-
3117	U/S SULTANGANJ	1.3	1.7	-	-	1.4	2.4	-	2.6	1.7	1.6	1.5	1.4	1.5	2.2	1.7	-
2554	SULTANGANJ (BHAGALPUR)	1.4	1.8	-	-	1.4	1.7	2.5	2.1	-	2.1	1.8	1.9	1.4	2	1.8	-
4398	WATER INTAKE POINT, BHAGALPUR	1.5	2	-	-	2.7	6.7	2.4	1.8	2.1	1.8	1.9	1.4	2	-	2	-
10138	CHAMPANAGAR	1.4	1.6	-	-	-	4.2	-	1.9	-	2.4	1.7	1.2	3	2.1	1.9	-
1819	BHAGALPUR	1.4	1.4	-	-	1.4	1.1	2.3	1.9	1.7	1.7	1.8	1.5	1.7	1.8	1.5	-
3118	U/S BHAGALPUR	1.5	2	-	-	1.8	2	2.8	2	2.1	1.9	2.1	1.4	2	-	2.9	-
1816	KAHALGAON	1.4	1.9	-	-	1.3	1.4	-	2	1.9	1.9	-	-	1.9	-	1.4	-
10143	KAHALGAON D/S, NEAR CREMATION GHAT	1.4	1.9	-	-	1.5	1.2	-	2.2	1.9	1.9	-	-	1.4	-	1.5	-

## Water quality of river Ganga in Bihar w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Bihar (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1074	BUXAR, CHAUSA KARMNASA	22000	22000	11000	2200	2700	35000	17000	160000	160000	4900	35000	28000	28000	28000	6300	4900
10113	U/S JAIL GHAT, BUXAR ( A/C THORA RIVER)	-	3900	4000	3300	4000	28000	92000	92000	92000	160000	92000	54000	92000	35000	24000	13000
2551	BUXAR, RAMREKHAGHAT	14000	28000	35000	2600	11000	160000	160000	35000	160000	160000	160000	92000	35000	35000	92000	2200
3113	BUXAR D/S, NEAR GANGA BRIDGE	11000	35000	17000	14000	17000	160000	17000	24000	54000	160000	160000	92000	24000	160000	160000	160000
10162	ARRAH-CHAPRA ROAD BRIDGE, U/S DORIGANJ	2200	17000	2700	-	-	3400	17000	2300	9400	35000	13000	13000	13000	17000	24000	-
2564	C/F OF SONE RIVER AT DORIGANJ, CHAPRA	1400	17000	14000	-	-	160000	92000	160000	160000	160000	22000	22000	92000	7900	-	-
10114	MAA AMBIKA ASTHAN, DORIGANJ D/S (SARAN)	11000	7900	11000	-	1700	24000	22000	22000	22000	160000	17000	17000	35000	22000	35000	-
3114	DANAPUR, NEAR PIPAPUL	-	-	2600	680	930	920	17000	-	-	54000	-	-	-	28000	-	-
1077	KURJI AT DIGHA GHAT, U/S PATNA	-	3300	11000	2200	2200	2200	22000	35000	24000	92000	160000	3300	35000	35000	-	-
2552	NIT GHANDHI GHAT ( PATNA)	-	28000	17000	9400	2200	4000	7900	160000	24000	92000	92000	92000	160000	160000	-	160000
10115	GULBI GHAT (PATNA)	-	22000	160000	14000	22000	17000	28000	160000	160000	54000	160000	160000	160000	54000	-	160000



43687/2022/LAW-HO

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Bihar (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1079	PATNA D/S (GANGA BRIDGE)	-	11000	28000	11000	3300	2700	11000	160000	160000	92000	92000	22000	92000	54000	-	35000
3122	MALSALAMI (PATNA)	-	7000	11000	2700	1700	92000	-	-	-	-	17000	4900	22000	-	92000	
4297	GANGA AT KACHCHI-DARGAH-BIDUPUR ROAD BRIDGE, PATNA	-	17000	17000	1100	1300	1700	13000	17000	-	92000	54000	35000	28000	24000	-	54000
10122	TRIVENI GHAT, B/c OF RIVER PUNPUN	-	4000	4000	2600	1400	2200	17000	17000	17000	11000	54000	2200	1300	35000	-	35000
2553	FATUHA, A/c OF RIVER PUNPUN	-	3300	35000	3300	3300	4000	11000	35000	13000	4900	160000	92000	92000	22000	-	54000
4301	BAKHYIYARPUR-TAJPUR BRIDGE ON GANGA, ATHMAGOLA, PATNA	2200	3300	-	1400	1700	1400	92000	54000	160000	160000	35000	-	7900	35000	92000	160000
3115	BARH, NEAR UMANATH TEMPLE	3300	17000	-	-	3300	13000	35000	160000	14000	160000	92000	-	13000	-	17000	160000
10130	NAWADAGHAT D/S (WATER INTAKE OF NTPC) BARH	2700	3300	-	-	1400	2200	17000	13000	160000	35000	35000	-	13000	4900	54000	160000
10131	U/S BARAHPUR BINDTOLI	4000	4000	-	-	1700	2100	160000	-	-	160000	-	-	17000	54000	22000	92000
1817	U/S MOKAMA	2600	3300	-	1100	2600	2200	35000	24000	-	160000	54000	-	92000	92000	92000	35000
1815	MOKAMA D/S (D/S RAJENDRA BRIDGE)	11000	2600	7900	-	4900	7900	13000	7900	7900	160000	11000	-	160000	-	22000	35000
3123	BARAHIA	7000	3900	-	-	1400	1400	17000	2300	2300	160000	92000	-	92000	35000	35000	7900
3116	U/S MUNGER	3300	3300	-	-	1700	1400	160000	160000	160000	14000	7900	160000	160000	7900	-	92000
1818	MUNGER	11000	11000	-	-	2200	2200	35000	17000	160000	160000	160000	7900	160000	92000	160000	-
3117	U/S SULTANGANJ	3300	11000	-	-	2000	160000	-	160000	160000	54000	28000	17000	160000	13000	160000	-
2554	SULTANGANJ (BHAGALPUR)	4000	17000	-	-	2600	2200	160000	160000	-	160000	92000	54000	160000	24000	160000	-
4398	WATER INTAKE POINT, BHAGALPUR	28000	28000	-	-	160000	1700	160000	160000	160000	160000	160000	35000	28000	-	160000	-
10138	CHAMPANAGAR	3300	22000	-	-	-	3300	-	92000	-	92000	28000	22000	-	28000	1700	-
1819	BHAGALPUR	11000	17000	-	-	1100	1100	160000	160000	54000	160000	4900	4900	160000	7900	160000	-
3118	U/S BHAGALPUR	14000	11000	-	-	1700	35000	160000	160000	160000	92000	160000	160000	160000	-	160000	-
1816	KAHALGAON	17000	17000	-	-	1400	1300	-	160000	160000	24000	-	-	54000	-	160000	-
10143	KAHALGAON D/S, NEAR CREMATION GHAT	11000	17000	-	-	2600	2700	-	160000	160000	160000	-	-	35000	-	1700	-

## Water quality of river Ganga in Bihar w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Bihar (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1074	BUXAR, CHAUSA KARMNASA	Not monitored								700	130	78	110	78	110	40	1.8
10113	U/S JAIL GHAT, BUXAR ( A/C THORA RIVER)	Not monitored								3500	330	78	68	790	700	45	110
2551	BUXAR, RAMREKHAGHAT	Not monitored								1400	110	20	20	330	490	45	1.8
3113	BUXAR D/S, NEAR GANGA BRIDGE	Not monitored								1700	490	170	140	170	220	170	790
10162	ARRAH-CHAPRA ROAD BRIDGE, U/S DORIGANJ	Not monitored								170	110	18	18	2200	170	93	-
2564	C/F OF SONE RIVER AT DORIGANJ, CHAPRA	Not monitored								140	40	78	110	9200	490	-	-
10114	MAA AMBIKA ASTHAN, DORIGANJ D/S (SARAN)	Not monitored								170	45	3500	1700	5400	790	790	-
3114	DANAPUR, NEAR PIPAPUL	Not monitored								-	5400	-	-	-	45	-	-
1077	KURJI AT DIGHA GHAT, U/S PATNA	Not monitored								2400	330	270	170	340	220	-	-
2552	NIT GHANDHI GHAT ( PATNA)	Not monitored								210	2800	9200	9200	3500	5400	-	2800
10115	GULBI GHAT (PATNA)	Not monitored								1400	9200	40	3500	3500	140	-	490
1079	PATNA D/S (GANGA BRIDGE)	Not monitored								1700	1700	2200	1700	1300	3500	-	3500
3122	MALSALAMI (PATNA)	Not monitored								-	-	-	700	2400	2200	-	270
4297	GANGA AT KACHCHI-DARGAH-BIDUPUR ROAD BRIDGE, PATNA	Not monitored								-	490	93	490	490	1300	-	20
10122	TRIVENI GHAT, B/c OF RIVER PUNPUN	Not monitored								270	2200	18	270	340	220	-	140
2553	FATUHA, A/c OF RIVER PUNPUN	Not monitored								330	2200	140	2100	400	230	-	790
4301	BAKHYIYARPUR-TAJPUR BRIDGE ON GANGA, ATHMAGOLA, PATNA	Not monitored								170	110	110	-	1.8	1.8	270	230
3115	BARH, NEAR UMANATH TEMPLE	Not monitored								68	140	2200	-	340	-	3500	330
10130	NAWADAGHAT D/S (WATER INTAKE OF NTPC) BARH	Not monitored								140	140	490	-	490	1.8	3500	45
10131	U/S BARAHPUR BINDTOLI	Not monitored										-	-	45	1700	340	68
1817	U/S MOKAMA	Not monitored								-	-	490	-	9200	9200	5400	93
1815	MOKAMA D/S (D/S RAJENDRA BRIDGE)	Not monitored								68	78	490	-	170	-	490	1.8
3123	BARAHIA	Not monitored								130	27	20	-	1300	1300	20	1.8
3116	U/S MUNGER	Not monitored								1300	45	18	45	1.8	1.8	-	45
1818	MUNGER	Not monitored								450	40	20	18	1.8	68	20	-
3117	U/S SULTANGANJ	Not monitored								230	40	18	18	3500	1.8	330	-
2554	SULTANGANJ (BHAGALPUR)	Not monitored								-	330	68	110	5400	110	78	-
4398	WATER INTAKE POINT, BHAGALPUR	Not monitored								16000	9200	1700	1100	790	-	5400	-
10138	CHAMPANAGAR	Not monitored								-	20	490	330	-	490	20	-

1819	BHAGALPUR		40	230	20	20	9200	20	20	-
3118	U/S BHAGALPUR		9200	110	1700	1300	1700	-	1700	-
1816	KAHALGAON		2800	230	-	-	78	-	45	-
10143	KAHALGAON D/S, NEAR CREMATION GHAT		330	40	-	-	1.8	-	45	-

#### 4. Water quality of river Ganga in Jharkhand

##### Water quality of river Ganga in Jharkhand w.r.t DO

Station Code	Station name	DO (mg/l) in Jharkhand (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10144	U/S NEARA LCT GHAT	8.2	8.6	8.6	9.5	9.5	9.6	8.4	-	8.6	8.4	8.7	-	2.4	7.8	7.8	-
10145	NEAR JANTA GHAT D/S	8.4	8.4	8.6	9.2	9.1	9	8.2	-	8.4	8.2	8.6	-	7.8	7.6	7.9	-
1059	RAJMAHAL	8.4	8.2	8.6	9.5	9.6	9.5	8.2	-	8.4	8.6	8.6	-	8.2	8.1	8.2	-
10146	SANGI DALAN	8.6	8.4	8.6	9.6	9.5	9.6	8.2	-	8.2	8.6	8.8	8.8	8.2	7.8	8.1	-

##### Water quality of river Ganga in Jharkhand w.r.t BOD

Station Code	Station name	BOD (mg/l) in Jharkhand (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10144	U/S NEARA LCT GHAT	2.6	2.4	2.6	1.8	1.7	1.6	2.4	-	2.6	2.4	2.4	-	2.4	2.6	2.6	-
10145	NEAR JANTA GHAT D/S	2.6	2.6	2.6	1.8	1.7	1.6	2.6	-	2.4	2.6	2.6	-	2.6	2.4	2.4	-
1059	RAJMAHAL	2.6	2.6	2.6	1.5	1.6	1.7	1.8	-	1.6	1.4	1.4	-	1.4	2.8	1.4	-
10146	SANGI DALAN	2.6	2.6	2.6	1.6	1.7	1.7	2.4	-	2.6	2.4	1.6	1.6	1.6	1.8	1.4	-



## Water quality of river Ganga in Jharkhand w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Jharkhand (2020)																
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec		
										First round	Second round	First round	Second round	First round	Second round	First round	Second round	
10144	U/S NEARA LCT GHAT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10145	NEAR JANTA GHAT D/S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1059	RAJMAHAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10146	SANGI DALAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## Water quality of river Ganga in Jharkhand w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Jharkhand (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10144	U/S NEARA LCT GHAT	Not monitored								-	-	-	-	-	-	-	-
10145	NEAR JANTA GHAT D/S									-	-	-	-	-	-		
1059	RAJMAHAL									-	-	-	-	-	-		
10146	SANGI DALAN									-	-	-	-	-	-		

## 5. Water quality of river Ganga in West Bengal

## Water quality of river Ganga in West Bengal w.r.t DO

Station Code	Station name	DO (mg/l) in West Bengal (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10159	KHAGRA, BEHARAMPORE	10.4	8.4	9	9.6	7.4	7.4	5	5.7	5.5	8.6	5.6	6.3	7.8	8.4	8	9.3
1080	BEHARAMPORE	10.7	8.3	9.1	6.8	6.3	7	5.5	5.5	6	6	5.3	6.5	7.9	8.1	8	9.4
10160	GORABAZAR, BEHRAMPORE	10.8	7.3	8.2	7.6	6.1	7.5	5	5.2	5.5	6	5.7	6.4	8	8	7.9	9.5
2511	NABADIP, GHOSHPARA NEAR MONIPURGHAT	11.1	10.5	7.2	7.7	7	6.4	5.2	5.6	5.2	5.4	6.3	6.5	6.6	7.5	8.2	8.5
2506	TRIBENI, NEAR BURNING GHAT	11.2	9.4	7.4	7.9	7.3	5.2	5.2	4.7	4.8	5.3	5.9	6	6.4	7.4	7.8	8.2
10161	SHITALATALA, PALTA	11.5	7.9	-	8.5	6.9	5.7	4.5	4.6	4.6	4.7	4.8	4.7	5.6	6.8	7.2	7.5
1054	PALTA	11.5	6.8	7.4	7.9	6	4.9	4.5	4.4	4.9	4.7	4.9	5.7	6.1	7.1	7.7	7.7
1472	SERAMPORE	11	12.5	7	6.4	5.4	5.6	5	4.2	4.8	4.9	5.3	5.9	5.6	8.3	7.5	7.9
1053	DAKSHINESHWAR	6.8	8.1	6.9	5.8	6.6	4.9	4.5	5.6	5.8	5.4	7	5.1	6.1	6.8	7.3	7.4
1470	GARDEN REACH	7.6	7.2	6.5	5	6.9	5	4.2	5	4.7	5.7	4.8	5.2	5	6.9	6.7	7.3
1471	SHIVPUR (HOWRAH)	7.2	7.4	6.5	3.9	6.8	5.2	4.3	4.6	3.9	4.6	4.7	5	5.2	7.3	6.9	6.7
1052	ULUBERIA	7	8.1	5.7	4	7.3	5.6	4.7	3.9	4.7	5.7	5.3	7	5	6.2	6.7	7.1
1469	DIAMOND HARBOUR	6.3	6.7	5	6.1	7.1	6.3	6.2	5.2	5.2	6.4	5.6	6.8	6	7.4	6.8	6.6
1335	GANGA AT PATIKALI NEAR DURGA CHAK	6	7	6.8	4.6	7.5	7.3	7	5.6	7	6.1	5.4	5.1	7.1	8.6	5.31	8.1

## Water quality of river Ganga in West Bengal w.r.t BOD

Station Code	Station name	BOD (mg/l) in West Bengal (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10159	KHAGRA, BEHARAMPORE	3.3	4.65	3.3	5.5	2.55	1.5	1.55	1.7	2.35	1.4	3.25	3.7	4.35	1.4	1.7	3.4
1080	BEHARAMPORE	3.3	3.35	4.1	3.7	1	1.2	2	1.1	2	2.55	3.1	3.2	4.4	1.6	2.05	3.15
10160	GORABAZAR, BEHRAMPORE	2.7	2.35	2.9	4	1.05	1.3	1.85	1.2	2	2.45	3.6	2.2	4.35	2.55	1.5	3.8
2511	NABADIP, GHOSHPARA NEAR MONIPURGHAT	6.2	2.4	3	2.8	2.1	2.8	4.15	2	3.35	2.75	4.15	2.6	4	2.45	3.4	2.15
2506	TRIBENI, NEAR BURNING GHAT	6.5	7.75	3.15	3	2.25	1.5	2.65	1.6	3.05	3.8	4.6	1.5	1.8	4.35	1.85	3.75
10161	SHITALATALA, PALTA	5	3.9	-	3.9	2.6	3.5	1.5	2.45	2.55	2.3	2.45	3.65	3.75	3.1	3.6	3.4
1054	PALTA	6.4	6.7	3.45	3.6	2.8	2.05	1.85	2	2.4	3.05	1.9	3.65	3.25	2.45	2.4	1.95

43687/2022/LAW-HO

Station Code	Station name	BOD (mg/l) in West Bengal (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
1472	SERAMPORE	3.25	4.4	2.55	2.8	3.9	2.75	1.45	2	2.8	2	3.2	3.55	2.15	2.6	3.6	1.3
1053	DAKSHINESHWAR	2	3.85	4.5	4	4.35	2.9	2.5	3.25	3.5	3.35	5	3	3.55	4.5	3.9	4.05
1470	GARDEN REACH	5.3	2	2.9	4	3.1	2.2	1.1	2.6	2.25	2.3	2.8	2.6	3	4.2	2.3	3.1
1471	SHIVPUR (HOWRAH)	4.9	3.4	4.3	1.3	3.6	2.05	1.15	2.55	1.95	2.8	2.3	2.8	2.85	3.55	3.25	2.4
1052	ULUBERIA	3.9	3.7	3.2	1	2.2	2.05	1.8	1.55	1.4	2.05	2.8	3.1	2.65	3.9	2	2.25
1469	DIAMOND HARBOUR	1.95	2.1	1.75	2.7	3.2	1.5	1.2	1.2	1.8	2.4	2.6	3.7	2.8	4.2	2	3
1335	GANGA AT PATIKALI NEAR DURGA CHAK	1.3	1.8	2.5	3.3	1.75	1.6	1.7	0.6	1.9	0.95	0.7	1	1.3	2.35	1.1	0.95

## Water quality of river Ganga in West Bengal w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in West Bengal (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10159	KHAGRA, BEHARAMPORE	4000	90000	140000	7000	1700	130000	14000	50000	130000	-	49000	110000	23000	79000	33000	49000
1080	BEHARAMPORE	800	80000	11000	2400	800	130000	110000	80000	50000	30000	49000	79000	23000	140000	130000	79000
10160	GORABAZAR, BEHRAMPURE	11000	60000	30000	6000	1700	80000	27000	8000	13000	27000	49000	110000	22000	23000	33000	23000
2511	NABADIP, GHOSHPARA NEAR MONIPURGHAT	4000	17000	4000	17000	300000	30000	17000	13000	80000	50000	41000	11000	79000	140000	79000	49000
2506	TRIBENI, NEAR BURNING GHAT	400	8000	13000	92000	13000	17000	50000	240000	14000	50000	92000	7800	13000	23000	17000	23000
10161	SHITALATALA, PALTA	110000	8000	-	140000	24000	50000	23000	300000	17000	240000	350000	130000	94000	130000	33000	79000
1054	PALTA	80000	13000	110000	26000	33000	80000	13000	12000	80000	7000	170000	49000	49000	23000	13000	23000
1472	SERAMPORE	23000	26000	14000	33000	50000	30000	13000	54000	17000	22000	70000	23000	23000	13000	33000	33000
1053	DAKSHINESHWAR	50000	50000	130000	110000	170000	70000	80000	80000	80000	50000	80000	130000	79000	130000	70000	49000
1470	GARDEN REACH	70000	30000	80000	140000	110000	30000	50000	50000	50000	50000	70000	80000	70000	110000	79000	33000
1471	SHIVPUR (HOWRAH)	70000	50000	80000	33000	110000	23000	70000	70000	110000	80000	50000	70000	130000	130000	130000	33000
1052	ULUBERIA	17000	13000	50000	17000	26000	13000	23000	30000	13000	8000	17000	33000	70000	49000	33000	17000
1469	DIAMOND HARBOUR	3000	4000	11000	790	3000	11000	8000	8000	4500	4000	8000	14000	17000	7900	7000	6800
1335	GANGA AT PATIKALI NEAR DURGA CHAK	3300	7000	900	-	2300	2100	680	450	780	920	1000	1400	13000	7900	9400	17000



## Water quality of river Ganga in West Bengal w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) in West Bengal (2020)															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		Oct		Nov		Dec	
										First round	Second round	First round	Second round	First round	Second round	First round	Second round
10159	KHAGRA, BEHARAMPORE	Not monitored								5000	220	1100	330	790	5400	490	490
1080	BEHARAMPORE									260	800	1100	490	1100	3500	2400	790
10160	GORABAZAR, BEHRAMPURE									900	1300	210	790	790	310	700	490
2511	NABADIP,GHOSHPARA NEAR MONIPURGHAT									1400	800	230	230	130	330	490	170
2506	TRIBENI, NEAR BURNING GHAT									1100	800	1400	220	230	2400	330	490
10161	SHITALATALA, PALTA									2400	1700	2800	2200	2200	1300	1700	1300
1054	PALTA									5000	1700	5400	790	1300	790	700	790
1472	SERAMPURE									2200	2400	1100	490	700	130	140	140
1053	DAKSHINESHWAR									70	90	140	170	170	220	220	170
1470	GARDEN REACH									70	110	110	92	79	130	170	70
1471	SHIVPUR (HOWRAH)									170	130	130	170	130	170	220	79
1052	ULUBERIA									110	90	68	93	93	79	130	49
1469	DIAMOND HARBOUR									25	40	20	68	40	23	49	33
1335	GANGA AT PATIKALI NEAR DURGA CHAK									-	-	-	-	130	120	110	220

Water Quality Data of 2021

## 1. Water quality of river Ganga in Uttarakhand

## Water quality of river Ganga in Uttarakhand w.r.t DO

Station Code	Station name	DO (mg/l) in Uttarakhand (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>	Ist	II <sup>nd</sup>
1491	BAGIRATHI AT GANGOTRI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1485	MANDAKINI B/C ALAKNANDA, RUDRAPRAYAG	10.2	-	10.4	-	10.4	-	-	-	-	-	9.6	-	-	-	9.6	-	9.2	-	-	-	9.6	-	9	-
1484	ALAKNANDA B/C MANDAKINI, RUDRA PRAYAG	10.8	-	10	-	10.2	-	-	-	-	-	9.6	-	-	-	9.2	-	9.6	-	-	-	9.4	-	10.2	-
1486	ALAKNANDA A/C MANDAKINI, RUDRAPRAYAG	10.4	-	10.2	-	10.4	-	-	-	-	-	9.8	-	-	-	9.6	-	9.8	-	-	-	10	-	10.4	-
1488	BHAGIRATHI B/C ALAKNANDA, DEVPRAYAG	10	-	9.6	-	10.2	-	-	-	9.8	-	9.2	-	9.6	-	8.8	-	9.8	-	-	-	10.4	-	10	-
1487	ALAKNANDA B/C BHAGIRATHI, DEVPRAYAG	9.8	-	9	-	9.8	-	-	-	9.6	-	10	-	9.8	-	9	-	9.8	-	-	-	10.6	-	10	-
1489	ALAKNANDA A/C BHAGIRATHI, DEVPRAYAG	10.4	-	9	-	10.4	-	-	-	9.6	-	10	-	10	-	9.6	-	9.4	-	-	-	10	-	10.6	-
20048	GANGA AT SWARG ASHRAM-1	10	9.6	9.4	9.4	9.8	9	9.2	-	9.8	-	9.6	-	9.4	9.6	9.2	9.4	9.8	-	-	-	9.6	-	10	10.2
1060	U/S RISHIKESH	11	10.4	10.2	9.8	10.4	10.2	10	-	10	-	10.2	-	9.2	9.8	9.8	10.4	10.4	-	-	-	10.4	-	10	10.4
20049	GANGA AT LAKKAR GHAT-OXIDATION PONDS	9.6	9.8	9.4	9.6	9.8	9.2	9	-	9	-	9.4	-	8.8	9.2	8.8	9.4	9.4	-	-	-	9.2	-	9.6	9.6
10147	RISHIKESH D/S	10.8	9.6	9.8	-	9.8	9.8	9.6	-	9.8	-	9.8	-	9	9.6	9.2	9.6	9.6	-	-	-	9.2	-	10.4	10.4
2725	A/C SONG NEAR SATYANARAYAN TEMPLE, D/S RAIWALA	10	10	10.8	9.6	9.8	9.2	8.2	-	9.4	-	9.2	-	9.6	9.4	9.2	9.6	9.6	-	-	-	9	-	9.1	9.8
10148	HAR-KI- PAURI GHAT	9.6	10.4	9.2	9.8	9.4	9.6	9.6	-	9.4	-	9	-	9.8	9.4	9.6	9.4	9.2	-	-	-	9.4	-	10	10.3
1061	HARIDWAR D/S	8.8	9.6	10.4	8.9	9.2	9.2	8.2	-	8.8	-	8.2	-	9.2	9	9.6	9.4	9.4	9.4	-	-	8.6	-	9.6	10.2

43687/2022/LAW-HO

20050	GANGA AT JAGJITPUR	9.2	-	9.4	9.2	8.8	9	8.2	-	9.8	-	8.7	-	9.4	9.2	9.8	9.6	9.2	-	-	-	9.3	-	10.3	10.5
2727	ROORKEE D/S	9.6	10.6	10.2	8.6	9.8	9.6	8.4	-	9.2	-	8.8	-	9.2	8.4	9	9.2	8.2	-	-	-	9	-	9.3	9.7

### Water quality of river Ganga in Uttarakhand w.r.t BOD

Station Code	Station name	BOD (mg/l) in Uttarakhand (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd
1491	BAGIRATHI AT GANGOTRI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1485	MANDAKINI B/C ALAKNANDA, RUDRAPRAYAG	1	-	1	-	1	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1	-	1	-
1484	ALAKNANDA B/C MANDAKINI, RUDRA PRAYAG	1	-	1	-	1	-	-	-	-	-	1	-	-	-	1	-	1	-	-	-	1	-	1	-
1486	ALAKNANDA A/C MANDAKINI, RUDRAPRAYAG	1	-	1	-	1	-	-	-	-	-	1	-	-	-	1	-	1	-	-	-	1	-	1	-
1488	BHAGIRATHI B/C ALAKNANDA, DEVPRAYAG	1	-	1	-	1	-	-	-	1	-	1	-	1	-	1	-	1	-	-	-	1	-	1	-
1487	ALAKNANDA B/C BHAGIRATHI, DEVPRAYAG	1	-	1	-	1	-	-	-	1	-	1	-	1	-	1	-	1	-	-	-	1	-	1	-
1489	ALAKNANDA A/C BHAGIRATHI, DEVPRAYAG	1	-	1	-	1	-	-	-	1	-	1	-	1	-	1	-	1	-	-	-	1	-	1	-
20048	GANGA AT SWARG ASHRAM-1	1	1	1.2	1.2	1	1	1	-	1.2	-	1.2	-	1.2	1.4	1.2	1.2	1.2	-	-	-	1.2	-	1	1
1060	U/S RISHIKESH	1	1	1	1	1	1	1	-	1	-	1	-	1	1.2	1.2	1.2	1	-	-	-	1.2	-	1	1
20049	GANGA AT LAKKAR GHAT-OXIDATION PONDS	1.6	1.4	1.2	1.4	1.2	1.4	1.2	-	1.2	-	1.2	-	1.4	1.4	1.6	1.4	1.4	-	-	-	1.4	-	1.2	1.2
10147	RISHIKESH D/S	1.2	1	1		1	1	1	-	1.2	-	1	-	1.2	1.2	1.4	1.2	1.2	-	-	-	1.2	-	1	1
2725	A/C SONG NEAR SATYANARAYAN TEMPLE, D/S RAIWALA	1.6	1.8	1.6	1.8	1.6	1.6	1.4	-	1.2	-	1.2	-	1.4	1.4	1.6	1.6	1.6	-	-	-	1.4	-	1.2	1.2
10148	HAR-KI- PAURI GHAT	1.2	1	1	1	1.2	1.4	1.2	-	1.2	-	1.2	-	1	1.4	1.2	1.2	1.2	-	-	-	1.5	-	1	1
1061	HARIDWAR D/S	1.6	1.4	1.4	1.8	1.6	1.4	1.4	-	1.2	-	1.6	-	1.6	1.8	2.4	2.6	2.2	2.2	-	-	1	-	1	1
20050	GANGA AT JAGJITPUR	1.2	-	1.4	1.6	1.2	1	1.2	-	1.4	-	1.6	-	1.6	1.8	1.8	2	2.2	-	-	-	1.2	-	1	1
2727	ROORKEE D/S	1.4	1.2	1.4	1.6	1.2	1.4	1.4	-	1.2	-	1.4	-	1.8	1.6	1.4	1.2	1.4	-	-	-	1.5	-	1	2



## Water quality of river Ganga in Uttarakhand w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Uttarakhand (2021)																								
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
		Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	
1491	BAGIRATHI AT GANGOTRI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1485	MANDAKINI B/C ALAKNANDA, RUDRAPRAYAG	1.8	-	1.8	-	1.8	-	-	-	-	-	1.8	-	-	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-	
1484	ALAKNANDA B/C MANDAKINI, RUDRA PRAYAG	1.8	-	1.8	-	1.8	-	-	-	-	-	1.8	-	-	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-	
1486	ALKANANDA A/C MANDAKINI, RUDRAPRAYAG	1.8	-	1.8	-	1.8	-	-	-	-	-	1.8	-	-	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-	
1488	BHAGIRATHI B/C ALAKNANDA, DEVPRAYAG	1.8	-	1.8	-	1.8	-	-	-	-	-	1.8	-	1.8	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-	
1487	ALAKNANDA B/C BHAGIRATHI, DEVPRAYAG	1.8	-	1.8	-	1.8	-	-	-	-	-	1.8	-	1.8	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-	
1489	ALAKNANDA A/C BHAGIRATHI, DEVPRAYAG	1.8	-	1.8	-	1.8	-	-	-	-	-	1.8	-	1.8	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-	
20048	GANGA AT SWARG ASHRAM-1	17	26	25	22	21	26	17	-	21	-	25	-	26	21	21	22	22	-	-	-	14	-	17	14	
1060	U/S RISHIKESH	14	1.8	17	17	14	17	13	-	17	-	20	-	1.8	25	17	14	14	-	-	-	9.2	-	10	10	
20049	GANGA AT LAKKAR GHAT-OXIDATION PONDS	22	1.8	22	17	25	27	22	-	25	-	32	-	33	26	32	26	27	-	-	-	17	-	22	17	
10147	RISHIKESH D/S	1.8	1.8	21	-	13	17	14	-	22	-	26	-	26	-	25	21	21	-	-	-	12	-	14	11	
2725	A/C SONG NEAR SATYANARAYAN TEMPLE, D/S RAIWALA	70	1.8	58	63	58	63	84	-	70	-	84	-	70	63	63	70	58	-	-	-	58	-	48	58	
10148	HAR-KI- PAURI GHAT	46	48	40	34	40	39	43	-	38	-	40	-	40	63	34	40	32	-	-	-	46	-	27	40	
1061	HARIDWAR D/S	70	84	84	70	94	84	79	-	70	-	94	-	94	84	94	79	84	84	-	-	-	46	-	47	58
20050	GANGA AT JAGJITPUR	58		58	63	63	58	70	-	48	-	84	-	84	79	84	70	79	-	-	-	70	-	48	79	
2727	ROORKEE D/S	58	63	63	70	58	63	70	-	79	-	84	-	63	79	63	70	70	-	-	-	63	-	47	58	

## Water quality of river Ganga in Uttarakhand w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) Uttarakhand (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd
1491	BAGIRATHI AT GANGOTRI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1485	MANDAKINI B/C ALAKNANDA, RUDRAPRAYAG	1.8	-	1.8	-	1.8	-	-	-	-	-	1.8	-	-	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-
1484	ALAKNANDA B/C MANDAKINI, RUDRA PRAYAG	1.8	-	1.8	-	1.8	-	-	-	-	-	1.8	-	-	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-
1486	ALAKNANDA A/C MANDAKINI, RUDRAPRAYAG	1.8	-	1.8	-	1.8	-	-	-	-	-	1.8	-	-	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-
1488	BHAGIRATHI B/C ALAKNANDA, DEVPRAYAG	1.8	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-
1487	ALAKNANDA B/C BHAGIRATHI, DEVPRAYAG	1.8	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-
1489	ALAKNANDA A/C BHAGIRATHI, DEVPRAYAG	1.8	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-	1.8	-	1.8	-	1.8	-	-	-	1.8	-	1.8	-
20048	GANGA AT SWARG ASHRAM-1	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	1.8	-	1.8	-	1.8	1.8	1.8	1.8	1.8	-	-	-	1.8	-	1.8	-
1060	U/S RISHIKESH	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	1.8	-	1.8	-	1.8	1.8	1.8	1.8	1.8	-	-	-	-	-	1.8	1.8
20049	GANGA AT LAKKAR GHAT-OXIDATION PONDS	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	1.8	-	1.8	-	1.8	1.8	1.8	1.8	1.8	-	-	-	1.8	-	1.8	1.8
10147	RISHIKESH D/S	1.8	1.8	1.8	-	1.8	1.8	1.8	-	1.8	-	1.8	-	1.8	1.8	1.8	1.8	1.8	-	-	-	1.8	-	1.8	1.8
2725	A/C SONG NEAR SATYANARAYAN TEMPLE, D/S RAIWALA	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	1.8	-	1.8	-	1.8	1.8	1.8	1.8	1.8	-	-	-	1.8	-	1.8	1.8
10148	HAR-KI- PAURI GHAT	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	1.8	-	1.8	-	38	1.8	32	36	1.8	-	-	-	17	-	6	9.2
1061	HARIDWAR D/S	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	1.8	-	1.8	-	34	37	22	34	1.8	1.8	-	-	31	-	32	26
20050	GANGA AT JAGJITPUR	1.8	-	1.8	1.8	1.8	1.8	1.8	-	1.8	-	1.8	-	33	34	32	33	1.8	-	-	-	27	-	22	22
2727	ROORKEE D/S	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	1.8	-	1.8	-	34	32	1.8	31	1.8	-	-	-	32	-	34	27

## 2. Water quality of river Ganga in Uttar Pradesh

## Water quality of river Ganga in Uttar Pradesh w.r.t DO

Station Code	Station name	DO (mg/l) in Uttar Pradesh (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sept		Oct		Nov		Dec	
		Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd
10150	MADHYA GANGA BARRAGE (BIJNOR)	10.8	9.9	9.8	9.3	8.9	8.6	8.5	8.5	9	8.5	8.9	9	8	7.7	8	7.7	7.7	7.9	-	-	8.4	9.1	9.3	9.8
10149	U/S BRIJGHAT, GARHMUKTESHWAR	10.7	10.7	11	10.8	-	-	9.5	9.6	9.6	9	7.8	7.6	8	9.1	8.9	9	8.5	-	9.5	11	11	11	11	-
1062	BRIJGHAT D/S, GHARMUKTESHWAR	10.2	10.8	10.7	10.6	-	-	9.2	9	6.8	8.5	7.5	7.9	7.8	8.8	8.7	8.6	8.1	-	10.7	9.3	10.7	10.5	10.7	-
2488	U/S ANOOPSHAHAR	8	8.2	8.9	8.2	-	-	8.1	7.1	6.9	9.1	-	-	7.1	6.6	7.4	6.5	-	-	-	-	-	-	-	-
2489	ANOOPSHAHAR D/S	8.3	8.6	8.6	8.4	-	-	8.2	7.2	7	8.9	-	-	6.9	6.4	6.8	-	-	-	-	-	-	-	-	-
1145	NARORA (BULANDSAHAR)	8.3	8.9	9.1	7.8	-	-	8.1	7.1	7.1	-	-	-	7	6.8	6.3	-	-	-	-	-	-	-	-	-
2490	KACHHLA GHAT (ALIGARH)	-	-	9.6	-	-	-	9.9	9.5	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10151	FARRUKHABAD	11	11	11.8	10.4	-	-	8.8	9.2	8.6	7.4	8.1	8.1	6.5	7.1	6.8	-	-	-	-	-	7.6	8.6	8.9	-
1063	U/S KANNAUJ (RAJGHAT)	10.5	10.7	10.6	-	-	-	8.5	8.5	7.9	-	7.9	8.1	6.9	5.8	6.4	-	-	-	-	-	6.4	8.3	8.6	-
1066	KANNAUJ D/S	10.2	10.3	9.8	10.2	-	-	8.2	8.2	8.3	7.7	7.9	-	5.6	6.6	6.2	-	-	-	-	-	7.8	6.2	8.4	-
1146	BITHOOR (KANPUR)	11.2	11.5	11.5	-	-	-	8.6	8.6	8.1	8.4	8.1	-	6.2	7.2	6.8	-	-	-	-	-	8.5	6.3	8.4	-
1067	U/S KANPUR (RANIGHAT)	10.9	11.1	10.8	-	-	-	8.3	8.3	8.1	8.1	7.9	-	7.1	5.8	6.6	-	-	-	-	-	8.6	6.2	8.8	-
10154	U/s SHUKLAGANJ /BATHING GHAT (BHARAOGHAT)	11	-	11.1	-	-	-	8.3	8.2	8.4	8.2	8	-	6	7	6.4	-	-	-	-	-	8.4	6.1	8.6	-
10155	SHUKLAGANJ D/S	10.8	10.7	10.6	-	-	-	7.9	8	7.8	7.9	7.7	-	6.8	-	6.4	-	-	-	-	-	8.4	6	8.5	-
10156	BATHING GHAT (GOLA GHAT)	10.6	10.5	10.4	-	-	-	7.8	-	7.8	7.6	7.6	-	6.6	5.4	6.3	-	-	-	-	-	8.3	5.8	8.4	-
10157	BATHING GHAT (JAJMAU BRIDGE)	10.5	10.4	10.3	-	-	-	7.6	7.6	7.3	7.7	7.7	-	6.3	5.2	6.2	-	-	-	-	-	-	-	8.2	-
1068	KANPUR D/S (JAJMAU PUMPING STATION)/JANE VILL.	10.2	10.4	10.1	-	-	-	7.5	7.5	7.2	7.5	7.5	-	6	5	6	-	-	-	-	-	8	5.3	8	-
1147	DALMAU (RAI BAREILLY)	10.4	10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2498	KALA KANKAR (RAI BAREILLY)	10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2487	KADAGHAT (PRAYAGRAJ)	-	-	-	-	-	-	-	-	7.8	-	-	-	10	8.8	8.5	8.1	-	-	-	-	-	-	-	-
1046	PRAYAGRAJ (RASOOLABAD)	-	-	-	-	-	-	8.6	-	8.3	-	-	-	8.4	8.3	8.3	8.5	-	-	-	-	-	-	8.8	-
1049	PRAYAGRAJ D/S (SANGAM)	-	-	-	-	-	-	-	-	7.4	-	-	-	8.5	8	8.7	8.1	-	-	-	-	-	-	-	-
10158	A/C TAMAS RIVER (SIRSA)	-	-	-	-	-	-	-	-	8.4	-	-	-	8.4	8.7	8.1	8.7	-	-	-	-	-	-	-	-
2485	U/S, VINDHYACHAL (MIRZAPUR)	-	9.1	9.4	12	9.3	-	8.5	8.7	8.4	8	-	-	8.2	7.8	6.8	7.3	7.1	7.3	7.1	7.3	7.2	8.4	8.6	8.6
2486	D/S, MIRZAPUR	7.6	7.6	8.6	10.3	8.5	-	7.6	7.8	7.5	7.4	-	-	7.8	7.3	6.7	6.4	6.7	6.5	6.8	6.5	6.6	7.4	9.5	7.8
10153	CHUNAR	8.4	8.4	9	11.4	8.8	8.3	8.2	8.4	8.2	8	-	-	8	7.5	7	6.6	6.8	7	6.8	7	6.9	7.8	9.2	8.2



43687/2022/LAW-HO

Station Code	Station name	DO (mg/l) in Uttar Pradesh (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sept		Oct		Nov		Dec	
		Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd
1070	U/S VARANASI (ASSIGHAT)	9.3	8.6	10	9.8	-	-	8.7	8.8	8.7	8.5	-	-	-	-	-	-	-	-	7.3	7.5	-	-	-	-
1071	VARANASI D/S (MALVIYA BRIDGE)	7.9	7.5	9.4	8.5	-	-	7.9	7.8	7.7	7.5	-	-	-	-	-	-	-	-	6.5	6.8	-	-	-	-
10152	A/C GOMTI RIVER (BHUSAULA)	8.8	8.4	9.6	8.8	-	-	8.4	8.5	8.3	8.2	-	-	-	-	-	-	-	-	7.1	7.2	8.1	5.5	-	-
1073	TARIGHAT (GHAZIPUR)	7.8	7.4	8.8	8.4	-	-	7.5	7.7	7.6	7.5	-	-	-	-	-	-	-	-	6.4	6.6	-	-	-	-

### Water quality of river Ganga in Uttar Pradesh w.r.t BOD

Station Code	Station name	BOD (mg/l) in Uttar Pradesh (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sept		Oct		Nov		Dec	
		Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd
10150	MADHYA GANGA BARRAGE (BIJNOR)	1.2	1.2	1.2	1.2	1.2	1.3	1.4	1.4	1.1	1.4	1.1	1.1	1.4	1.2	1.3	1.3	1.2	-	-	1.2	1.3	1.2	1.1	
10149	U/S BRIJGHAT, GARHMUKTESHWAR	1.4	1.4	1.3	1	-	-	1.2	1.4	1.4	1	1	1.3	2	1.2	1.1	1	-	1.5	1.1	1	1	1	-	
1062	BRIJGHAT D/S, GHARMUKTESHWAR	2.4	2.1	2.4	1.5	-	-	2.4	2	2	1.3	2.2	1.8	2.4	1.6	2.7	1.8	-	1.8	2.4	1.6	1.5	1.4	-	
2488	U/S ANOOPSHAHAR	1.6	1.3	1.5	1.1	-	-	1.5	2.2	2.2	1.7	-	-	2.8	2.2	2.1	2.2	-	-	-	-	-	-	-	
2489	ANOOPSHAHAR D/S	1.4	1.2	1.4	1.4	-	-	1.3	2.1	2	1.9	-	-	3	1.8	2.4	-	-	-	-	-	-	-	-	
1145	NARORA (BULANSAHAR)	1.3	1.1	1.6	1.4	-	-	1.4	2.3	2.1	-	-	-	2.9	1.6	2	-	-	-	-	-	-	-	-	
2490	KACHHLA GHAT (ALIGARH)	-	-	1.3	-	-	-	1.2	1.3	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10151	FARRUKHABAD	2.3	2.3	1.8	1.7	-	-	4.2	1.7	3.7	4	1.6	1.8	1.9	1.8	-	-	-	-	-	-	2.8	2.8	-	
1063	U/S KANNAUJ (RAJGHAT)	2.4	3.3	2.5	-	-	-	2.6	2.4	2.6	-	2.6	2.8	3.1	3	-	-	-	-	-	-	3	2.9	-	
1066	KANNAUJ D/S	2.6	3.5	3	2.9	-	-	2.9	2.7	2.8	2.8	3	-	3.4	5.3	3.2	-	-	-	-	-	-	3.1	-	
1146	BITHOOR (KANPUR)	3.1	3	3	-	-	-	3.1	3	3.1	3.1	3.3	-	3.3	3.1	3.2	-	-	-	-	-	3.3	-	3	
1067	U/S KANPUR (RANIGHAT)	3.2	3.1	3.3	-	-	-	3.2	3.1	3.2	3.4	3.6	-	3.3	3.9	3.3	-	-	-	-	-	3.7	-	3.4	

Station Code	Station name	BOD (mg/l) in Uttar Pradesh (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sept		Oct		Nov		Dec	
		Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd
10154	U/s SHUKLAGANJ /BATHING GHAT (BHARAOGHAT)	3.2	-	3.2	-	-	-	3.2	3.2	3.3	3.2	3.2	-	3.4	3.3	3.4	-	-	-	-	-	3.5	-	3.3	-
10155	SHUKLAGANJ D/S	3.3	3.4	3.4	-	-	-	3.6	3.2	3.4	3.6	3.8	-	3.4	-	3.5	-	-	-	-	-	4	-	3.6	-
10156	BATHING GHAT (GOLA GHAT)	3.5	3.6	3.5	-	-	-	3.4	-	3.8	3.6	3.5	-	3.6	3.9	3.7	-	-	-	-	-	4	-	4.1	-
10157	BATHING GHAT (JAJMAU BRIDGE)	3.8	3.9	3.8	-	-	-	3.9	3.9	3.8	3.9	3.9	-	4	4.2	4	-	-	-	-	-	-	-	4.2	-
1068	KANPUR D/S (JAJMAU PUMPING STATION)	4.1	4	4.2	-	-	-	4.2	4.2	3.9	4.1	4.2	-	4.2	4.6	4.2	-	-	-	-	-	4.3	-	4.4	-
1147	DALMAU (RAI BAREILLY)	3.6	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2498	KALA KANKAR (RAI BAREILLY)	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2487	KADAGHAT (PRAYAGRAJ)	-	-	-	-	-	-	-	-	2.5	-	-	-	1	2.8	2.6	2.6	-	-	-	-	-	-	-	-
1046	PRAYAGRAJ (RASOOLABAD)	-	-	-	-	-	-	2.8	-	2.8	-	-	-	2.8	2.7	2.7	2.8	-	-	-	-	-	-	2.8	-
1049	PRAYAGRAJ D/S (SANGAM)	-	-	-	-	-	-	-	-	2.6	-	-	-	2.7	2.6	2.8	2.7	-	-	-	-	-	-	-	-
10158	A/C TAMAS RIVER (SIRSA)	-	-	-	-	-	-	-	-	2.6	-	-	-	2.7	2.6	2.7	2.7	-	-	-	-	-	-	-	-
2485	U/S, VINDHYACHAL (MIRZAPUR)	2.3	2.3	2.1	1.8	2	-	2.4	2.2	2.4	2.5	-	-	2.6	2.4	3.2	3	2.4	2.2	2.3	2.1	2.2	2.1	1.9	1.9
2486	D/S, MIRZAPUR	3.7	3.7	3.5	3.1	3.5	-	4	3.8	4	4.2	-	-	3.5	3.3	14.4	3.8	3.4	3.5	3.5	3.7	3.5	3.8	1.7	3.6
10153	CHUNAR	3.4	3.4	2.8	2.3	3.2	3.3	3.2	3	3.2	3.2	-	-	3.3	3.1	3.4	3.5	3.2	3	3.2	2.9	3.2	3.2	2.8	3
1070	U/S VARANASI (ASSIGHAT)	2.2	2.5	1.9	2.5	-	-	2.3	2.2	2.2	2.4	-	-	-	-	-	-	-	-	2.1	2	-	-	-	-
1071	VARANASI D/S (MALVIYA BRIDGE)	3.6	3.7	3.3	3.5	-	-	4	3.8	3.8	4	-	-	-	-	-	-	-	-	3.5	3.4	-	-	-	-
10152	A/C GOMTI RIVER (BHUSAULA)	2.8	3.2	2.5	2.9	-	-	3.2	3.1	3.2	3.3	-	-	-	-	-	-	-	-	3.2	3	4.1	-	-	-
1073	TARIGHAT (GHAZIPUR)	3.7	3.8	3.5	3.7	-	-	4.3	4	4.2	4.4	-	-	-	-	-	-	-	-	3.8	3.6	-	-	-	-

## Water quality of river Ganga in Uttar Pradesh w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Uttar Pradesh (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd
10150	MADHYA GANGA BARRAGE (BIJNOR)	790	630	790	700	790	790	790	790	840	840	840	840	790	840	630	790	790	940	-	-	940	700	790	840
10149	U/S BRIJGHAT, GARHMUKTES HWAR	170	170	130	350	-	-	170	240	240	130	280	130	220	220	240	170	350	-	280	350	130	110	170	-
1062	BRIJGHAT D/S, GHARMUKTES HWAR	920	350	220	540	-	-	280	350	350	350	540	540	350	350	350	350	540	-	540	1.8	220	220	220	-
2488	U/S ANOOPSHAHA R	680	920	680	780	-	-	1100	1200	920	970	-	-	140	130	140	110	-	-	-	-	-	-	-	-
2489	ANOOPSHAHA R D/S	1100	1200	920	930	-	-	1200	1300	950	950	-	-	140	170	140	-	-	-	-	-	-	-	-	-
1145	NARORA (BULANSAHAR)	1300	1100	1100	920	-	-	950	980	930	-	-	-	220	220	220	-	-	-	-	-	-	-	-	-
2490	KACHHLA GHAT (ALIGARH)			320		-	-	210	220	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10151	FARRUKHABAD	1100	1100	1200	1000	-	-	6300	920	980	930	930	980	1100	920	540	-	-	-	-	-	920	780	350	-
1063	U/S KANNAUJ (RAJGHAT)	1400	1700	1500	-	-	-	1100	1400	1300	-	1300	1100	1700	1300	1100	-	-	-	-	-	1700	1700	1100	-
1066	KANNAUJ D/S	1700	2500	1300	1600	-	-	1600	1700	1600	1600	1600	-	1700	2100	1700	-	-	-	-	-	2200	2100	2100	-
1146	BITHOOR (KANPUR)	2100	2500	1400	-	-	-	1100	1100	1400	1100	1100	-	1100	1700	1300	-	-	-	-	-	1700	1400	1700	-
1067	U/S KANPUR (RANIGHAT)	3200	3500	2800	-	-	-	2500	1700	1700	1800	2500	-	2500	1700	2100	-	-	-	-	-	2000	1800	1700	-
10154	U/s SHUKLAGANJ /BATHING GHAT (BHARAOGHAT)	2100		2100	-	-	-	2100	1700	1600	1700	1800	-	1500	2200	2800	-	-	-	-	-	2400	1700	2100	-
10155	SHUKLAGANJ D/S	3100	2100	3100	-	-	-	2700	2200	1800	2100	3200	-	3100	-	2500	-	-	-	-	-	2500	2800	3400	-



Station Code	Station name	Fecal Coliform (MPN/100 ml) in Uttar Pradesh (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd
10156	BATHING GHAT (GOLA GHAT)	13000	11000	10000	-	-	-	3500		3500	4100	4100	-	3400	2800	3100	-	-	-	-	-	3400	3300	2700	-
10157	BATHING GHAT (JAJMAU BRIDGE)	23000	17000	14000	-	-	-	10000	14000	7000	6800	4900	-	6300	7000	4900	-	-	-	-	-	-	-	4000	-
1068	KANPUR D/S (JAJMAU PUMPING STATION)/JANE VILL.	17000	21000	15000	-	-	-	14000	14000	7900	11000	7900	-	9200	14000	8400	-	-	-	-	-	9800	8400	6800	-
1147	DALMAU (RAI BAREILLY)	1400	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2498	KALA KANKAR (RAI BAREILLY)	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2487	KADAGHAT (PRAYAGRAJ)	-	-	-	-	-	-	-	-	810	-	-	-	220	930	820	840	-	-	-	-	-	-	-	-
1046	PRAYAGRAJ (RASOOLABAD)	-	-	-	-	-	-	1100	-	1200	-	-	-	920	930	930	910	-	-	-	-	-	-	680	-
1049	PRAYAGRAJ D/S (SANGAM)	-	-	-	-	-	-	-	-	1200	-	-	-	920	930	1000	830	-	-	-	-	-	-	-	-
10158	A/C TAMAS RIVER (SIRSA)	-	-	-	-	-	-	-	-	810	-	-	-	680	630	680	700	-	-	-	-	-	-	-	-
2485	U/S, VINDHYACHAL (MIRZAPUR)	800	500	800	500	1100	-	800	700	1100	800	-	-	1100	1300	1100	1300	900	800	800	1100	800	1100	1300	1300
2486	D/S, MIRZAPUR	13000	13000	11000	8000	8000	-	11000	8000	13000	11000	-	-	13000	11000	13000	11000	13000	13000	13000	11000	7000	13000	8000	14000
10153	CHUNAR	8000	8000	8000	4000	7000	8000	8000	5000	8000	7000	-	-	7000	5000	8000	7000	7000	9000	8000	7000	5000	7000	7000	8000
1070	U/S VARANASI (ASSIGHAT)	800	700	700	800	-	-	800	500	800	1100	-	-	-	-	-	-	-	-	800	700	-	-	-	-
1071	VARANASI D/S (MALVIYA BRIDGE)	11000	13000	8000	11000	-	-	11000	8000	11000	13000	-	-	-	-	-	-	-	-	9000	11000	-	-	-	-
10152	A/C GOMTI RIVER (BHUSAULA)	5000	7000	7000	8000	-	-	5000	4000	7000	5000	-	-	-	-	-	-	-	-	7000	8000	7000	6800	-	-

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Uttar Pradesh (2021)																								
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December		
		Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	
1073	TARIGHAT (GHAZIPUR)	130	140	900	140	-	-	130	110	130	140	-	-	-	-	-	-	-	-	-	110	130	-	-	-	-

### Water quality of river Ganga in Uttar Pradesh w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Uttar Pradesh (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd	Ist	IInd
10150	MADHYA GANGA BARRAGE (BIJNOR)	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	-	1.8	1.8	1.8	1.8
10149	U/S BRIJGHAT, GARHMUKTESHWAR	120	120	49	170	-	-	110	110	110	79	130	-	110	70	110	94	110	-	70	120	46	63	20	
1062	BRIJGHAT D/S, GHARMUKTESHWAR	150	120	70	280	-	-	150	220	170	170	280	240	170	94	170	140	210	-	210	1.8	120	120	40	
2488	U/S ANOOPSHAHAR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2489	ANOOPSHAHAR D/S	-	-	-	-	-	-	-	-	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-
1145	NARORA (BULANDSAHAR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2490	KACHHLA GHAT (ALIGARH)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10151	FARRUKHABAD	1.8		1.8	600	-	-	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-	-	-	-	-	-	1.8	1.8	1.8	-
1063	U/S KANNAUJ (RAJGHAT)	1.8	1.8	-	-	-	-	1.8	1.8	1.8	-	1.8	1.8	1.8	1.8	-	-	-	-	-	-	1.8	1.8	1.8	-
1066	KANNAUJ D/S	1.8	1.8	330	33	-	-	1.8	20	1.8	33	1.8	-	1.8	40	1.8	-	-	-	-	-	1.8	1.8	1.8	-
1146	BITHOOR (KANPUR)	45	40	1.8	-	-	-	40	40	40	1.8	45	-	34	1.8	43	-	-	-	-	-	40	40	45	-
1067	U/S KANPUR (RANIGHAT)	20	-	1.8	-	-	-	11	1.8	11	1.8	20	-	1.8	20	1.8	-	-	-	-	-	20	20	20	-
10154	U/s SHUKLAGANJ /BATHING GHAT (BHARAOGHAT)	45	-	1.8	-	-	-	1.8	1.8	1.8	1.8	45	-	40	78	46	-	-	-	-	-	78	78	68	-

43687/2022/LAW-HO

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Uttar Pradesh (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd	Ist	IIInd
10155	SHUKLAGANJ D/S	-	20	34	-	-	-	26	33	20	34	20	-	22	-	22	-	-	-	-	-	20	20	20	-
10156	BATHING GHAT (GOLA GHAT)	-	1.8	26	-	-	-	1.8	-	1.8	1.8	1.8	-	1.8	1.8	1.8	-	-	-	-	-	1.8	1.8	1.8	-
10157	BATHING GHAT (JAJMAU BRIDGE)	20	20	50	-	-	-	20	20	1.8	50	20	-	1.8	22	21	-	-	-	-	-	-	-	20	-
1068	KANPUR D/S (JAJMAU PUMPING STATION)/JANE VILL.	1.8	-	40	-	-	-	1.8	1.8	1.8	40	1.8	-	21	1.8	1.8	-	-	-	-	-	1.8	1.8	1.8	-
1147	DALMAU (RAI BAREILLY)	1.8	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2498	KALA KANKAR (RAI BAREILLY)	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2487	KADAGHAT (PRAYAGRAJ)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1046	PRAYAGRAJ (RASOOLABAD)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1049	PRAYAGRAJ D/S (SANGAM)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10158	A/C TAMAS RIVER (SIRSA)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2485	U/S, VINDHYACHAL (MIRZAPUR)	4300	-	2100	1700	2100	-	1400	1100	900	800	-	-	1100	900	900	700	700	6300	6000	8000	7000	5000	11000	11000
2486	D/S, MIRZAPUR	-	7000	7000	4900	6300	-	9000	7000	8000	7000	-	-	9000	7000	9000	7000	11000	8000	9000	7000	27000	34000	90000	90000
10153	CHUNAR	-	4900	4900	4300	4600	4900	6300	4900	6300	4900	-	-	6300	4600	6300	4900	7000	8000	6300	7000	22000	50000	63000	49000
1070	U/S VARANASI (ASSIGHAT)	4600	3400	3100	3400	-	-	2300	2100	900	1100	-	-	-	-	-	-	-	-	7000	5000	-	-	-	-
1071	VARANASI D/S (MALVIYA BRIDGE)	11000	9000	7000	8000	-	-	7000	6300	7000	11000	-	-	-	-	-	-	-	-	7000	9000	-	-	-	-
10152	A/C GOMTI RIVER (BHUSAULA)	7000	6300	2200	6300	-	-	4300	3400	4300	4600	-	-	-	-	-	-	-	-	4300	4900	20	20	-	-
1073	TARIGHAT (GHAZIPUR)	9000	13000	11000	13000	-	-	8000	7000	9000	11000	-	-	-	-	-	-	-	-	8000	11000	-	-	-	-

## 3. Water quality of river Ganga in Bihar

## Water quality of river Ganga in Bihar w.r.t DO

Station Code	Station name	DO (mg/l) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
1074	BUXAR, CHAUSA KARNASA	11	9.9	11.4	9.2	8.5	11.2	9.6	9.4	8.8	8.3	10.2	7.4	6.7	9.9	6.5	5.6	7.2	7.5	5.4	-	6.4	8.4	11.5	9.8
10113	U/S JAIL GHAT, BUXAR ( A/C THORA RIVER)	12	9.9	11.9	10.9	7.9	9.3	8.3	-	7.2	7.8	7.3	-	8.2	7.9	6.4	6.3	8.5	7.5	5.7	-	6.5	8.2	12.5	11.1
2551	BUXAR, RAMREKHAGHAT	9.2	8.8	9.1	9.9	7.5	8.7	8.1	8	6.8	7.6	8.3	7.2	7.2	7.3	6.1	8.8	7.7	7.7	5.2	-	6.7	7.9	10.1	11.7
3113	BUXAR D/S, NEAR GANGA BRIDGE	7.8	9	10.2	7.1	7.2	7.9	7.6	7.9	6.6	7.7	10.7	6.5	5.1	6.5	5.9	5.7	8.6	6.2	6.4	-	5.7	8.6	10.9	10.9
10162	ARRAH-CHAPRA ROAD BRIDGE, U/S DORIGANJ	9.8	9	10.2	9.5	9.6	8.6	8.1	8.4	8.7	7.9	7.8	7.9	5.9	6.5	6.3	5.6	8.3	6.9	6	-	-	-	8	-
2564	C/F OF SONE RIVER AT DORIGANJ, CHAPRA	9.5	7.9	9.4	9.7	9.3	8	-	8.2	8.6	8.1	7.5	7.6	6.5	6.1	5.9	-	7.5	6.5	6.4	-	-	-	6.8	-
10114	MAA AMBIKA ASTHAN, DORIGANJ D/S (SARAN)	9	8.2	9.6	9.2	7.5	9.1	-	8.1	9.1	8.5	8.9	9.2	6.4	6.7	5.6	6.1	7.7	6.7	7.7	-	-	-	7.1	9.9
3114	DANAPUR, NEAR PIPAPUL	9.4	9	11	8.5	11.2	10.2	9.6	8.9	9	8.4	7.8	7.4	4.8	7	6.1	5.7	-	-	3.9	-	6.4	5.4	-	-
1077	KURJI AT DIGHA GHAT, U/S PATNA	9.6	9.9	9.9	8.7	8.4	10	9.3	9.2	7.8	8.3	7.6	7.2	7	6	5.5	6.6	6.8	7.3	5	-	6.1	7.9	7.8	-
2552	NIT GHANDHI GHAT ( PATNA)	7.8	8.9	8.1	-	5.2	6.6	6.4	7.9	7.6	6.5	6.3	6	6.5	6.2	4.3	-	5.4	6.1	6.5	-	5.6	7.8	7.6	8.7
10115	GULBI GHAT (PATNA)	7.5	7.8	8	9.3	7.3	7.2	6.8	8.1	7.9	6.6	6.1	6.2	6.8	6.6	4.4	5.5	5.6	5.8	5.2	-	6.5	7.3	7.2	8.5
1079	PATNA D/S (GANGA BRIDGE)	9.5	8.7	8.2	9.8	7.7	9.9	7.9	8.4	8.2	7	7.1	6.8	6	5.8	4.3	5.8	5.5	5.9	5.9	-	-	-	7.4	8.9
3122	MALSALAMI (PATNA)	9.5	9.4	8.7	10	7.7	-	9	-	9.1	-	7.5	-	-	-	-	-	-	-	6.2	-	-	-	7	10.1
4297	GANGA AT KACHCHI-DARGAH-BIDUPUR ROAD BRIDGE, PATNA	9.5	10	8.9	11.6	9.5	-	9.1	9.2	8.6	-	7.8	7.9	6.3	6.6	4.5	5.9	-	6.4	6.2	-	-	-	6.8	9.5
10122	TRIVENI GHAT, B/c OF RIVER PUNPUN	7	9.8	8.9	12.6	7.4	-	8.6	8.7	7.5	-	6.9	6.8	7.3	6	5.2	5.7	5.5	7.8	4.5	-	-	-	7.3	9.1
2553	FATUHA, A/c OF RIVER PUNPUN	6	6.5	6	7.7	6.3	-	5.7	7.1	7.6	-	6.4	5.3	6	5.5	5.3	5.9	5.5	4.4	5.4	-	-	-	7.2	8.9
4301	BAKHIYARPUR-TAJPUR BRIDGE ON GANGA, ATHMAGOLA, PATNA	9.4	9	9.8	11.3	9.8	9.6	8	9.8	8.8	7.7	7.1	7.9	6.8	7.2	6.7	6.8	9.2	7.2	7.5	-	-	-	8.2	10.2



43687/2022/LAW-HO

Station Code	Station name	DO (mg/l) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	I	I	II	I	II
3115	BARH, NEAR UMANATH TEMPLE	8.3	9.6	9.3	11.4	9.5	9.6	9.8	9.8	7.5	8.3	7.3	5.6	6.4	7.3	6.6	6.5	6.9	6.8	6.8	-	-	-	7.7	8.8
10130	NAWADAGHAT D/S (WATER INTAKE OF NTPC) BARH	9.6	11.5	9.3	11.3	9.8	12.6	9.5	8.8	8.9	8.9	5.2	7.5	6.5	7.4	6.9	6.8	8.3	6.6	6.9	-	-	-	8.2	9.5
10131	U/S BARAHPUR BINDTOLI	9.5	11.4	9.1	11	9.4	-	9.1	8.6	9.6	9.6	6.4	7.3	-	7.1	6.5	6.1	6.8	6.1	6.4	-	-	-	8	9.1
1817	U/S MOKAMA	9.4	11.2	9	11.2	12.3	8.7	8.8	9.6	8.8	8.5	5.8	7.4	6.2	6.8	7.1	7	6.5	6.4	7.2	-	-	-	9.4	8.9
1815	MOKAMA D/S (D/S RAJENDRA BRIDGE)	9.3	10.6	8.7	11.1	11.5	7.9	8.7	9.6	8.7	8.2	5.9	7.5	6.1	7	6.9	8	7.1	6.7	6.7	-	-	-	8.6	9.4
3123	BARAHIA	9.5	9.1	9.1	12.8	9	9.7	8	9.7	7.6	9	5.4	7.6	6.8	6.9	6.6	6.4	7	6.2	6.8	-	-	-	9.1	11.2
3116	U/S MUNGER	9.6	9.6	11.1	9.3	9.4	10.4	9	8.4	8.5	9.2	6.5	8.9	7.5	6.5	5.4	6.9	6.2	6.7	6.6	-	-	-	8.9	9.3
1818	MUNGER	9.9	9.4	10.5	9.2	9	7.9	8.7	8.8	8.8	8.9	6.1	8.7	7.2	7	5.6	6.4	6.5	7.6	6.4	-	-	-	8.7	9.1
3117	U/S SULTANGANJ	9.8	9.9	10.4	10	8.9	10.3	8.5	8.7	9.1	8.3	7.8	6.4	7.2	6.8	-	7.1	6.9	7.6	6.5	-	-	-	9.1	9
2554	SULTANGANJ (BHAGALPUR)	9	9.8	10.8	9	8.7	9.8	8.5	8.8	8.7	7.4	-	7.1	7.6	-	6.7	6.3	6.8	6.4	6.4	-	-	-	9	8.8
4398	WATER INTAKE POINT, BHAGALPUR	6.9	9.8	7.5	7.1	8.4	-	9.5	8	6.4	7.2	7.3	6.9	7.4	6.3	5.8	6.9	6.7	6.2	6.7	-	-	-	8.2	7.7
10138	CHAMPANAGAR	9	9	9.5	9.3	9.1	8.6	6	9	7.4	6.3	7.9	7.4	6.6	6.5	6	6.1	7.1	8.2	7.2	-	-	-	8.5	8.7
1819	BHAGALPUR	10	-	11.1	9.8	9	10	9	9.1	7.7	8.4	7.4	6.4	7.6	7.2	6.9	6.8	6.8	7.8	6.7	-	-	-	9.2	8.5
3118	U/S BHAGALPUR	3.7	5.2	7.8	7.9	7.5	5.9	10	8	6.1	7	7.1	7.1	6.2	7.2	5.8	6.2	6.4	6.8	6.1	-	-	-	7.1	8.2
1816	KAHALGAON	-	9.6	9.8	10.1	9.4	9.3	8.2	-	-	-	6.7	-	6.5	7.6	7.1	-	6.6	6.2	7.8	-	-	-	9	7.9
10143	KAHALGAON D/S, NEAR CREMATION GHAT	9.5	-	10.6	10.3	9	9.1	8.5	-	-	-	6.4	6.4	7.6	6.3	7.3	-	6.1	6.6	7.4	-	-	-	8.8	7.4

## Water quality of river Ganga in Bihar w.r.t BOD

Station Code	Station name	BOD (mg/l) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
1074	BUXAR, CHAUSA KARMNASA	1.2	2.1	1.4	1.8	1.6	1.3	1.6	1.2	1.2	2.2	1.7	1.5	1.1	1	2	2	1.3	1.6	1.8	-	2.5	1	1	1.3
10113	U/S JAIL GHAT, BUXAR ( A/C THORA RIVER)	1	2.3	1.3	1.4	1.7	1.1	1.9	-	1.4	1.8	1.8	-	1.2	1.2	1.9	1.9	1	1.3	2.6	-	2	1.4	1.8	1.2
2551	BUXAR, RAMREKHAGHAT	1.9	1.8	1.5	1.6	1.6	1	1.7	2.3	1.7	2.1	3.3	3	1.5	1.5	2	2.2	1.4	1.4	1.7	-	2.9	2	1	1.3
3113	BUXAR D/S, NEAR GANGA BRIDGE	1.7	1.3	1.2	1.9	1.7	1	1.9	2.1	1.8	2.1	6.4	3.3	1.8	1.7	2.4	2.8	1.1	2	1.8	-	3	1.9	1.1	1.6
10162	ARRAH-CHAPRA ROAD BRIDGE, U/S DORIGANJ	1.5	1.8	1.1	1.8	1.4	1.4	1.2	1.3	1	1	1.6	1.7	1.2	1.1	2	2.1	1.2	2.4	1.8	-	-	-	1.4	
2564	C/F OF SONE RIVER AT DORIGANJ, CHAPRA	1.4	1.9	1.8	1.3	1	1.3	-	2.1	1.1	1.1	1.8	1.4	1.5	1.8	2.5	-	1.9	2.3	2.9	-	-	-	1.9	-
10114	MAA AMBIKA ASTHAN, DORIGANJ D/S (SARAN)	1.4	1.8	1.2	1.7	1.5	1.5	-	1.6	1	1.2	2.6	1	1.5	1.4	2.8	2.7	1.7	2.4	2.3	-	-	-	1.5	1
3114	DANAPUR, NEAR PIPAPUL	2.3	1.6	1.7	1.7	1.4	1.3	1.3	1.5	1.3	1.1	1.1	1.2	3	2.4	1.8	3.5	-	-	4	-	2.8	2.4	-	-
1077	KURJI AT DIGHA GHAT, U/S PATNA	1.4	2	1.2	1.4	1.2	2.3	1.6	1.2	1.6	1.2	1.3	1.5	1.8	4	2.3	2.2	1.7	1.5	2.9	-	2.5	1.6	1.9	-
2552	NIT GHANDHI GHAT ( PATNA)	1.6	2	2	-	2.6	3	2.6	2	2.4	1.8	2.2	2.3	2.1	2	2.8	-	3	2.6	2.5	-	3	1.2	1.8	2.5
10115	GULBI GHAT (PATNA)	1.8	2.2	2.3	2.1	2.1	2.6	2.8	2.2	2.8	1.9	2.5	2.7	2	2.2	3.2	2.8	2.8	3.1	2.8	-	1.9	1.4	2	2.5
1079	PATNA D/S (GANGA BRIDGE)	1.8	1.2	2.1	1.7	1.9	1.8	2.1	2.1	1.9	1.7	1.7	2.3	2.2	2.6	3	2.3	3	2.6	2.3	-	-	-	1.7	2.2
3122	MALSALAMI (PATNA)	1.2	1.6	1.7	1.3	1.7	-	1.6	-	1.4	-	1.1	-	-	-	-	-	-	-	2	-	-	-	2.1	1.4
4297	GANGA AT KACHCHI-	1.4	1.5	1.5	1.6	1.3	-	1.6	1.3	1.2	-	1.4	1.2	2	2.7	3	2.6	-	1.8	2.9	-	-	-	2.5	1.4

43687/2022/LAW-HO

Station Code	Station name	BOD (mg/l) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
	DARGAH-BIDUPUR ROAD BRIDGE, PATNA																								
10122	TRIVENI GHAT, B/c OF RIVER PUNPUN	1.4	2	1.3	2.1	2.1	-	1.8	1.8	1.5	-	1.6	1.8	1.9	1.8	2.3	2.9	2.5	3	3	-	-	-	2.1	1.7
2553	FATUHA, A/c OF RIVER PUNPUN	2	4	2.9	1.8	2.4	-	3	1.8	2.1	-	2.3	2.6	2.8	4.1	2.8	2.3	2.9	3	2.5	-	-	-	2	1.8
4301	BAKHYYARPUR-TAJPUR BRIDGE ON GANGA, ATHMAGOLA, PATNA	1.4	1.2	1.7	1.8	1.4	1.1	1.2	1.5	1.1	1.1	1.5	1	1.1	2.1	2.2	1.8	1	1.4	1.4	-	-	-	1.3	1.4
3115	BARH, NEAR UMANATH TEMPLE	1.5	1.1	1.6	1.4	1.4	1.6	1.3	1.4	1.2	1.3	1	2.4	1.4	1.9	2.1	2	2.4	1.8	1.7	-	-	-	1.7	2.2
10130	NAWADAGHAT D/S (WATER INTAKE OF NTPC) BARH	2.5	2	1.7	2.1	1.2	1.4	1.6	1.4	1.1	1.1	2.7	1.1	1.5	1.8	1.9	2.2	1.3	1.8	1.9	-	-	-	1.2	1.5
10131	U/S BARAHPUR BINDTOLI	1.8	1.3	1.8	2.9	1.8	-	2	1.7	1.7	1.7	1.2	1.3	-	1	1.9	2.6	1.8	2.4	2.1	-	-	-	1.8	2.3
1817	U/S MOKAMA	1.7	1	1.8	2.3	1.8	1.9	2.1	1.3	1.1	1.2	2.8	2.6	1.7	2.4	2	1.5	1.8	1.9	1.7	-	-	-	1.9	2.1
1815	MOKAMA D/S (D/S RAJENDRA BRIDGE)	1.5	1.9	1.9	1.1	2.3	7.9	2.1	1.4	1.3	1.5	2.4	2.1	1.8	2.4	2	1.9	1.4	1.8	2.1	-	-	-	1.5	1.5
3123	BARAHIA	1.7	1.3	1.9	1.3	1.5	2.1	2.2	1.2	1.2	1.1	2.3	2.3	1.2	2	2.3	1.9	1.3	1.6	2.5	-	-	-	1.3	1.6
3116	U/S MUNGER	1.6	2.1	1.2	1.9	1.1	1.4	2.4	1.6	1.1	1.2	1.2	1.4	1.1	2	2.8	2.2	2.2	1.7	2.5	-	-	-	1.5	1.7
1818	MUNGER	1.8	1.6	1.6	1.8	1.4	1.6	1.9	2.1	1.5	1.1	1.8	1.8	1.2	1.9	3.2	2.2	1.9	1.4	2.6	-	-	-	1.6	1.6
3117	U/S SULTANGANJ	2	1.5	1.8	1.6	2	1.5	2.2	1.8	1.3	1.2	1.7	1.2	1.2	1	-	1.9	1.3	1.6	2	-	-	-	1.7	1.3
2554	SULTANGANJ (BHAGALPUR)	2.9	2	2.1	1.7	1.6	1.8	2.7	2.1	1.7	2.1	2.3	-	1.4	1.9	-	2.2	2.3	1.8	2.4	-	-	-	2.8	2.2
4398	WATER INTAKE POINT, BHAGALPUR	2	3	3.2	3	3	-	3.1	3	2.3	1.9	1.8	1.9	2.2	2.1	2.3	1.7	1.6	2.8	2.1	-	-	-	2.8	2.5
10138	CHAMPANAGAR	1.8	1.7	1.3	1.6	1.4	1.5	1.4	1.2	1.6	1.6	1.1	4.2	1.6	1.7	2.2	2.6	1.4	1	1.7	-	-	-	2.1	1.4
1819	BHAGALPUR	2.8	-	1.5	1.4	1.7	1.4	1.3	1.8	1.1	1.1	1.2	2.4	3	1.1	1.9	2	1.3	1	1.5	-	-	-	1.7	1.8

43687/2022/LAW-HO

Station Code	Station name	BOD (mg/l) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
3118	U/S BHAGALPUR	3	2.4	3	2.9	6.6	3.2	3	2.9	2.1	2.1	1.9	1.8	2.2	2	2	2.5	2.4	1.8	2.5	-	-	-	2	1.9
1816	KAHALGAON	-	2.3	1.4	1.5	2.1	1.6	2.4	-	-	-	2.3	-	1.9	1.8	1	-	1.7	2.2	1.9	-	-	-	1.6	2.1
10143	KAHALGAON D/S, NEAR CREMATION GHAT	2.1	-	1.9	1.6	1.3	1.3	2	-	-	-	-	2.3	2.6	1.8	1.2	-	2.2	2.5	1.9	-	-	-	1.4	1.7

## Water quality of river Ganga in Bihar w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	I I	I	II	I	II
1074	BUXAR, CHAUSA KARMA NAS A	160 000	130 0	350 00	160 000	790 0	270 0	170 00	170 00	790 0	160 000	330 0	130 00	170 00	170 00	540 00	160 000	160 000	540 00	350 00	-	540 00	240 00	790	280 00
10113	U/S JAIL GHAT, BUXAR ( A/C THORA RIVER)	920 00	330 0	170 00	240 00	160 000	140 00	350 00	-	160 000	540 00	160 000	-	460 0	350 00	160 000	160 000	240 00	700 0	160 000	-	920 00	160 000	490 0	170
2551	BUXAR, RAMREK H AGHAT	160 000	270 0	540 00	490 0	350 00	220 00	160 000	350 00	160 000	160 000	540 00	160 000	160 000	920 00	330 0	160 000	160 000	160 000	160 000	-	160 000	160 000	540 00	490 0
3113	BUXAR D/S, NEAR GANGA BRIDGE	350 00	490 0	920 00	540 00	170 00	160 000	350 00	170 00	920 00	160 000	160 000	160 000	160 000	160 000	350 00	160 000	920 00	160 000	350 00	-	160 000	920 00	700 0	170 00
10162	ARRAH- CHAPRA ROAD BRIDGE,	130 0	340 0	170 00	230 0	130 00	220 00	140 00	220 0	330 0	540 00	540 00	170 0	160 000	240 00	110 00	270 0	920 00	170 0	240 00	-	-	-	540	-



43687/2022/LAW-HO

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
	U/S DORIGANJ																								
2564	C/F OF SONE RIVER AT DORIGANJ, CHAPRA	7900	7900	3300	1700	1100	3300	-	3500	7900	7000	160000	160000	160000	160000	2300	-	160000	92000	54000	-	-	-	54000	-
10114	MAA AMBIKA ASTHAN, DORIGANJ D/S (SARAN)	3400	2800	2400	3100	1100	2300	-	2200	1100	2400	2100	92000	160000	160000	11000	17000	92000	92000	160000	-	-	-	160000	4000
3114	DANAPUR, NEAR PIPAPUL	780	1300	200	680	330	280	3300	4600	2100	1700	160000	780	160000	35000	160000	92000	-	-	92000	-	13000	92000	-	-
1077	KURJI AT DIGHA GHAT, U/S PATNA	7900	7000	1700	3300	54000	35000	35000	24000	35000	54000	160000	4900	54000	160000	54000	24000	92000	7900	160000	-	17000	35000	13000	-
2552	NIT GHANDHI GHAT (PATNA)	160000	160000	160000	-	160000	160000	160000	160000	160000	92000	160000	160000	92000	160000	160000	-	160000	160000	160000	-	160000	160000	160000	92000
10115	GULBI GHAT (PATNA)	160000	160000	160000	160000	160000	160000	160000	92000	160000	92000	160000	160000	160000	92000	35000	54000	160000	160000	160000	-	160000	54000	160000	54000
1079	PATNA D/S (GANGA BRIDGE)	92000	54000	54000	92000	160000	92000	160000	54000	92000	35000	160000	54000	160000	160000	160000	22000	92000	160000	160000	-	-	-	160000	17000
3122	MALSALAMI (PATNA)	160000	54000	54000	92000	35000	-	35000	-	54000	-	160000	-	-	-	-	-	-	-	24000	-	-	-	92000	3300
4297	GANGA AT KACHCHI-DARGAH-BIDUPUR ROAD	92000	35000	35000	54000	54000	-	35000	17000	13000	-	35000	24000	160000	24000	160000	35000	-	35000	17000	-	-	-	92000	24000

43687/2022/LAW-HO

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
	BRIDGE, PATNA																								
10122	TRIVENI GHAT, B/c OF RIVER PUNPUN	35000	13000	35000	14000	22000	-	17000	1100	35000	-	35000	24000	160000	92000	35000	35000	35000	13000	54000	-	-	-	54000	3300
2553	FATUHA, A/c OF RIVER PUNPUN	160000	92000	14000	92000	92000	-	92000	54000	160000	-	160000	35000	160000	54000	35000	54000	35000	160000	160000	-	-	-	160000	3300
4301	BAKHIIYARPUR-TAJPUR BRIDGE ON GANGA, ATHMAGOLA, PATNA	14000	35000	35000	4900	11000	4900	35000	2200	2200	1300	9200	3300	1300	160000	24000	92000	2400	160000	2400	-	-	-	92000	4000
3115	BARH, NEAR UMANATH TEMPLE	11000	35000	35000	4900	160000	54000	3300	160000	1700	13000	3300	35000	4900	160000	2700	24000	16000	13000	3500	-	-	-	160000	92000
10130	NAWADA GHAT D/S (WATER INTAKE OF NTPC) BARH	4900	35000	160000	2300	780	680	160000	7900	1700	1700	35000	780	160000	54000	92000	4900	35000	160000	35000	-	-	-	92000	17000
10131	U/S BARAHPUR BINDTOLI	11000	35000	17000	4900	35000	-	17000	35000	92000	92000	160000	54000	-	680	160000	24000	2600	35000	2600	-	-	-	92000	160000
1817	U/S MOKAMA	28000	28000	35000	3300	35000	24000	35000	2200	11000	92000	43000	4900	1300	160000	160000	92000	160000	43000	160000	-	-	-	92000	160000
1815	MOKAMA D/S (D/S RAJENDRA BRIDGE)	17000	13000	2700	1300	1700	17000	3400	24000	1300	2300	35000	780	160000	13000	1100	92000	84000	2200	92000	-	-	-	35000	1700

43687/2022/LAW-HO

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	I	I	II	I	II
3123	BARAHIA	24000	4900	2700	2300	13000	2600	7900	3300	160000	35000	160000	92000	160000	160000	160000	240000	33000	22000	49000	-	-	-	92000	54000
3116	U/S MUNGER	54000	54000	24000	4000	2300	92000	24000	160000	1700	7900	160000	54000	160000	160000	46000	49000	92000	21000	92000	-	-	-	160000	11000
1818	MUNGER	54000	54000	24000	11000	35000	22000	92000	35000	1300	1100	160000	160000	27000	17000	22000	79000	35000	35000	24000	-	-	-	160000	35000
3117	U/S SULTANG ANJ	35000	92000	160000	54000	160000	54000	35000	54000	2200	7000	54000	160000	160000	160000	-	35000	54000	92000	92000	-	-	-	54000	160000
2554	SULTANG ANJ (BHAGALPUR)	35000	35000	35000	54000	160000	160000	54000	35000	7900	92000	29000	-	160000	35000	-	160000	35000	54000	54000	-	-	-	92000	49000
4398	WATER INTAKE POINT, BHAGALPUR	13000	35000	35000	92000	54000	-	24000	54000	35000	54000	160000	7000	63000	160000	92000	160000	160000	92000	92000	-	-	-	160000	160000
10138	CHAMPAN AGAR	1300	6300	1700	3300	92000	92000	3300	35000	24000	13000	24000	54000	160000	35000	160000	17000	160000	92000	92000	-	-	-	28000	22000
1819	BHAGALPUR	28000	-	24000	54000	22000	22000	79000	24000	7900	160000	35000	160000	35000	54000	160000	35000	160000	24000	35000	-	-	-	35000	17000
3118	U/S BHAGALPUR	54000	34000	160000	160000	54000	92000	54000	92000	92000	160000	160000	54000	160000	160000	160000	160000	160000	110000	110000	-	-	-	160000	170000
1816	KAHALGAON	-	24000	46000	160000	160000	160000	92000	-	-	-	160000	-	24000	160000	24000	-	92000	24000	35000	-	-	-	160000	140000
10143	KAHALGAON D/S, NEAR CREMATI ON GHAT	1700	-	2300	92000	24000	54000	35000	-	-	-	-	160000	13000	92000	54000	-	160000	28000	54000	-	-	-	160000	170000

## Water quality of river Ganga in Bihar w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	I	I	II	I	II
1074	BUXAR, CHAUSA KARMNASA	220	20	20	120	20	20	45	45	220	20	490	130	230	130	350	330	920	540	330	-	220	790	140	490
10113	U/S JAIL GHAT, BUXAR ( A/C THORA RIVER)	450	130	78	790	140	45	230	-	240	110	350	-	110	490	920	230	490	350	170	-	350	540	130	13
2551	BUXAR, RAMREKHAGHAT	140	270	540	45	110	220	170	490	350	110	350	540	220	920	790	130	540	130	140	-	920	540	170	330
3113	BUXAR D/S, NEAR GANGA BRIDGE	2400	350	45	170	490	340	270	110	170	540	350	130	790	920	170	330	540	330	790	-	540	330	790	170
10162	ARRAH-CHAPRA ROAD BRIDGE, U/S DORIGANJ	1.8	1.8	940	790	1.8	110	20	68	20	45	110	68	130	170	170	110	790	18	2	-	-	-	6.8	-
2564	C/F OF SONE RIVER AT DORIGANJ, CHAPRA	1.8	1.8	170	170	130	20	-	790	45	20	350	700	330	350	20	-	130	270	20	-	-	-	350	-
10114	MAA AMBIKA ASTHAN, DORIGANJ D/S (SARAN)	2400	350	270	270	78	230	-	68	78	130	220	350	350	540	340	230	170	110	68	-	-	-	400	240
3114	DANAPUR, NEAR PIPAPUL	20	1.8	20	1.8	240	4.5	240	490	20	45	350	45	350	350	920	170	-	-	350	-	490	240	-	-
1077	KURJI AT DIGHA GHAT, U/S PATNA	2400	130	170	170	130	68	240	330	130	220	130	20	350	350	350	350	790	350	490	-	790	68	6.8	-
2552	NIT GHANDHI GHAT ( PATNA)	9200	920	170	-	170	790	170	540	540	540	350	920	350	170	540	-	350	920	540	-	280	350	540	540
10115	GULBI GHAT (PATNA)	9200	920	210	170	170	920	220	540	920	920	920	280	920	230	350	540	540	540	540	-	350	350	540	110
1079	PATNA D/S (GANGA BRIDGE)	1700	330	350	490	170	130	170	400	340	350	350	700	540	540	130	110	920	540	540	-	-	-	920	540
3122	MALSALAMI (PATNA)	-	-	-	-	-	-	-	-	-	-	240	-	-	-	-	-	-	-	240	-	-	-	350	170
4297	GANGA AT KACHCHI-	330	350	330	110	490	-	240	330	170	-	110	110	920	130	350	350	-	340	790	-	-	-	540	170



43687/2022/LAW-HO

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	I	I	II	I	II
	DARGAH-BIDUPUR ROAD BRIDGE, PATNA																								
10122	TRIVENI GHAT, B/c OF RIVER PUNPUN	2400	490	1300	110	220	-	220	1.8	330	-	110	1100	3500	3500	3500	790	5400	1300	1300	-	-	-	260	400
2553	FATUHA, A/c OF RIVER PUNPUN	170	3500	2400	1300	790	-	790	24000	2400	-	2800	1700	3500	1300	2400	130	5400	1700	5400	-	-	-	5400	790
4301	BAKHYIYARPUR-TAJPUR BRIDGE ON GANGA, ATHMAGOLA, PATNA	140	230	270	1.8	20	20	270	170	170	45	1300	45	20	20	130	9200	330	170	33	-	-	-	35000	130
3115	BARH, NEAR UMANATH TEMPLE	330	490	790	230	20	1300	68	1700	68	170	45	3500	20	220	330	790	490	130	33	-	-	-	3500	330
10130	NAWADAGHAT D/S (WATER INTAKE OF NTPC) BARH	230	78	1700	45	1.8	1.8	1700	330	78	78	3500	68	270	20	1100	20	340	45	400	-	-	-	110	330
10131	U/S BARAHPUR BINDTOLI	410	130	3500	40	45	-	3500	340	790	790	3500	68	-	40	9200	790	170	490	140	-	-	-	2800	490
1817	U/S MOKAMA	330	2400	20	45	20	45	78	110	40	78	3500	330	20	490	78	790	330	3500	3500	-	-	-	1700	220
1815	MOKAMA D/S (D/S RAJENDRA BRIDGE)	68	490	20	1.8	1.8	-	45	78	20	170	3500	20	700	330	40	5400	170	230	270	-	-	-	1100	400
3123	BARAHIA	230	110	20	110	1.8	20	20	68	3500	1100	5400	3500	1300	18	5400	68	4	1300	68	-	-	-	170	330
3116	U/S MUNGER	3500	3500	1.8	45	45	45	45	270	20	490	110	490	68	110	490	20	27	220	340	-	-	-	93	140
1818	MUNGER	93	1300	20	45	20	1.8	1300	45	130	110	110	490	40	45	1300	20	140	27	170	-	-	-	140	68
3117	U/S SULTANGANJ	110	5400	490	330	78	45	490	2400	20	45	170	78	110	230	-	110	1700	61	68	-	-	-	490	340
2554	SULTANGANJ (BHAGALPUR)	45	1700	110	1700	170	220	1100	130	40	2700	68	-	340	230	-	130	330	140	170	-	-	-	220	490
4398	WATER INTAKE POINT, BHAGALPUR	20	3500	330	130	790	-	130	20	45	2400	3500	330	130	45	1700	130	5400	170	270	-	-	-	170	3500

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Bihar (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	I	I	II	I	II
10138	CHAMPANAGAR	130	78	45	240	45	68	130	45	45	170	110	230	140	330	330	20	920	490	130	-	-	-	330	330
1819	BHAGALPUR	78	-	1.8	230	20	45	170	350	220	240	45	350	490	20	68	78	170	2	68	-	-	-	110	330
3118	U/S BHAGALPUR	130	240	170	340	230	130	400	170	220	170	540	130	490	140	350	330	540	490	330	-	-	-	140	350
1816	KAHALGAON	-	1.8	45	330	350	280	130	-	-	-	540	-	240	350	330	-	490	34	270	-	-	-	700	6.8
10143	KAHALGAON D/S, NEAR CREMATION GHAT	130	-	1.8	270	110	110	330	-	-	-	-	540	45	130	68	-	540	2	110	-	-	-	260	330

#### 4. Water quality of river Ganga in Jharkhand

##### Water quality of river Ganga in Jharkhand w.r.t DO

Station Code	Station name	DO (mg/l) in Jharkhand (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
10144	U/S NEARA LCT GHAT	7.6	7.5	-	-	7.5	-	7.6	-	-	-	-	-	7.6	7.5	6.5	7.2	6.9	-	-	-	6.9	6.9	6.7	-
10145	NEAR JANTA GHAT D/S	7.5	7.6	-	-	7.6	-	7.5	-	-	-	-	-	7.4	7.6	6.4	6.9	7	-	-	-	6.7	6.9	6.9	-
1059	RAJMAHAL	7.8	7.8	7.7	-	7.4	-	7.6	-	-	-	-	-	7.6	7.8	6.5	6.8	6.8	-	-	-	6.8	7.2	6.4	-
10146	SANGI DALAN	7.6	7.6	7.5	-	7.5	-	7.5	-	-	-	-	-	7.5	7.6	7	7	7	-	-	-	6.6	7	6.8	-

##### Water quality of river Ganga in Jharkhand w.r.t BOD

43687/2022/LAW-HO

Station Code	Station name	BOD (mg/l) in Jharkhand (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
10144	U/S NEARA LCT GHAT	2.2	2.2	-	-	1.4	-	1.2	-	-	-	-	-	1.4	1.2	1.4	1.2	1.4	-	-	-	1.4	1.6	1.4	-
10145	NEAR JANTA GHAT D/S	2.4	2.2	-	-	1.6	-	1.4	-	-	-	-	-	1.6	1.4	1.2	1.4	1.6	-	-	-	1.6	1.4	1.2	-
1059	RAJMAHAL	1.4	1.2	1.3	-	1.3	-	1.2	-	-	-	-	-	1.2	1.3	1.6	1.4	1.6	-	-	-	1.4	1.2	1.4	-
10146	SANGI DALAN	1.4	1.6	1.4	-	1.4	-	1.2	-	-	-	-	-	1.2	1.4	1.6	1.2	1.6	-	-	-	1.6	1.4	1.2	-

### Water quality of river Ganga in Jharkhand w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in Jharkhand (2021)																							
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
10144	U/S NEARA LCT GHAT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10145	NEAR JANTA GHAT D/S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1059	RAJMAHAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10146	SANGI DALAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### Water quality of river Ganga in Jharkhand w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) in Jharkhand (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
10144	U/S NEARA LCT GHAT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10145	NEAR JANTA GHAT D/S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1059	RAJMAHAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10146	SANGI DALAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## 5. Water quality of river Ganga in West Bengal

### Water quality of river Ganga in West Bengal w.r.t DO

Station Code	Station name	DO (mg/l) in West Bengal (2021)																								
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sept		Oct		Nov		Dec		
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	
10159	KHAGRA, BEHARAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	5.6	5.6	5.2	7.1	6.6	6.4	-	7.2	7.8	7.8	8.6
1080	BEHARAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	5.5	5.2	5.3	7.1	6.5	6.3	-	7.3	7.1	7.7	8.9
10160	GORABAZAR, BEHRAMPURE	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	5.6	5.2	5.3	6.3	6.5	6.2	-	7	7.8	7.9	8.4
2511	NABADIP,GHOSHPARA NEAR MONIPURGHAT	-	-	-	-	-	-	-	-	-	-	-	-	-	6	5.5	5	6.6	5.8	5.6	5.6	-	7.9	7.7	7.9	6.3
2506	TRIBENI, NEAR BURNING GHAT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.9	6.3	6.3	5.3	5.3	-	-	-	-	-	-
10161	SHITALATALA, PALTA	-	-	-	-	-	-	-	-	-	-	-	-	-	5	4.4	3.5	4.2	-	4.2	5.4	-	5.6	5.5	5.5	7.8
1054	PALTA	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7	4.6	3.2	4.3	4	5	5.4	-	6.5	-	6.9	7.8
1472	SERAMPURE	-	-	-	-	-	-	-	-	-	-	-	-	-	5.4	4.9	3.2	4.2	4.3	5.9	-	-	-	-	-	-
1053	DAKSHINESHWAR	7.7	7.5	6.9	7.7	7	5.5	6.5	6.2	-	-	4.8	4.6	4.5	4.6	4.4	4.9	4.7	4	4.6	-	5.8	5.9	5.8	7.7	
1470	GARDEN REACH	7.4	7.2	7	7.8	7.1	5.6	5.5	5.5	-	-	4.7	4.7	5	4.9	4.2	4	5.3	4.8	-	-	6.1	4.5	6.5	7.4	
1471	SHIVPUR (HOWRAH)	7.5	7	7.5	7.8	6.8	5.6	5.3	5.2	-	-	4.5	4.4	4.7	5.4	4	4.2	4.7	4.2	-	-	6.1	4.5	5.6	7.7	
1052	ULUBERIA	7.8	7.8	7.4	7.7	7.6	5.8	5.2	5.9	-	-	4.9	5.3	4.4	4.7	4.6	4.7	4.7	4.3	-	-	5.4	5	5.4	6.4	
1469	DIAMOND HARBOUR	6.7	7.4	6.9	6	6	5.4	6.2	6.2	-	-	5.2	5.6	4.7	5.2	4	4.3	5.2	4.5	-	-	6	5	6.8	6.2	
1335	GANGA AT PATIKALI NEAR DURGA CHAK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.3	7.1	5.5	-	6	-	-	-	-	-	-

### Water quality of river Ganga in West Bengal w.r.t BOD



Station Code	Station name	BOD (mg/l) in West Bengal (2021)																							
		Jan		Feb		Mar		Apr		May		JUNE		JULY		Aug		Sept		Oct		Nov		Dec	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
10159	KHAGRA, BEHARAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	2.3	2.2	2.5	2	2.3	3.3	2.3	-	1.6	1.8	1.7	1.4
1080	BEHARAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	1.1	3.9	2.3	1.8	2.4	2.9	2.6	-	2.5	1.6	2.7	1.3
10160	GORABAZAR, BEHRAMPOR	-	-	-	-	-	-	-	-	-	-	-	-	2.3	1.2	1.7	1.9	1.7	1.7	1.7	-	1.4	2.8	2.1	2.6
2511	NABADIP,GHOSHPARA NEAR MONIPURGHAT	-	-	-	-	-	-	-	-	-	-	-	-	3.3	3.9	2.4	3.1	2.6	2.1	2	-	2.5	3	1.7	2
2506	TRIBENI, NEAR BURNING GHAT	-	-	-	-	-	-	-	-	-	-	-	-	1.4	3.7	3.6	3.6	2.9	2.9	-	-	-	-	-	-
10161	SHITALATALA, PALTA	-	-	-	-	-	-	-	-	-	-	-	-	4.3	2.9	3.3	2.8	3.7	4	3.9	-	3.9	3.8	4.3	3.4
1054	PALTA	-	-	-	-	-	-	-	-	-	-	-	-	2	2	3.5	2.2	3.7	1.7	1.5	-	3.5	-	3	2.8
1472	SERAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	1.4	1.2	3.6	2.7	2.4	1.1	-	-	-	-	-	-
1053	DAKSHINESHWAR	4	3.9	2.7	2.1	3.3	3.2	3.3	3.2	-	-	2.2	2.3	2	2.5	2.3	2.9	2.4	1.8	2.4	-	3.1	3.6	3.7	3.3
1470	GARDEN REACH	2.7	2.7	3.6	2.6	3.4	3	3	2.9	-	-	2.3	2.2	2.6	2.6	2.2	2	3	2.5	-	-	2.6	2.4	2.1	3.2
1471	SHIVPUR (HOWRAH)	3.5	3	2.1	2.8	2.8	3	2.5	2.9	-	-	2	2.4	2.5	2.1	2	2.1	2.6	1.8	-	-	2.4	2.5	1.9	3.9
1052	ULUBERIA	3.4	3.2	4	3.2	3.6	3.4	3.2	2.9	-	-	2.5	3.2	2.1	2.4	2.3	2	2.4	2	-	-	1.9	1.9	2.9	2.4
1469	DIAMOND HARBOUR	2	2.5	2.4	2	3.6	2.8	3.2	3.3	-	-	2.7	2.8	3.2	2.1	1.1	1.7	2.8	2	-	-	2.3	2	2.2	2.5
1335	GANGA AT PATIKALI NEAR DURGA CHAK	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	1.8	1.6	-	2.5	-	-	-	-	-	-

### Water quality of river Ganga in West Bengal w.r.t FC

Station Code	Station name	Fecal Coliform (MPN/100 ml) in West Bengal (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	I	I	II	I	II
10159	KHAGRA, BEHARAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	1100	3300	4900	2300	1300	2300	2300	-	7900	2300	6300	3300
1080	BEHARAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	1300	7900	1300	3300	1700	1700	7900	-	1300	1100	1300	1300
10160	GORABAZAR, BEHRAMPOR	-	-	-	-	-	-	-	-	-	-	-	-	1700	2300	1700	2300	3300	3300	7900	-	4900	7900	4900	3300
2511	NABADIP,GHOSHPARA NEAR MONIPURGHAT	-	-	-	-	-	-	-	-	-	-	-	-	1100	2300	4900	4900	1100	4900	2300	-	2300	2300	1300	7900

43687/2022/LAW-HO

Station Code	Station name	Fecal Coliform (MPN/100 ml) in West Bengal (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	I	I	II	I	II
2506	TRIBENI, NEAR BURNING GHAT	-	-	-	-	-	-	-	-	-	-	-	-	7900	7900	3300	3300	7900	7900	-	-	-	-	-	-
10161	SHITALATALA, PALTA	-	-	-	-	-	-	-	-	-	-	-	-	7000	1300	4900	6300	1300	1300	1300	-	2400	3300	1100	4900
1054	PALTA	-	-	-	-	-	-	-	-	-	-	-	-	4900	1100	1300	9400	1100	3300	7900	-	4900	-	1100	2300
1472	SERAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	1700	2300	1300	1700	1100	7900	-	-	-	-	-	-
1053	DAKSHINESH WAR	33	790	790	790	490	790	7	31	-	-	790	1100	1100	1100	3300	1100	7900	7000	-	-	7900	7900	7900	4900
1470	GARDEN REACH	23	330	490	490	790	230	3	46	-	-	700	7900	3300	7900	7000	7000	7900	7900	-	-	4600	4900	4900	7000
1471	SHIVPUR (HOWRAH)	49	490	700	330	230	130	2	33	-	-	700	4900	4600	1700	3300	4900	4900	7000	-	-	2300	4600	3300	4900
1052	ULUBERIA	13	230	310	490	170	450	1	17	-	-	230	2700	1300	3300	4900	2300	2300	7900	-	-	2100	1700	1300	2300
1469	DIAMOND HARBOUR	68	680	330	780	450	450	6	23	-	-	450	6800	4500	7800	7800	4500	4500	4600	-	-	3500	6800	4500	3300
1335	GANGA AT PATIKALI NEAR DURGA CHAK	-	-	-	-	-	-	-	-	-	-	-	-	-	9400	8400	7000	-	7900	-	-	-	-	-	-

## Water quality of river Ganga in West Bengal w.r.t FS

Station Code	Station name	Fecal streptococci (MPN/100 ml) in West Bengal (2021)																							
		Jan		Feb		Mar		Apr		May		June		July		August		September		October		November		December	
		I	II	I	II	I	II	I	II	I	I	I	II	I	II	I	II	I	II	I	I	I	II	I	II
10159	KHAGRA, BEHARAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	230	490	940	630	790	460	790	-	790	490	490	490
1080	BEHARAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	790	130	140	940	170	170	170	-	130	110	170	170
10160	GORABAZAR, BEHARAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	330	490	790	700	110	790	110	-	110	130	170	130
2511	NABADIP, GHOSH PARA NEAR MONIPURGHAT	-	-	-	-	-	-	-	-	-	-	-	-	490	840	120	110	490	130	790	-	790	700	330	230
2506	TRIBENI, NEAR BURNING GHAT	-	-	-	-	-	-	-	-	-	-	-	-	340	790	130	130	130	130	-	-	-	-	-	-
10161	SHITALATALA, PALTA	-	-	-	-	-	-	-	-	-	-	-	-	140	170	130	110	170	130	170	-	240	260	240	170
1054	PALTA	-	-	-	-	-	-	-	-	-	-	-	-	490	940	110	940	130	110	130	-	120	-	130	130
1472	SERAMPORE	-	-	-	-	-	-	-	-	-	-	-	-	110	790	700	840	790	110	-	-	-	-	-	-
1053	DAKSHINESHWAR	260	210	220	240	220	78	21	170	-	-	23	33	250	350	270	330	220	220	-	-	330	240	270	260
1470	GARDEN REACH	130	130	170	220	260	78	11	170	-	-	17	11	220	350	320	330	170	330	-	-	210	310	220	330
1471	SHIVPUR (HOWRAH)	170	170	220	220	78	68	11	130	-	-	24	17	170	240	210	250	140	130	-	-	170	270	210	270
1052	ULUBERIA	130	70	170	130	79	23	78	70	-	-	13	14	170	23	220	210	110	130	-	-	140	110	110	110
1469	DIAMOND HARBOUR	45	49	46	26	13	78	20	1.8	-	-	78	45	78	13	23	45	45	20	-	-	33	45	20	33
1335	GANGA AT PATIKALI NEAR DURGA CHAK	-	-	-	-	-	-	-	-	-	-	-	-	-	260	110	240	-	220	-	-	-	-	-	-