

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,**

**Principal Bench, New Delhi**

Original Application No. 200/2014

In the matter of: -

M.C Mehta

Applicant(s)

Vs.

Union of India & Ors.

Respondent(s)

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*Amit Kumar Vidyarthi*

**(A.K. Vidyarthi)**

Scientist-E

Central Pollution Control Board,  
Parivesh Bhawan, East Arjun Nagar,  
Delhi- 110032.

Date: 04.02.2021

Place: Delhi

**Compliance Report on behalf of CPCB in compliance to Hon'ble NGT Order dated 13.08.2020 in the matter of M.C. Mehta Vs Union of India & Ors., O.A. No. 200/2014**

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Environmental compensation calculations for untapped drains discharging untreated effluent into the river Ganga and under construction STP projects, status of guidelines for bio diversity parks and e-flow are being dealt in the report.

**Environmental Compensation Calculations:**

Hon'ble NGT in the matter of M.C. Mehta Vs Union of India & Ors., vide its order dated 7/22.08.2019 (**Annexure-I**) and subsequent orders dated 12/18.12.2019 (**Annexure-II**) and 13.08.2020 (**Annexure-III**) 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 considered the report filed by CPCB on 24.06.2020 and 13.08.2020 and 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 compliance of Hon`ble NGT orders dated 7/22.08.2019 and 12.18.2019, CPCB calculated and levied EC for the untapped drains where interim measures have not been adopted by the States and raised demands for the same with the Chief Secretaries of the States. Only West Bengal had deposited the EC amount of Rs. 20 lacs for one drain. EC is yet to be deposited by the State of Uttar Pradesh, Uttarakhand and Bihar. EC calculated and intimated by the CPCB is based on the information received from the States.

In order to obtain the fresh status of drains and STP projects in order to calculate EC, CPCB sent letters dated 22.10.2020 (**Annexure-IV**) and 28.10.2020 (**Annexure- V**) to state agencies of five Ganga main stem states of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal i.e. State Pollution Control Boards (SPCB), State Project for Mission Ganga (SPMG), Urban Development departments and other concerned agencies requesting to provide the requisite information in enclosed format regarding status of the STPs and drains. Thereafter, reminder letters dated 27.11.2020 (**Annexure-VI**) were also sent to the concerned departments.

Subsequently, a meeting was convened thorough video conference on 07.12.2020 with all concerned agencies of the five Ganga main stem states for reviewing status of drains & STPs to take further action as per Hon`ble NGT order. Minutes of Meeting are annexed at **Annexure-VII**.

Follow-up meetings through video conference were held with concerned departments of States of Bihar and West Bengal on 14.12.2020 and 16.12.2020 (meeting organized by WBPCB) respectively. Minutes of Meeting dt. 14.12.2020 with State of Bihar is attached as **Annexure-VIII**.

In order to finalize the inventory, meetings with concerned state agencies were convened on 12.01.2021 (Jharkhand, Uttarakhand & Bihar) and 14.01.2021 (Uttar Pradesh) and

15.01.2021 (West Bengal). Minutes of these meetings are annexed as **Annexure IX, Annexure-X and Annexure-XI** respectively.

In the meetings, representatives from concerned state agencies put forth their views and made submissions, which were considered while calculating EC. Representative from state of Jharkhand requested to CPCB vide letter dt.12.01.2021 (**Annexure-XII**) to reconsider the EC to be levied for delay in construction of the various components of sewage projects in view of situations arising due to COVID-19 crisis & financial constraints. CPCB considered the request made by State of Jharkhand, providing reason for delay in construction of one under construction STP that is under trial from December 2020 and has not calculated EC for the same as the unit is already under trial for commissioning.

As requested by the State government representatives and hence decided in the meeting held on 16.12.2020, WBSPMG vide emails dated 04.01.2021 and 05.01.2021 requested Hon'ble NGT through CPCB for relaxation/exemption from the penalty/fine imposition in respect of STPs and for untapped drains citing various reasons. Subsequently, again vide letter dated 19.01.2021, West Bengal agencies submitted an explanatory note on 21 Special Category Drains (**Annexure XIII**) requesting to exempt these drains from EC considering their typical nature as the KMDA is considering low cost sewage treatment systems for these drains. Considering this, CPCB has not calculated EC for aforementioned 21 drains. Hon'ble NGT is requested to direct on the same.

SPMG, Uttarakhand vide letter dated 22.01.2021 (**Annexure-XIV**) provided responses for delay in construction of 07 STPs with request to Hon'ble NGT through CPCB on behalf of the State to waive off the EC for the delayed projects. CPCB considering the reason provided by the State Government for under construction STP projects has not calculated EC for the two under construction STP projects out of the 7.

Data on STPs and drains provided by SPMG, Bihar through email dated 24.12.2020 was considered by CPCB while calculating EC for the drains and STPs. Subsequently, vide letter dated 08.01.2021 (**Annexure-XV**), UDHD Bihar has communicated to CPCB that the government is filing an application in Hon'ble Supreme Court of India requesting to waive off the EC levied by the CPCB in pursuance to Hon'ble NGT directions and also to extend the timelines of the STP projects as the projects get delayed due to various reasons. Vide the said

letter government has also requested to extend timelines of the STP projects as per the enclosed annexure and to waive off the EC levied and communicated vide CPCB letter dated 03.02.2020.

Information received from the State agencies of Uttar Pradesh vide emails dated 29.12.2020 and 22.01.2021 was considered while calculating EC.

As per the updated information received from the state agencies via emails and information provided in the meetings, EC has been calculated for untapped drains and delayed/under construction STP projects. The same was communicated to the Chief Secretaries of the States vide letters dated 03.02.2021 (**Annexure-XVI**). Difference in the number of drains in the calculations of EC for different time period is due to the updated information received from the States.

The details of the calculations are summarized below:

#### 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 × @10 lakhs/month/drain (Since 01.07.2020 till 31.12.2020)	:	22x 10 x 06 = 1320 Lakhs

**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 (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****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 × @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 × @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 8x 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 × @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 × @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 × @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 tendering/DPR/Proposed STPs (33 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 × @10 lakhs/month/drain (Since 01.07.2020 till 31.12.2020)	:	0

#### 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 × @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 × @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*

**In the meeting held with five Ganga main stem states for finalizing EC calculations state agencies has requested Hon'ble NGT through CPCB to consider the unavoidable reasons (including COVID-19 and delay in sanctioning of the projects) for delay in the project work and exempt/post pone them from levying EC and also to extend the timelines of the delayed projects.**

**Guidelines for Biodiversity parks**

Hon'ble NGT vide order dated 14.05.2019 (**Annexure-XVII**) directed the CPCB along with MoEF&CC to develop guidelines for setting up of bio-diversity parks. Subsequently, vide order dated 12/18.12.2019, Hon'ble NGT further directed:

*“28. 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.”*

CPCB vide its compliance report dated 23.06.2020 considered by Hon'ble NGT (filed on 24.06.2020) has filed the final guidelines prepared for setting up of bio-diversity parks.

*“Guidelines for setting up of Biodiversity Parks in the flood plain of the rivers of India, including river Ganga”* has been prepared and uploaded on CPCB website available at the following link:

<https://cpcb.nic.in/openpdffile.php?id=UmVwb3J0RmlsZXMvMTE1M18xNjA3NDI3NjkxX21lZGllhcGhvdG8xMTYxMi5wZGY=>

The same has also been circulated vide CPCB letters dated 07.01.2021 (**Annexure-XVIII**) to the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) with a request to forward the guidelines to the concerned state agencies for necessary action.

**Impact of E-flows on riverine aquatic life:**

With regards to the issue of E-flow, Hon'ble NGT order dt. 29.11.2018 directed,

*“E-flows has been notified by the Ministry of Water Resources. Various instrumentalities must ensure that e-flows as notified be strictly maintained for the health of aquatic life. The impact on riverine aquatic life as a result of newly mandated e-flow regime needs to be compiled by the CPCB led/constituted agencies and report submitted to this Tribunal”.*

The tribunal in its order dated 12/18.12.2019 further, directed *“CPCB and SPCBs may periodically undertake biological assessment of Ganga. NMCG and States concerned may depict biological diversity of Ganga in public domain”.*

CPCB submits that the biological diversity is a vast subject and requires involvement of experts from various specialised research field. In compliance to the above orders, CPCB organised a workshop on 06.02.2020 (**Minutes attached as Annexure-XIX**) on “Impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along the River Ganga” which was attended by prominent scientists and experts from various research institutions having expertise on the subject matter. The comments submitted by experts were compiled and reviewed. During the meeting, it was decided to develop an integrated proposal for achieving both the key objectives as per the Hon'ble NGT order(s). Further, it was indicated that the ecological flow study has to be carried out at upstream as well as downstream of structures of upper Ganga reach comprising of 4 dams of River Bhagirathi and 2 dams of River Alakhnanda and also at 5 barrages of middle Ganga stretch from Haridwar (Uttarakhand) to Unnao (Uttar Pradesh) as mentioned in the MoWR gazette notification emphasizing on the impact of discharge on aquatic biota to determine river health. However, the bio-monitoring study has to depict biological diversity along the entire stretch of the River Ganga from origin till confluence at Bay of Bengal and therefore, will include additional sampling sites even beyond Unnao region. Bio-monitoring study will help categorize the entire

river stretch into polluted or non-polluted stretch based on absence/presence of aquatic bio-indicators.

Due to the lockdown, the said study has been delayed. Further, after lockdown, a webinar was organized on 21.10.2020 (**Minutes attached as Annexure-XX**) by the CPCB under the guidance of Prof. C.R. Babu, Delhi University, where a number of research organizations/universities such as ICAR-CIFRI, ZSI, CSIR-NEERI, CWC, WII, HNB Garhwal University, Central University of South Bihar participated to discuss specific sampling locations/sites, significant parameters/bio-indicators for both the studies, their sampling/analysis methodology as well as sampling frequency.

Since the study has various diverse components that requires expertise on bio-monitoring approaches, ecology of various species such as fishes, zooplankton, phytoplankton, periphytons, benthic-invertebrates, mammals, amphibians, reptiles, macrophytes and statistical analysis, therefore, it is proposed that integrated study may be executed either by individual institute having all facilities to achieve both the objectives or under consortium approach, wherein, a consortium of technical institutions and individual experts may be formed. The consortium must choose a lead organization amongst themselves that shall be responsible for: (i) the co-ordination of study activities; (ii) allocation of specific stretches for sampling to other participatory institutes; (iii) ensuring unified study approach; (iv) application of standard methodologies for sampling as well as analysis and (v) timely execution of the proposed study.

The project proposal for above studies has been prepared and is under bidding stage. The time line for conducting the studies is 1 year and additional 6 months is required for data analysis as well as report preparation.

**Hon'ble NGT is therefore, requested to grant time of 2 years to CPCB for completion of the project. CPCB will ensure periodic filing of progress report to Hon'ble NGT**

Now, this compliance report is submitted for consideration of Hon'ble NGT

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

Original Application No. 200/2014

M.C. Mehta

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 07.08.2019

Date of uploading of the order on website: 22.08.2019

**CORAM:** HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

**ORDER**

1. The matter has been taken up for reviewing the progress of compliance of directions of this Tribunal dated 10.12.2015 and 13.07.2017 on the subject of preventing and remedying the pollution of river Ganga. The matter was earlier being considered by the Hon'ble Supreme Court since the year 1985, before being transferred to this Tribunal, in the year 2014 and 2017<sup>1</sup>.
2. The Tribunal dealt with the pollution caused on account of illegal discharge of untreated sewage and industrial effluents either directly into the River Ganga or its tributaries and connected drains, besides, issues of dumping of solid waste,

<sup>1</sup> M.C. Mehta vs. Union of India & Ors. Writ Petition (Civil) No. 3727/1985 order dated 29.10.2014 and 24.01.2017

bio-medical waste, hazardous waste, plastic waste, muck and other waste, illegal sand mining, illegal encroachment of the floodplains, absence of steps for conservation of ground water, reuse of treated water and restoration of water bodies and maintenance of e-flow.

3. The matter was dealt with by two orders dividing the area covered by the River Ganga into different 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,

**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).

4. As already noted, the proceedings have been pending since 1985. Various orders have been passed by the Hon'ble Supreme Court on the subject before transfer of proceedings to this Tribunal and thereafter by this Tribunal. The result of monitoring for 34 years has not been encouraging. Government of India took initiatives by way Ganga Action Plans I & II and thereafter by way of *Namami Gange*. The progress so far has been far from satisfactory, as noted in earlier orders.
5. While considering the progress of compliance of orders of this Tribunal, vide order dated 19.07.2018 with regard to **Phase-I -**

**Segment-A** and order dated 28.07.2018 with regard to **Phase-I - Segment-B**, the CPCB/SPCBs were required to display the result of water samples at various locations and atleast at one place within 100 kms showing whether water was fit or not fit for consumption or for bathing. Monitoring Committee was constituted headed by a former Judge of the Uttarakhand High Court for **Phase-I Segment-A** and Allahabad High Court for **Phase-I Segment-B** to take stock of the actions taken with clear measurable indicators of progress and success and to oversee the action plans. The actions were required to cover interception and diversion of drains carrying sewage to STPs, laying of sewerage network, utilization of treated sewage, compliance of norms by industries in the catchment areas, ground water regulation, flood plain regulation, rain water harvesting systems, good irrigation practices and filing list of industries which have the potential for pollution and creation of bio-diversity parks.

6. Further, order dated 29.11.2018 dealt with the progress in the **Segment A and B of Phase-I** on STPs, CETPs, tapping of drains, compliance of MSW Rules, setting up of bio-digesters, sewerage network, improvement in water quality, unregulated ground water extraction, e-flow, public involvement, decentralized waste processing facility close to the source of generation of waste, protection of floodplains and illegal mining.

7. Again, on 11.03.2019 deficient working of CETPs at Jajmau, Banthar and Unnao was considered and directions were issued to consider closure of non-compliant units to improve the water quality.
8. Vide order dated 14.05.2019, this Tribunal considered the report from Justice U.C. Dhyani with regard to **Segment-A of Phase-I** dated 09.05.2019 *inter-alia* pointing out non-compliance in respect of the STPs. The Tribunal directed remedial action including recovery of environmental compensation in view of repeated failures to comply with the directions by the Hon'ble Supreme Court and this Tribunal for the last 34 years. NMCG was to ensure compliance with regard to prevention and removal of encroachments, maintenance of e-flow, afforestation and setting up of bio-diversity parks, ground water regulation, sand mining regulation, stopping any camping on the banks of river Ganga or its tributaries. With regard to **Segment-B of Phase-I**, after noting that the industries were discharging untreated effluents in river Ganga, the Tribunal directed closure of all activities of the members of the dysfunctional CETPs, until the CETPs are compliant. It was further directed that only treated effluents may be discharged into the River Ganga and its tributaries. Further direction was that coercive measures be taken against officers of UPPCB and NMCG colluding in permitting continued operations of polluting activities. Direction was also given for remediation of chromium dumps at Kanpur Dehat, Khanpur and Rakhi Mandi in Uttar

Pradesh and ensuring of proper e-flow from the Narora Barrage.

9. With regard to **Phase-II to IV**, NMCG, in co-ordination with State Governments of Uttarakhand, Bihar, Jharkhand, West Bengal and Uttar Pradesh, was to 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. 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 to be displayed on their respective websites. CPCB was also to indicate such status on its website. Flood plains were to be demarcated, encroachments removed, bio-diversity parks set up, afforestation works undertaken, guidelines for bio-diversity parks prepared by the CPCB and the MoEF&CC, flood plains were to be handed over to the State Forest Departments.
10. 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>. 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 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.

11. Vide order dated 22.07.2019, prayer for extension of timelines for up-gradation of CETPs at Unnao and Banthar was rejected as the stipulated period of two years vide order dated 13.07.2017 had already expired.

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

12. In the above background, we have heard learned Amicus, learned ASG for the State of Uttarakhand and learned Counsel for the States of Uttar Pradesh, Bihar, Jharkhand, West Bengal, Central Pollution Control Board (CPCB) and National Mission for Clean Ganga (NMCG) and perused the reports and the documents filed.

13. It may be appropriate to note the precise issues which need immediate focus:

- i) Prevention of discharge of untreated industrial waste and sewage in the River Ganga and its tributaries, including tapping of drains and bio-remediation, as applicable;
- ii) Installation of STPs, CETPs, and making existing CETPs functional (including at Jajmau, Banthar and Unnao) and enhance the capacities, so assessed and monitoring of the standards before discharge of water into Ganga River;
- iii) Installation of Continuous Emission Monitoring System (CEMS) at appropriate locations and Online Monitoring System (OMS);
- iv) Usage of treated waste water, of sludge manure and setting up of bio-digesters and septage management
- v) Preventing dumping of waste and scientific waste management including bio-medical wastes, plastic wastes and decentralizing waste processing, including waste generated from hotels, ashrams, etc.;

- vi) Floodplains identification and zone demarcation with restrictions against any development/ construction /encroachment;
- vii) Maintenance of E-flow as notified by Ministry of water Resources including releasing water by Hydel projects and barrages; and
- viii) Other directions including displaying water quality data in public domain and at prominent places, development of bio-diversity parks, prohibition of river bed mining, remediation of chromium dumpsites in Uttar Pradesh, collection of compensation from violators and involvement of society including religious, charitable, social and educational institutions for preventing and remedying pollution of River Ganga.

14. We may now consider the progress State-wise.

**State of Uttarakhand**

15. Learned ASG appearing for the State of Uttarakhand has indicated progress on the subjects of STPs, use of treated water, action against polluting industries, compliance of norms by hydropower projects, water quality monitoring, e-flow, plantation in bio-diversity parks, action against violators and erring officers and contractors and bio-remediation of sewage. In short, the information furnished shows that out of 18 projects for setting up of STPs, 9 have been completed and the remaining will be completed upto February 2020. Water quality

upto Rishikesh was 'A' class and downstream Rishikesh was 'B' class, which is fit for outdoor bathing as per the 'Designated Best Uses Criteria'<sup>3</sup>. Hydropower projects have to maintain e-flow of 15% of the average lean season flow. Closure order was passed against 32 non-compliant industries. Show cause notice was issued to 166 units from April to July 2019. Four hotels were found discharging sewage out of which two hotels were closed and the remaining two hotels were found to be complying later. Action was also taken for non-compliance of the Bio-Medical Waste Management Rules, 2016. Compensation was collected from the plastic users/violators and for illegal mining. Rafting camps have been removed, Bio-remediation started wherever required. The State Government along with NHAI will consider preparation or revision of Master Plan for Haridwar – Rishikesh designating 'no motor' zones in some areas, 'only electric vehicles' in some areas, widening of roads, green belts and beautification, Information Education Communication (IEC) activities by including religious, charitable, social and educational institutions, plantation in bio-diversity parks along river Ganga and its tributaries, including on the encroached land (after removing such encroachments).

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

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<sup>3</sup> <https://cpcb.nic.in/water-quality-criteria-2/>

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 phyto-remediation 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. There is need to evolve a tourism policy for permitting hotels, vehicles or other such activities consistent with the carrying capacity to avoid pollution of River Ganga. There is also need for proper planning in all the areas adjacent to the River Ganga to regulate traffic and orderly movement, avoiding vehicular pollution and having 'vehicle free' or only non-polluting vehicles, scientific disposal of solid waste dumps consistent with the orders of this Tribunal dated 17.07.2019 in *O.A. No. 519/2019*<sup>4</sup>.
20. Learned Amicus pointed out that at Gaumukh, there was pollution of sewers and resultantly bacteriophage activity of River Ganges which gives it inherent ability to kill harmful bacteria is decreasing which is not good in terms of maintaining water quality of the River Ganga. There is need to issue guidelines by the MoEF&CC for setting up of biodiversity parks for handing over flood plains of the rivers in the country to the Forest Department, for the purpose, within four months in terms of Para 21. Guidelines for levying compensation for discharge of untreated sewage/effluents into the river in terms of Para 13 of the order dated 14.05.2019 also needs to be devised.
21. We do not consider it necessary to consider point-wise progress in the present order in view of pre-existing directions on each of

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<sup>4</sup> News item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes"

the points. The State of Uttarakhand may take action under each head, accordingly.

**State of Uttar Pradesh (Phase -I, Segment- B)**

22. The State of UP is yet to provide the cost of removing the Chromium dumps in terms of Para 5 of the order dated 29.05.2019. It is reported that out of 86 drains to be tapped, only 33 have been wholly or partially tapped, 59 remain to be tapped. For 23 drains, work is yet to commence. It is stated that the land for tapping of two drains was not available. Needless to say that where the land is not available, the State Government can take steps for its acquisition or purchase.

**Directions with regard to State of Uttarakhand in paras 16, 17 and 18 will apply to the State of Uttar Pradesh also with regard to the timelines and compensation.**

23. It was stated that though the tanneries were closed for violating the norms of discharge, the dues have not been collected from the members of the CETPs and the industries are clandestinely operating as shown from the data of water samples which contained high Chromium.

24. Chromium dump has been stored since 1976 which is required to be shifted to TSDF. The State of Uttar Pradesh may undertake health survey of the area and ensure shifting of the Chromium dumps within three months failing which it would be liable to pay environmental compensation of Rs. 10 lakhs

per month to CPCB besides furnishing performance guarantee of Rs. 1 Crore to CPCB.

25. Let the remedial measures be taken by the SPCB for effective monitoring by installing CCTV cameras or undertaking surveillance in any other manner with the help of local police.
26. As observed in the case of Uttarakhand 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 State of Uttar Pradesh may take action under each head, accordingly.

**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. As noted on an earlier order<sup>5</sup> in a study in respect of 97 Ganga towns, the sanitation status was found to be as follows:

*“19 towns had municipal solid waste (MSW) plant within the town; 47 towns had adequate litterbins around the ghat area; 41 towns had anti-littering messages/hoardings placed around the ghat area; 72 towns had old & legacy dumpsites as well as garbage vulnerable points (GVPs) in the vicinity of the ghats; 66 towns had at least one nullah draining into Ganga; 34 towns had sweeping & cleaning arrangements at the ghat area; 33 towns had solid waste floating on at least one of the ghats of the town. Further, the report mentions “The output of the survey offers a comprehensive report on cleanliness to aid the Government take action on the identified gaps. It also helps in understanding the*

<sup>5</sup> Order dated 11.03.2019 at para 15

*best practices being implemented in various towns and ghats and support in sharing of knowledge among the various stakeholders helping them to inculcate and tailor best actions according to the city's requirement."*

The concerned Chief Secretaries may ensure that the above deficiencies are addressed expeditiously.

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:

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

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

31. Let a further quarterly progress report be filed by the Chief Secretaries of Uttarakhand, UP, Bihar, Jharkhand, West Bengal, with an advance copy to Secretary, Water Resources, Jal Shakti, Government of India by 30.11.2019 by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in). The Director General, *Namami Gange* may

file a consolidated report before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).

List for further consideration on 12.12.2019.

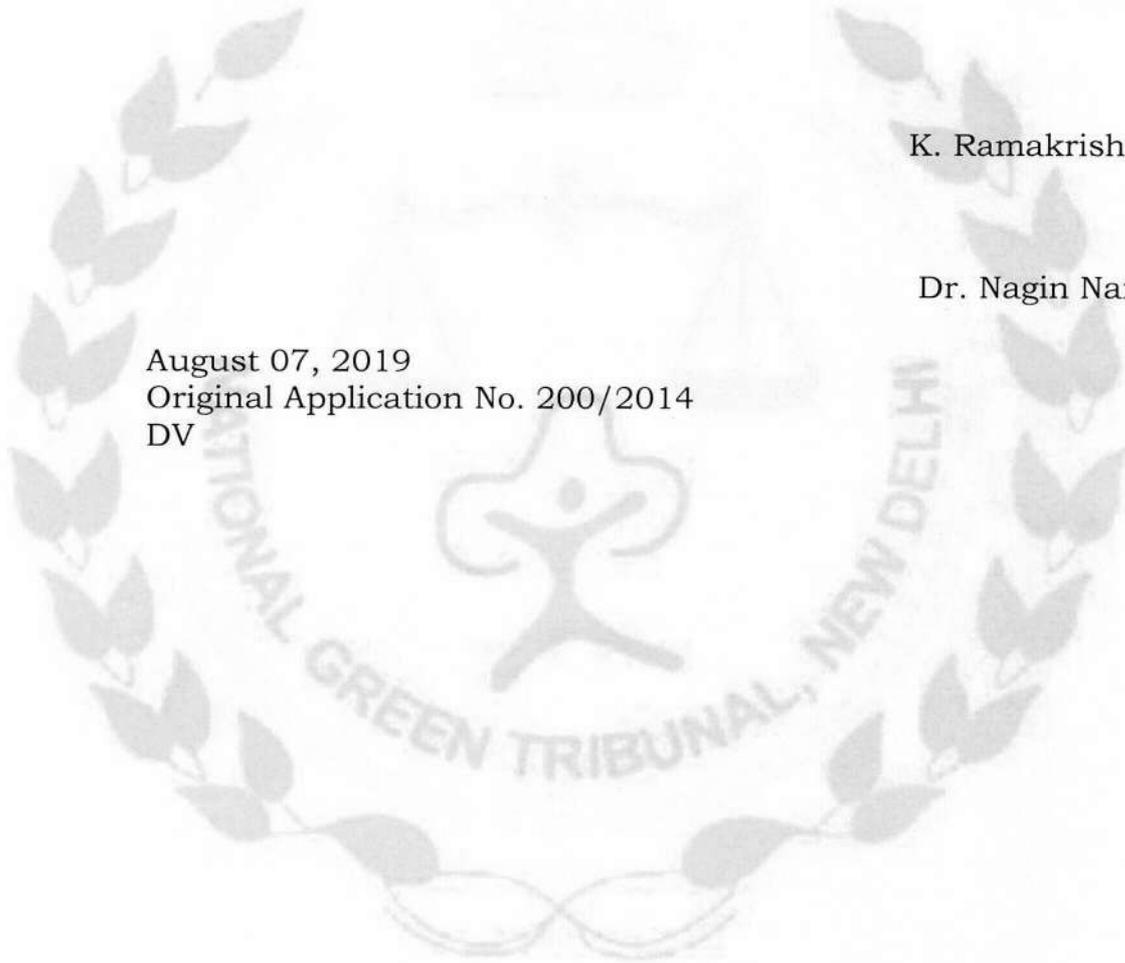
Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

August 07, 2019  
Original Application No. 200/2014  
DV



Item No. 01

Court No. 1

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

Original Application No. 200/2014

M.C. Mehta

Applicant(s)

Versus

Union of India &amp; Ors.

Respondent(s)

Date of hearing: 12.12.2019

Date of uploading: 18.12.2019

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

**ORDER**

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I	The issue: Review of progress of compliance of directions of this Tribunal to prevent and remedy pollution of river Ganga in the light of orders of the Hon'ble Supreme Court dated 29.10.2014 and 24.01.2017 in W.P.(C) 3727/1985	1-4
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III	Further monitoring, in the light of reports of the Monitoring Committees, vide orders dated 11.03.2019, 14.05.2019 and 29.05.2019. Issue of waste management in 97 'Ganga Towns' and directions for zero discharge of pollutants in Ganga, making concerned officers accountable to be monitored by the Chief Secretaries' of the concerned States	6-9
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**I. The issue: Review of progress of compliance of directions of this Tribunal to prevent and remedy pollution of river Ganga in the light of orders of the Hon'ble Supreme Court dated 29.10.2014 and 24.01.2017 in W.P.(C) 3727/1985:**

1. This order may be read in continuation of order dated 22.08.2019 with regard to reviewing the progress of compliance of directions of this Tribunal dated 10.12.2015 and 13.07.2017 on the subject of preventing and remedying the pollution of river Ganga. The matter was earlier being considered by the Hon'ble Supreme Court since the year 1985, before being transferred to this Tribunal, in the year 2014 and 2017<sup>1</sup>.
2. The Tribunal dealt with the pollution caused on account of illegal discharge of untreated sewage and industrial effluents either directly into the River Ganga or its tributaries and connected drains besides issues of dumping of solid waste, bio-medical waste, hazardous waste, plastic waste, muck and other waste, illegal sand mining, illegal encroachment of the floodplains, absence of steps for conservation of ground water, reuse of treated water, restoration of water bodies and maintenance of e-flow.
3. The matter was dealt with by orders dividing the area covered by the River Ganga into different 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

<sup>1</sup> M.C. Mehta vs. Union of India & Ors. Writ Petition (Civil) No. 3727/1985 order dated 29.10.2014 (2015) 12 SCC 764 and 24.01.2017

Border (via Bihar), and **Phase-IV:** Jharkhand Border to Bay of Bengal (West Bengal).

4. As already noted, the proceedings have been pending since 1985. Various orders have been passed by the Hon'ble Supreme Court on the subject before transfer of proceedings to this Tribunal and thereafter by this Tribunal. The result of monitoring for 34 years has not been encouraging. Government of India took initiatives by way of Ganga Action Plans I & II and thereafter by way of *Namami Gange*. The progress so far has been far from satisfactory, as noted in earlier orders.

**II. Constitution of Monitoring Committees headed by former Judges in the States of Uttarakhand and Uttar Pradesh vide orders dated 29.11.2018 and 06.08.2018 to oversee execution of Action Plans in the light of stipulated timelines:**

5. While considering the progress of compliance of orders of this Tribunal, vide order dated 19.07.2018 with regard to **Phase-I - Segment-A** and order dated 27.07.2018 with regard to **Phase-I - Segment-B**, the CPCB/SPCBs were required to display the result of water samples at various locations and atleast at one place within 100 kms showing whether water was fit or not fit for consumption or for bathing. A Monitoring Committee was constituted headed by a former Judge of the Uttarakhand High Court for **Phase-I Segment-A** and Allahabad High Court for **Phase-I Segment-B** vide orders dated 29.11.2018 and 06.08.2018 respectively to take stock of the actions taken with clear measurable indicators of progress and success and to oversee the action plans. The actions were required to cover interception and diversion of drains carrying sewage to STPs, laying

of sewerage network, utilization of treated sewage, compliance of norms by industries in the catchment areas, ground water regulation, flood plain regulation, rain water harvesting systems, good irrigation practices and filing list of industries which have the potential for pollution and creation of bio-diversity parks. Vide order dated 29.11.2018, the Tribunal reviewed the progress in **Segments A and B of Phase-I** on STPs, CETPs and tapping of drains with reference to the laid down timelines and also compliance of MSW Rules, setting up of bio-digesters, sewerage network, improvement in water quality, unregulated ground water extraction, e-flow, public involvement, decentralized waste processing facility close to the source of generation of waste, protection of floodplains and illegal mining. The Tribunal also 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.

**III. Further monitoring, in the light of reports of the Monitoring Committees, vide orders dated 11.03.2019, 14.05.2019 and 29.05.2019. Issue of waste management in 97 'Ganga Towns' and directions for zero discharge of pollutants in Ganga, making concerned officers accountable to be monitored by the Chief Secretaries' of the concerned States:**

6. Again, on 11.03.2019, deficient working of CETPs at Jajmau, Banthar and Unnao was considered and directions were issued to consider closure of non-compliant units to improve the water quality.
7. Vide order dated 14.05.2019, this Tribunal considered the report from Justice U.C. Dhyani with regard to **Segment-A of Phase-I** dated 09.05.2019 *inter-alia* pointing out non-compliance in respect of the

STPs. The Tribunal directed remedial action including recovery of environmental compensation in view of repeated failures to comply with the directions by the Hon'ble Supreme Court and this Tribunal for the last 34 years. NMCG was to ensure compliance with regard to prevention and removal of encroachments, maintenance of e-flow, afforestation and setting up of bio-diversity parks, ground water regulation, sand mining regulation, stopping any camping on the banks of river Ganga or its tributaries. With regard to **Segment-B of Phase-I**, after noting that the industries were discharging untreated effluents in river Ganga, the Tribunal directed closure of all activities of the members of the dysfunctional CETPs, until the CETPs are compliant. It was further directed that only treated effluents may be discharged into the River Ganga and its tributaries. Further direction was that coercive measures be taken against officers of UPPCB and NMCG colluding in permitting continued operations of polluting activities. Direction was also given for remediation of chromium dumps at Kanpur Dehat, Khanpur and Rakhi Mandi in Uttar Pradesh and ensuring of proper e-flow from the Narora Barrage.

8. With regard to **Phase-II to IV**, NMCG, in co-ordination with State Governments of Uttarakhand, Bihar, Jharkhand, West Bengal and Uttar Pradesh, was to 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. 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 to be displayed on their respective websites. CPCB was also to indicate such status on its website. Flood plains were to be demarcated, encroachments removed, bio-diversity parks set up, afforestation works undertaken, guidelines for bio-diversity parks prepared by the CPCB and the MoEF&CC, flood plains were to be handed over to the State Forest Departments.

9. 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. 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 as earlier directed in order dated 29.11.2018. Encroachments were to be removed. Tapping

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

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.

**IV. Monitoring by the Tribunal on last date of hearing i.e. 22.08.2019, fixing strict timelines with consequence of requiring payment of compensation by the defaulting States and NMCG and action against the erring officers:**

10. Status of compliance was further considered vide order dated 22.08.2019 with reference to following specific issues:

- i) Prevention of discharge of untreated industrial waste and sewage in the River Ganga and its tributaries, including tapping of drains and bio-remediation, as applicable;
- ii) Installation of STPs, CETPs, and making existing CETPs functional (including at Jajmau, Banthar and Unnao) and enhance the capacities, so assessed and monitoring of the standards before discharge of water into Ganga River;
- iii) Installation of Continuous Emission Monitoring System (CEMS) at appropriate locations and Online Monitoring System (OMS);
- iv) Usage of treated waste water, of sludge manure and setting up of bio-digesters and septage management;
- v) Preventing dumping of waste and scientific waste management including bio-medical wastes, plastic wastes and decentralizing waste processing, including waste generated from hotels, ashrams, etc.;

- vi) Floodplains identification and zone demarcation with restrictions against any development/ construction /encroachment;
- vii) Maintenance of E-flow as notified by Ministry of water Resources including releasing water by Hydel projects and barrages; and
- viii) Other directions including displaying water quality data in public domain and at prominent places, development of bio-diversity parks, prohibition of river bed mining, remediation of chromium dumpsites in Uttar Pradesh, collection of compensation from violators and involvement of society including religious, charitable, social and educational institutions for preventing and remedying pollution of River Ganga.

11. The Tribunal considered the progress State-wise as follows:

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

15. *Learned ASG appearing for the State of Uttarakhand has indicated progress on the subjects of STPs, use of treated water, action against polluting industries, compliance of norms by hydropower projects, water quality monitoring, e-flow, plantation in bio-diversity parks, action against violators and erring officers and contractors and bio-remediation of sewage. In short, the information furnished shows that out of 18 projects for setting up of STPs, 9 have been completed and the remaining will be completed upto February 2020. Water quality upto Rishikesh was ‘A’ class and downstream Rishikesh was ‘B’ class, which is fit for outdoor bathing as per the ‘Designated Best Uses Criteria’<sup>3</sup>. Hydropower projects have to maintain e-flow of 15% of the average lean season flow. Closure order was passed against 32 non-compliant industries. Show cause notice was issued to 166 units from April to July 2019. Four hotels were found discharging sewage out of which two hotels were closed and the remaining two hotels were found to be complying later. Action was also taken for non-compliance of the Bio-Medical Waste Management Rules, 2016. Compensation was collected from the plastic users/violators and for illegal mining. Rafting camps have been removed, Bio-remediation started wherever required. The State Government along with NHAI will consider preparation or revision of Master Plan for Haridwar – Rishikesh designating ‘no motor’ zones in some areas, ‘only electric vehicles’ in some areas, widening of roads, green belts and beautification, Information Education Communication (IEC) activities by including religious, charitable, social and educational institutions, plantation in bio-diversity parks*

<sup>3</sup> <https://cpcb.nic.in/water-quality-criteria-2/>

along river Ganga and its tributaries, including on the encroached land (after removing such encroachments).

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. There is need to evolve a tourism policy for permitting hotels, vehicles or other such activities consistent with the carrying capacity to avoid pollution of River Ganga. There is also need for proper planning in all the areas adjacent to the River Ganga to regulate traffic and orderly movement, avoiding vehicular pollution and having 'vehicle free' or only non-polluting vehicles, scientific disposal of solid waste dumps consistent with the orders of this Tribunal dated 17.07.2019 in O.A. No. 519/2019<sup>4</sup>.
20. Learned Amicus pointed out that at Gaumukh, there was pollution of sewers and resultantly bacteriophage activity of River Ganges which gives it inherent ability to kill harmful bacteria is decreasing which is not good in terms of maintaining water quality of the River Ganga. There is need to issue guidelines by the MoEF&CC for setting up of biodiversity parks for handing over flood plains of the rivers in the country to the Forest Department, for the purpose, within four months in terms of Para 21. Guidelines for levying compensation for discharge of untreated sewage/effluents into the river in terms of Para 13 of the order dated 14.05.2019 also needs to be devised.
21. 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 State of Uttarakhand may take action under each head, accordingly.

**State of Uttar Pradesh (Phase -I, Segment- B)**

22. The State of UP is yet to provide the cost of removing the Chromium dumps in terms of Para 5 of the order dated 29.05.2019. It is reported that out of 86 drains to be tapped, only 33 have been wholly or partially tapped, 59 remain to be tapped. For 23 drains, work is yet to commence. It is stated that the land for tapping of two drains was not available. Needless to say that where the land is not available, the State Government can take steps for its acquisition or purchase. **Directions with regard to State of Uttarakhand in paras 16, 17 and 18 will**

<sup>4</sup> News item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes"

**apply to the State of Uttar Pradesh also with regard to the timelines and compensation.**

23. It was stated that though the tanneries were closed for violating the norms of discharge, the dues have not been collected from the members of the CETPs and the industries are clandestinely operating as shown from the data of water samples which contained high Chromium.
24. Chromium dump has been stored since 1976 which is required to be shifted to TSDF. The State of Uttar Pradesh may undertake health survey of the area and ensure shifting of the Chromium dumps within three months failing which it would be liable to pay environmental compensation of Rs. 10 lakhs per month to CPCB besides furnishing performance guarantee of Rs. 1 Crore to CPCB.
25. Let the remedial measures be taken by the SPCB for effective monitoring by installing CCTV cameras or undertaking surveillance in any other manner with the help of local police.
26. As observed in the case of Uttarakhand 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 State of Uttar Pradesh may take action under each head, accordingly.

**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. As noted on an earlier order<sup>5</sup> in a study in respect of 97 Ganga towns, the sanitation status was found to be as follows:

“19 towns had municipal solid waste (MSW) plant within the town; 47 towns had adequate litterbins around the ghat area; 41 towns had anti-littering messages/hoardings placed around the ghat area; 72 towns had old & legacy dumpsites as well as garbage vulnerable points (GVPs) in the vicinity of the ghats; 66 towns had at least one nullah draining into Ganga; 34 towns had sweeping & cleaning arrangements at the ghat area; 33 towns had solid waste floating on at least one of the ghats of the town. Further, the report mentions “The output of the survey offers a comprehensive report on cleanliness to aid the Government take action on the identified gaps. It also helps in understanding the best practices being implemented in various towns and ghats and support in sharing of knowledge among the various stakeholders helping them to inculcate and tailor best actions according to the city’s requirement.”

The concerned Chief Secretaries may ensure that the above deficiencies are addressed expeditiously.

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:

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<sup>5</sup> Order dated 11.03.2019 at para 15

<b>Sr. No.</b>	<b>Targets to be achieved as per orders dated 10.12.2015, 13.07.2017 and the 22.08.2019 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*

31. Let a further quarterly progress report be filed by the Chief Secretaries of Uttarakhand, UP, Bihar, Jharkhand, West Bengal, with an advance copy to Secretary, Water Resources, Jal Shakti, Government of India by 30.11.2019 by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in). The Director General, Namami Gange may file a consolidated report before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).”

12. Thus, it was made clear that no untreated sewage was to be discharged into the river and interim remediation measures were to positively start from 01.11.2019 failing which the defaulting States were to pay compensation of Rs. 5 lakhs per month per drain. The Chief Secretaries were to identify the officers responsible for delay and adverse entries were to be recorded in their ACRs. For delay in STPs and sewerage network beyond timeline of 30.06.2019 for ongoing works and 31.12.2020 for works which had not yet started, compensation is payable @ Rs. 10 lakh per month per STP which can be recovered from the erring officers/contractors. NMCG is liable to pay 50% of the amount.

**V. Issue of shifting of Chromium dump in existence since 1976 affecting ground water at Rania, Kanpur Dehat/Rakhi Mandi, UP:**

13. The Tribunal in its order dated 22.08.2019 also fixed the timeline for clearing Chromium dump in the State of UP within three months and in default to pay environmental compensation of Rs. 10 lakh per

month, besides performance guarantee of Rs. 1 crore. Thereafter, on receipt of a report from Justice Tandon Committee, the Tribunal vide orders dated 27.09.2019 and 15.11.2019 in O.A. No. 985-6/2019 issued directions on the subject. The said matter is now being separately dealt with and is fixed for hearing on 07.02.2020.

**VI. Final reports of Justice Tandon Committee for UP and Justice Dhyani Committee for Uttarakhand and progress reports filed by States/NMCG in the light of order dated 22.08.2019 and report of CPCB in terms of order dated 14.05.2019 on the subject of biodiversity parks:**

14. Accordingly, 'final' reports have been filed by the Monitoring Committees. Quarterly progress reports have been filed by the States of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal and a consolidated report by the NMCG. CPCB has also filed its interim report on the subject of biodiversity parks in terms of order dated 14.05.2019.
15. We first refer to the final report furnished by Justice Dhyani Committee. The report gives the status of construction of STPs, status of operation, management and performance of STPs and status of upgradation of 7 STPs not meeting the prescribed parameters. Town-wise details in respect of priority towns have also been given. The report further gives status of compliance by industries. Compliance status by hotels, ashrams, dharamshalas, compliance status in respect of flood plains, mining on river beds, biomedical waste, municipal solid waste, compliance of directions for recovery of compensation. The summary and recommendations of the report given in chapters 11 and 12 are as follows:

## **“Chapter 11**

### **SUMMARY OF MONITORING COMMITTEE OBSERVATION**

*The years' work of the Committee in verification of compliance to Hon'ble NGT Order on OA No 200/2014 is summarized as under:*

- I. Management of Drains polluting the river and its tributaries: Efforts have been made to intercept and divert the identified drains and work on 111 out of 136 identified drains have been completed. The intercepted waste water couldn't be completely treated as many of the STPs' are as yet under construction. As such an estimated 100 MLD of waste water still remains untreated, including the waste water from the Jagjeetpur and Lakkar Ghat STP that have less capacity as of now. Once the STPs' at Haridwar and Rishikesh are commissioned, near 98% interception, diversion and treatment will be achieved.*

*The alternative methods of waste water treatment must be closely evaluated for their safety and effectiveness. Use of every such methodology must be monitored by at least one Professional Institute and also by CPCB mandatorily. In absence of a standardized protocol, these steps are essential to protect public safety and also public money.*

- II. Building up of sewage treatment infrastructure: State of Uttrakhand is working upon 18 number of STPs 9 have been completed. The remaining STPs are targeted to complete and commence operation as per the schedule submitted. Committee has the following reservations in respect of the STP infrastructure.*
  - a. Sixteen smaller STPs' of electrocoagulation seen on the upper reaches of the river are not in operation. The process used to award the contract itself is a serious deviation. The project has been awarded and then the technology and details are submitted for vetting by IIT/Delhi. The Institution has made material changes to the design and added further process and equipment. Looking at the quality and condition of plant it is very clear that the finances proposed do not provide for these changes. Basically the financial bid was for a design that has itself changed substantially. With such a major infraction, can the plant be actually built and operated at the same cost. The situation suggests that it can't and therefore the plants are not getting completed and quality has suffered. The plant output water is compliant since the input waste water is almost clean at this stage.*
  - b. STP plant is made at higher levels than the development/houses/ commercial establishment. The constructions lower than*

*the sewage and closer to the river continue unabated. The sewage lines are not be able to tap sewage from these locations and they are directly discharging into the river. At some places sewage is being pumped against gravity and it requires continuous electricity which is not available. Unless sewage infrastructure and control in habitation activity are completely coordinated the infrastructure will fail to achieve its purpose and river at its inception will continue to get contaminated and at a much faster pace. The areas where the problem is very evident are Badrinath, Joshimath, Devprayag, Rudraprayag- basically the Dhams on upper reaches.*

- c. Sludge disposal and its monitoring is the blind spot in the entire system. There is no assessment of sludge generation, testing and scientific disposal so as to ensure that the waste recovered from water is not added back to the environment nullifying the entire effort. It is noted that even the tender document doesn't give it a serious space and therefore actually no one is responsible for sludge. Some effort has now been made to keep records and do the necessary testing of the manure made out of it. A standard protocol is necessary for sludge management as well.*
- d. No solution is applied for remote hamlets so far. The problem may not look very severe in numbers but it is polluting the clear stream emanating from the mountains.*
- e. Septage management seems to have gained attention. Policy and guidelines have been issued. Continued and sustained efforts are required for the same which includes efficient mechanism for collection/transport, technology inputs for remediation at STPs, remediation where STP is too far and a system of financing and monitoring the activity,*
- f. The present system of Project Planning and execution is confusing. DPR is made by an outsourced agency that hands over the document to Client (NMCG in most cases) and its responsibility ends. The DPR forms basis of tender that is issued by another Agency (UK Pey Jal Nigam) which wasn't actually a part of making the DPR and holds no responsibility for it either. The tender is evaluated by this agency on its own. The bidder is completely responsible for its bid and is required to make its own assessment irrespective of the DPR (if the document is shared). The bidder makes the cost bids basis its own technology and design. Tendering Agency awards work to the lowest bidder. After the work is awarded, the bidder is supposed to get its design vetted by technical institute. Now the design is changed by the Institute for various reasons. The financial costing done by the bidder is changed and the work is still to be executed in the same money. The financing is by NMCG that appoints a third outsourced agency for project monitoring so the critical responsibility shifts to another external party. The project is monitored by State Government as well but responsibility actually rests with an external agency paid for the purpose. Basically, the mother of the project-DPR maker hands over the baton to another one who then passes it to another and so on. No*

one is responsible and all contribute to project cost, delay and confusion.

Much worse is that the Project aim is itself fractured-making STP or a pipeline, or house to house connection; it's not addressing a solution-Treat all waste water in a XYZ town.

- III. *Industrial Effluent and CETP: The Industrial establishment in the state fall into two major categories in terms of geographical location- eg. Industrial Clusters such as SIDCUL, Pant Nagar, and standalone industries spread all over the state- eg. Sugar and Distillery in Laksar, India Glycol and Nandi Paper Mills in Kashipur.*

*The industrial clusters have a possibility of CETP. The three industrial clusters have CETP however the exercise of connecting industries to CETP need deliberate and serious push by UEPPCB and also support by State Government. More needs to be done in this regard. Then there is linked and more serious issue of financing and operating the CETPs'. Committee notices serious gap in viable financing, technical skills of operating agency and effective monitoring of the CETP operations. As a result the systems either fails to meet the desired results or there is a tendency to avoid operating it or both. Department of Industries that creates the infrastructure takes no responsibility for concomitant pollution and has so far not been seriously enlisted as a stakeholder.*

*The standalone large industries operate under the monitoring of UEPPCB in terms of environment compliances. The organization has neither developed sufficient in house capability nor created a mechanism for effective outsourcing. It is still to start using technology seriously to aid in its working. With the weak champion for the cause of environment, the industries are free to care for environment to the extent that they can or wish to. CPCB has limited intervention and in most cases it cites its dependence on UEPPCB. The situation is not conducive to effective compliance and Committee noticed its impact in every visit. HUL at Haridwar and Venkateshwar Textiles at Kashipur are good corporate citizens and have taken effective measures for water utilization and waste water treatment. In contrast, Sugar Mills and Paper Mills and India Glycol needed monitoring which was inadequate resulting in unchecked environment pollution.*

*The online monitoring of ETP outlet needs further strengthening in many critical areas including- calibration of the equipment and its temper proofing, real-time data analysis and automatic triggers back to industry, consistency in use of data for prosecution, standardizing best ETP plant and processes, industry-wise, based on performance, crosscheck the data with the catchment drain/water body and more. Aim should be*

to ensure fidelity of the data and use it efficiently to secure no pollution by industries. Otherwise monies spent on creating the infrastructure is not sufficiently utilised.

- IV. Flood plain demarcation, protection and utilization plan is still a work in progress. The encroachment close to the river and even the dry river bed in lean season continues unabated. River Chandrabhaga is cited just as an example and the same situation is happening in others as well. There has to be a serious political and administrative will to stop it entirely. Less than that all the plans for protecting river will fall short. The action taken at Maya Kund should become the rule so as to protect the flood plains.
- V. E-FLOW has become a very well-known concept and there is an effort to implement the regime. There are reservations and issues raised by existing Hydel Plants and the same need to be addressed appropriately so that the regime is adhered to.
- VI. Sand Mining on river beds: State Government has made a policy under which licenses are granted. There is awareness about the penalty for illegal mining and it's not as blatant as before. The continued interventions have achieved the purpose of making the sand miners and the officers understand the risks involved and has been able to drill the import of word 'illegal' into all players in this domain. This is a positive development that has helped to minimize illegal sand mining of a commercial and mechanized scale.
- VII. Biomedical Waste Management Regulations have gained wider publicity and there is visible impact on larger hospitals where the colored bins have appeared in the last one year, more so in last six months. The protocol and training for segregation at source are yet to be firmed up and hospitals are experimenting their methods. There is clear effort evident in private hospitals and Government hospitals have still to catch up.
- VIII. The CBWTF design, operation and meeting of desired standards is yet to happen. More attention is required in this segment so that post segregation and collection the biomedical waste is actually safely disposed of. The current competition of 'as cheap as possible' is failing the requirement of 'desired quality'. We have yet to come across a well design and operating facility so far. The management of liquid waste from HCF is yet to start. In fact even the state level agencies lack the knowledge of its requirement including legal provisions. Committee has started the process of creating awareness. Capacity building followed by its implementation and monitoring are the next steps to be taken by State and Central Agencies.
- IX. Basically the stat has still to complete its process of meeting the regulatory requirement on the issue.

- X. *Municipal solid waste management in Ganga Towns is observed as a huge gap and a serious situation. State Government has plans which are on table and need to be brought on ground. The facilities seen do not inspire confidence. Dehradun MSW Plant is the only credible plant in the state. The problem of current waste together with legacy waste is assuming alarming proportions. The Ban on Plastics is not appreciated as effective with plastic seen almost everywhere and in all dumps. The dumping of mixed waste close to the river and the slopes leading to the river hasn't been stopped despite all judicial pronouncements. State Government expresses its limitation in finding a space for its disposal. However, we also see an equal gap in use of technology for its disposal. The seriousness of the problem is compounded by the fact that it is impossible to check its growth with the growing cities, population and commercial development. While space is a constraint for Government, garbage continues to find its own space-it is accumulating at will and everywhere.*
- XI. *Awareness of the issue-saving the rivers and water bodies- is very much evident and overall Committee notes with satisfaction that the issue of water pollution is well highlighted in Schools, Colleges, media and the public as well as private stakeholders. There has been efforts by Government at creating awareness and also a number of private entities. Large Industries have a fair perception that law shall be implemented and it is in their best interest to take necessary steps and be responsible for environment. The same is yet to percolate to smaller and unorganized segment. Yet there is no denying the facts that the old habit of cutting corners calls for concerted and discretion-less application of law. The message that environment safety is precursor to live industry must get drilled longer to make it a habit.*
- XII. *Government system is working on some fronts and needs to co-ordinate its efforts that is widely dispersed over multiple departments making accountability difficult to recognize. The fractured system of DPR and tender coupled with Ll concept are compounding the project execution and further diluting the accountability.*
- XIII. *Maintaining Biodiversity is an important measure and needs more actual support. While Forest Department has been assigned the responsibility, it has to be supported with finances and large scale, impactful projects must be executed in a time bound manner.*

## **Chapter 12**

### **RECOMMENDATIONS OF MONITORING COMMITTEE**

- I. *The Project Planning has to improve so that the DPR, the execution and the final outcome remain one entity's*

responsibility. All elements must fall in place simultaneously to achieve the final result- eg. treat all waste water discharge from say ABC town. Current state of separate DPR for each element at different times fracture the very definition of project and despite the 'lowest cost tender' all monies put together and the failure to achieve results in time prove far more expensive. The Project must include the non-negotiable quality as the start point and poor quality must face stringent measures for the concerned officers mandatorily. One entity must carry the baton till finishing line. 'Simplify' is the only solution.

- II. *Water Footprint Planning must come under one umbrella even in the States. The use and treatment of water has to be planned against its availability, all sources combined. Water is an essential resource that can't be compartmentalized if urban centers have to become sustainable. The upstream of one town is the downstream of another and therefore, the upper town's mis-doings are paid by the lower town and its people.*
- III. *Rivers are sacred in Indian culture and the same has to be shown by actually respecting its purity. It's surprising to see religious institutions- Temples, Ashrams and Dharamshalas polluting the rivers. The same entities must be mobilized to rectify the situations themselves and also propagate the message amongst devotees who throng to rivers for religious reasons. Similar effort has to be made to keep our religious places in good state. The condition of Badrinath, Devprayag, Rudraprayag, Joshimath, and Uttarkashi- in fact all such places speaks poorly of their management. It's difficult to locate the shrines and reach river without walking through dirty congested lanes. The all-weather char dam road will increase this flow and further uncontrolled commercialization of these places. If State Government doesn't plan in advance, whatever we may say about protecting rivers, it is not likely to materialize.*
- IV. *The message of environmental responsibility must be conveyed clearly to the Industries. In fact Industry Department should be the one holding this responsibility. As of now they are promoting industry without any accountability for environment and have no co-ordination with other stakeholders-Central Ground Water Authority, Urban Local Bodies, Water and Waste Water Departments. Environment protection must be non-negotiable for industrial growth and even urban growth. Water recovery, recycle and reuse must be planned simultaneous with planning an Industrial Estate.*
- V. *E-Flow must get maintained. Simultaneously there should be a plan to capture excess water when it becomes available. We are*

*a country where flood and draught occur with equal frequency and in the same geographical location.*

- VI. State Government in Uttrakhand bears significant responsibility of carrying clean water and delivering the same at its border. This is the river that nurtures the entire Gangetic plain. Therefore, waste water treatment must be of highest quality in the state. Any compromise will cost the other states dearly and there is no financial saving likely at the end. Hon'ble NGT has insisted on the highest parameters for its treatment Plants and there can be no concession or deviation possible. In this light, the meticulous functioning of UK Pey Jal Nigam and UEPPCB is absolutely essential. Both organizations require high caliber professionals, continuous training and use of best technologies to ensure consistent performance. A lot needs to be done on this front.*
- VII. The online monitoring infrastructure is still in its infancy. As stated supra it needs to be upgraded and better utilised for the purpose of achieving environment protection.*
- VIII. Maintaining the ecological balance in this area is also essential to protect the water sources. Biodiversity is one aspect. Interventions in this regard must be concentrated, impactful and visible. Current strategy of patchy and scattered plantations need a serious re-look. The number of plants seeded is very high but the impact is visible only in Rasiyavad where there is concentrated effort and original flora and fauna have been revived. Similar effort on a large scale and with involvement of local population is urgently required. This is a state known for CHIPKO movement and it will not be a difficult task to have the communities involved in such projects.*
- IX. CBWTF are private enterprises and the entrepreneurs would need state support in running the business with good quality output. As of now given limited cooperation of users and very small fee that HCFs' are prepared to pay, no entrepreneur is bringing in the right technology and investment in this segment. It's a nascent sector where State Government and Central Agencies need to think through a viability framework. The current ones are facing fines and closures but new ones are not emerging. It is a worrisome situation. Given the performance of government in STP and related segments, one would not wish it to become Government venture. At the same, it's a business that has to be rightly nurtured at this stage.*
- X. MSW has been a mounting problem and everyone agrees that it requires an urgent solution. This segment is also gravitating towards the same system of DPR, Tender and no responsibility. Government must have a clear view on do we own that technical competence to make the DPRs' and do a*

*right project of managing 'unsegregated waste'. We have to first make the right 'Problem Statement'-'Manage the unsegregated municipal waste of ABC city in 2 hectares of land with minimum landfill to be accommodated in that land itself for say 15 years". The plan that we have seen so far, begins with segregated waste and ends with land requirement with no indication on how we derived it and what is the final target. If an Agency-nationally or globally, has the proven solution that can be executed, it may be brought in with a system for cost control instead of financial bidding. A credible entity is unlikely to give a financial bid in the current experimental status. A few such plants will provide the actual costs, experienced manpower, test and adaptation of technology and market will see a better and competitive response. As of now small monies are spent and more land is lost under the heap of garbage, not to mention its impact on environment and health of people. It's better to accept crisis and seek all that help that we can get."*

16. We may now refer to 'final' Report of the Monitoring Committee for the State of UP dated 23.10.2019 which has been filed on 31.10.2019 for Segment 'B'. The report refers to the progress in terms of waste water treatment, tapping of drains, connecting of tapped drains to STP, compliance by Grossly Polluting Industries (GPIs), reduction in use of water by the industries, leading to reduction in waste water generation and pollution load, biomedical waste management. The Committee has given the status of STPs for which works have been awarded and which are at tender stage. Status of compliance by the existing STPs has also been mentioned. It has been specifically mentioned that STPs at Jajmau were not operational and those not fully operational. Reason for non-compliance by already constructed STPs are structural defects, absence of financial assistance or not receiving the required sewage quantity. The report also mentions illegal order of the Principal Secretary, UP dated 08.08.2019 permitting waste water to be discharged directly into river Ganga which is subject matter of OA 985/2019. Deficiency in working CETP

has also been mentioned. The report also gives the status of major drains. It is stated that the waste extracted from the drains has been heaped on the sides of the drains and not transported to designated place. Demarcation of flood plains has not been completed. E-flow has to be ensured. Green belt plantation direction has yet to be enforced. Mining has to be regulated. Ground water extraction is not being properly regulated. Chromium dump at Rania and Rakhi Mandi needs to be remediated. Primary Effluent Treatment Plants (PETPs) need to be compliant. Solid waste is not being treated. More than 1 lakh MT waste is lying at open in Meerut. 4 lakh MT waste is lying at Kanpur. Such waste is uncovered and lying in open and has a potential of hazard. Recommendations of the Committee are:

**“RECOMMENDATIONS:**

*The Committee may make following recommendation for the purpose of prevention of pollution of River Ganga in light of the various reports and observations.*

**1. STP's, CETP'S and ETP'S**

*CCTV cameras with the provision of live feed through an app on mobile along with storage capacity of 30 days must be installed at all STPs. Access to app may be provided to the public at large so that they may verify at any point of time as to whether the STP is operational or not. OCEAMS must also be installed and linked to a central server for constant monitoring.*

*In the matter of working of STP quantification of the total sludge generated and to whom it is sold or the manner it is disposed of, must be recorded by the STP operator with verifiable data on day to day basis. The record must notice the total sludge generated, quantity of sludge sold/disposed of, along with name of the person with address to whom sold/provided free of cost.*

*In respect of CETP an identical provision for installation of CCTV cameras with live feed through an app on mobile must be made. The sludge generated at the CETP must be analysed, and it must be ascertained as to in what manner*

*the same is required to be disposed of. In case the sludge contains heavy metals, it must be directed to be transported to Hazardous Waste Disposal Plant and verifiable records must be maintained on day to day basis by the operator.*

*So far as the ETP installed by the industries are concerned, provision for installation of CCTV cameras with live feed must be provided which can be monitored through an app on mobile along with storage capacity of 30 days. The sludge generated must be directed to be quantified and recorded on day to day basis. The manner in which the sludge is disposed of/sold with specific details of the purchaser or the person to whom it is provided for disposal must specifically be mentioned.*

*Quantification of sludge generated at the STP, CETP and the ETP and the manner in which it is disposed of/sold would be a good indicator for assessing the performance of the plant.*

*The State Government may be asked to constitute a separate State Cadre Service for operation and maintenance of STP's and CETP's consisting of experts having knowledge of operation and maintenance of STPs/CETP's.*

## **2. Modular STP's**

*In old city areas laying of sewer lines/sewer trunk lines not only requires huge amount of expenditure it also leads to inconvenience to the public at large for months together. Further construction of big STP not only requires large area of land which is in scarcity in big town. It also raises serious issue with regard to discharge of dirty water when the plant becomes nonoperational for maintenance or for other reasons. The Committee would recommend that State may resort to modular STP's to be installed at the tail of the drains which are already carrying sewage to the river/its tributaries.*

## **3. Extraction of underground water.**

*A study be undertaken industry-wise as to what quantity of underground water is actually required by the industry for its manufacturing purposes. Permission for extraction of underground water be revisited by the Central Ground Water Authority having regard to the aforesaid aspect of the matter, specifically in respect of industries which have become ZLD or partially ZLD. The rates for extraction of underground water in our opinion must be so fixed so as to ensure that larger the amount of water extracted, the higher the rates like in the case of electricity charges.*

*There must be specific directions for authentication and verification of the flow meters installed in the premises of each industry, on periodical basis.*

The report in that regard must be submitted with the Central Ground Water Authority. Competent department for the purpose must also be identified.

**4. Compliance of conditions mentioned in the order permitting to operate.**

District level officer of the pollution department be specifically made aware of the conditions mentioned in the permission order and they must ensure strict compliance thereof. Periodical reports must be submitted in respect of compliance of the conditions as mentioned in the permission order.

**5. Fresh Joint Inspection of GPI's.-**

In view of the conclusions of the Committee that the joint inspection done in respect of GPI's is not comprehensive and does not take into consideration many issues which are relevant for avoiding pollution a fresh joint inspection of all the GPI's be directed in light of what is observed in the report with the condition that in case a GPI is found to be violating the conditions contained in the permission to extract underground water heavy environmental compensation be imposed on day to day basis.

**6. Notification of rates for transportation of spent chrome.-**

Chief Secretary of State of Uttar Pradesh be directed to ensure that rates for transportation of spent chrome from the tanneries to the Hazardous Waste Management Plant at Kanpur are notified within 15 days and recovery from the tanneries is effected in terms of the order of the Hon'ble National Green Tribunal dated 13.07.2017 passed in O..A.No.200/2014.

**7. Finalization of parameters for inlet and outlet of STPs.-**

Under the notification of the Ministry of Environment dated 01.01.2016 each State has to notify the parameters for inlet and outlet of CETPs'. The State of Uttar Pradesh has not been able to do so. The Chief Secretary must be asked to notify the parameters in respect of discharge of CETP and the point from where samples are to be drawn for ascertaining as to whether CETP is compliant or not having regard to the fixed designed parameters.

**8. Monitoring of E-flow**

CWC must be directed to monitor e-flow of River Ganga specifically during lean season at various places specifically between Hardoi to Kanpur regularly. It must be ensured that

the quantity of water in the normal channel of the river is maintained equivalent to 20% on an average monthly basis during lean months of the River Ganga at Haridwar. CPCB shall continue to monitor the river water quality.

#### **9. Installation of ETP at Hospitals.-**

All hospitals of more than 100 bed capacity must be asked to install their ETP's in a time bound manner failing which action may be recommended and the Chief Medical Officer must be made responsible for ensuring the said compliance.

#### **10. Resorting to Incineration of Waste.-**

CPCB and UP PCB must ensure that where ever permission is granted to dispose of the sludge/industry waste through incineration, then such permission must accompany a detail scheme for disposal of the ash to be generated/collected because of incineration. In case it is not possible to dispose of the ash in the effective and safe manner such permission for incineration must not be granted.

#### **11. Afforestation and Bio-diversity Park**

All the land which become available due to the reduction in the storage capacity of the lagoons at distilleries/sugar factories/other industries in terms of the circular of CPCB, fixing the storage capacity equivalent to 30 days production must be directed to be utilized for thick plantation so as to act as a buffer against foul air of the industry and a source of fresh air to the residents of the localities.

NGT order had asked for framing of guidelines by CPCB and MOEF. The same is yet to be complied. CCA Projects/UP has already framed plans for Biodiversity Parks under guidance of Mr C R Babu, subject matter expert. All district DFOSs' have have been trained in the concept and 25 projects for establishment of Biodiversity parks have been submitted to State Mission for Clean Ganga on 18 October with a total approx. cost of 323.82 Cr. The same should be perused expeditiously for appropriate approvals.

In pursuance of NGT order, CPCB has also worked upon the plan for bio-diversity and has completed a study on river rejuvenation for Kali East. A draft has been prepared for action for this river.

#### **12. No discharge of untreated dirty water in River Ganga at any point of time.-**

The State must be asked to come up with a comprehensive plan so as to ensure that no sewer or dirty water enter into River Ganga even during the rainy season/during the period

the STPs are under maintenance/repair or otherwise. The State must resort to phyto-remediation, bio-remediation or any other technology where ever STP's are not in operation. The process used must be well evaluated and also documented as for its safety to the river ecosystem and its effectiveness in pollution abatement. CPCB shall be responsible for constant monitoring of the performance of any such project undertaken in the drains. It shall periodically submit its report to the State Authorities as well while taking appropriate action under law and NGT order. CPCB is entrusted with this important responsibility as custodian of environment, more specifically the Rivers in this case.

**13. Removal of Chromium Dump at Rania, Kanpur Dehat and Rakhi Mandi, Kanpur.-**

Chromium dump lying at Rania, Kanpur Dehat and Rakhi Mandi, Kanpur must be removed with promptness and due diligence. Effective measures in a time bound manner must be taken. Till such removal the dump must be covered so as to ensure that rain water does not come in contact with the chromium dump and leachates from dump is avoided as far as possible. Drinking water facilities for human beings and animals at both the places must be ensured by the State of Uttar Pradesh without fail. There must be a constant monitoring of the steps to be taken by the Government for permanent removal of chromium and responsibility must be fastened for the safe execution of the work upon the Chief Secretary of the State of Uttar Pradesh.

**14. Solid Waste.-**

The State must ensure fast and effective measures for disposal of solid waste both legacy and that generated on day to day basis in big cities like Meerut, Kanpur, Bareilly, Moradabad etc. Safe and hygienic method for disposal of the plastic bags must be a part of the mechanics for disposal of the solid waste. Hon'ble National Green Tribunal must monitor the action plan of the State Government in that regard on regular basis.

**15. Restriction on use of plastic bag.-**

Use of plastic bag for segregation of Bio-medical waste and other waste, both recyclable and food waste etc as well as other Municipal waste must be stopped immediately. State must come out with an alternative for such segregation and transportation of the Bio-medical waste, recyclable waste and other waste.

**LASTLY**

The Committee feels that levy of environmental compensation upon the polluting industries does act as a deterrent. But the same principle of levy of environmental compensation does not act as a deterrent qua the local body, local authority or departments of State of Uttar Pradesh for the simple reason that public money collected by the department/funds provided by the Government are used for payment of such compensation to the Pollution Department. Meaning thereby, that it is the public money which is used for payment of Environmental Compensation. The Hon'ble Tribunal may not only impose/levy environmental compensation in case of pollution norms being violated/ noncompliance of the directions issued by the Hon'ble Tribunal upon local bodies, local authorities and government departments it may also consider to recommend adverse action against the responsible officer, in a time bound manner and further a part of the environmental compensation be directed to be recovered from the salary of the officer concerned. The Committee would recommend that action be taken against the officers at the highest level.

The Committee also requests for appropriate orders on the non-operation of STP infrastructure in Allahabad, namely 29 MLD STP at Salori, 80 MLD STP at Naini, 60 MLD STP at Rajapur. Further, the Committee also submits that Geo-tubes have not been removed from the site nor the sludge entrapped properly managed. The report of UP PCB along with photographs is submitted alongwith.

Committee suggests that the following aspects of Ganga cleaning require continued monitoring.

1. The ground water extraction, water utilization by major industries and ground water replenishment measures need constant monitoring for improvement. CGWA is clearly not proving sufficient to guard the ground water issues which are fairly serious in nature.
2. The accounting for safe disposal of sludge from CETP and STP requires a standard protocol and constant monitoring. As of now it is going unassessed by all the agencies.
3. Kanpur has seen much effort in last two years and continues to require more work to abate the pollution that it causes to River Ganga.
4. Rania Chromium dump is a serious problem whose solution is yet to start. Very close monitoring is called for to ensure that problem is actually solved.
5. Notification of Flood Plains is the starting point in protecting the River ecosystem. It is required to protect the flood plain zones and initiate the process of restoring the biodiversity

*along the river. The same is still pending with State Government.*

*6. The well- coordinated creation of infrastructure for waste water treatment and its optimal operation and maintenance so as to ensure that no waste water enters river needs consistent watch. It tends to slip up at multiple points in the current multi-agency complex process. Stakeholders haven't envisaged a change in current process and therefore constant watch is the only option to ensure that public funds utilized achieve the purpose of clean river.*

*7. CPCB shall continue to monitor the waste water infrastructure and the Drains falling into river Ganga and its tributaries. It shall take appropriate action as per NGT order and under the prevailing legal provisions."*

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.

19. Brief summary of the reports received from the States of Uttarakhand, UP, Bihar, Jharkhand and West Bengal are as follows:

#### **UTTARAKHAND**

##### **Setting up of STPs, Interception and Diversion (I&D) of drains and preventing untreated sewage and effluents in the River Ganga.**

- a. Out of 18 projects sanctioned under Namami Gange Programme, 10 projects have been completed, 5 projects are scheduled to be completed by December 2019, 2 projects to be completed by February 2020 and remaining 01 project relating to Construction of 2 STPs at Joshimath of which 01 STP has also been completed in June, 2019 and work of other STP is stopped which will be completed by June, 2020.
- b. Under 18 projects, 30 STPs are proposed of which 21 STPs are completed, 06 STPs are to be completed by December 2019, 2 STPs will be completed by February 2020 and 01 STPs by June, 2020.
- c. Under these projects, 59 drains are proposed to be intercepted and diverted to these STPs against which 43 drains have been intercepted, 9 drains are proposed to be intercepted by June, 2019, 4 drains by February 2020 and remaining 3 drains by June, 2020.
- d. Bio-remediation on such 07 drains namely 1. Chandershwar drain (Consists of 3 drains merging together at one point-Shamshan Ghat, Dhalwala and Chandershwar), 2. Taulia drain, 3 Junior High School drain, 4. Kothiyalsain drain, 5. Baitarni drain, 6. Pokhari Bend drain and 7. Belni drain has commenced w.e.f. 01.11.2019 in compliance of the directions passed by this Hon'ble Tribunal on 22.08.2019. Thus, all the drains under the ongoing projects shall be intercepted and diverted to STPs for treatment' before 1<sup>st</sup> July 2020; and as an interim measure Bio-remediation facility has also been installed before 01.11.2019 on 07 drains which are likely to be intercepted and diverted after December, 2019.

#### **Information in tabular form**

Sl. No.	Targets to be achieved as per orders dated 10.12.2015, 13.07.2017 and 22.08.2019 the timelines	Targets achieved and the reasons for delay in compliance	Targets not achieved and the revised timelines proposed	Action taken or suggested for violation of timelines or non-achieving of targets.
1.	As per order dated Gyansu and 40 MID STP Haridwar which were sanctioned before 10.12.2015	As per the directions of Hon'ble NGT the targets were achieved in case of Tapovan, Devprayag and Gyansu. Regarding 40 MID STP at Haridwar, it was approved for 68 MID STP on Hybrid Annuity PPP Model, as such work is now scheduled to be completed by February, 2020 well before the timeline (01.07.2020) set by order dated 22.08.2019 for ongoing works.	Not applicable	Not applicable
2	As per order dated 22.08.2019 following timelines have been set:- (a). The project under execution are to be completed by 01.07.2020	Out of 18 projects sanctioned during 2017-2019, so far 10 are completed, OS will be completed by December, 2019, 02 by February, 2020 and remaining 01 by June, 2020. Hence, targets are		Though the projects will be Completed before 01.07.2020, liquidated Damage (LD) has been imposed on contractors who failed to achieve milestone during construction. Detail thereof is given under para 5.16 (6) of. This affidavit.

	(b). The projects where work has not commenced are to be completed by 31.12.2020.	01 project (STP & I&D Srikot) falls under this category. Work has	Not applicable	Not applicable
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**Action Taken by State Government on the Observations of the Monitoring Committee in reference to the Report dated 23.10.2019.**

The State Government has clarified and provided action taken report in response to the report of the Monitoring Committee dated 23.10.2019 which inter alia relates to;

- a. Interception of Pandeywala drains in Haridwar.
- b. Functioning of 3 Mini STPs at Devprayag.
- c. Functioning of STP of 50 KLD at Sangam road NandPrayag.
- d. Functioning of STP of 1.08 MLD, STP at Pokhri, Joshimath town.
- e. Functioning of STP at Badrinath.
- f. Functioning of STP at Tehri Town.
- g. Online Monitoring System for STP of 1 MLD at Rishikesh and other STPs at Haridwar, Tapovar, Swargasharam, Gyansu (Uttarkashi) and Srinagar.
- h. Construction of Electro-Coagulation based technology for 16 small STPs.

**Use of Treated Water**

- a. The treated water of 68 MLD from STP of Jagjeetpur will be use for irrigation by constructing a canal of 10 Km length and 20 Km offsets length having carrying capacity of 90MLD and this will be completed by December 2019.

- . Treated water from Sarai STP of 32 MLD (18+14) will be used for irrigation.
- a. With regard to STPs at Rishikesh and Munikireti the work is, to be undertaken for construction of a Canal of length of 20045 Km by Irrigation Department to use 5 MLD of treated water. However, **no timelines are given for completion.**
- d. It has been mentioned that treated water will not be possible in hilly region as the discharge from such STPs is very less and not techno economically feasible and hence treated effluent as per described norms is being discharge into the river.
- e. Therefore, **it is important all STPs should meet faecal coliform standards if it is discharged into the river.**

**Use of sludge manure (Ref. 5.4 Page 16)**

- a. The sludge generated from STPs/septic tanks is utilized by the farmers as manure against production of estimated production of 10732 cubic meters sludge, 14924 cubic meters sludge has been distributed to the farmers. (Free of cost)
- b. Sludge generated is found to be saved for application.

**Status of Septage Management (Ref. 5.5 Page 17)**

- a. Protocol for Septage Management has been developed and 9 septage suction transport vehicles have been procured, however, **Timelines are not given Septage Management in other hilly towns where specific Septage Suction Vehicles are needed in these hilly towns.**

- b. **Direction: In no cases Septage either solid or non slurry form should be disposed in any stream leading to the river Ganga or its tributaries.**
- c. **There is no clear cut Action Plan is emerging out with timelines for co-treatment of Septage with existing STPs.**

**Compliance in relation to Industries (Ref. 5.6 Page 18)**

- a. It has been mentioned that out of 7080 industries in operation in the State, 5306 units are having valid consents and 204 applications are under consideration at various levels and remaining 1570 have been issued directions to show cause.

**Functioning of CETPs**

- a. 3 CETPs are reported to be complying with standards.
  - . All the operational units in Sitarganj are connected with CETP. Out of 531 industries, 20 are not connected in CETP Haridwar and the conveyance system is under construction which will be completed by May, 2020.
- a. In Pantnagar CETP, out of 499 industries, 254 industries are not connected with CETP because of non-availability of conveyance system. Further out of 254 now 61 industries are connected and remaining 193 industries will be connected within one year time.
- b. Observations: can the industries which are not connected to CETP but having stand alone ETP must be complying with the prescribed norms and what is the mode of disposal of their effluent is not clear in the report. Till they are connected to

CETP, SPCB may take a view on their operations if such units are not found to be complying with the stricter standards.

UKSPCB has to ensure that CETPs should meet with the prescribed norms and the treated water should be utilized instead of discharging effluents in any drain leading direct or indirectly to the river Ganga.

**Rawali Mahdood Drain (Para 5 Page 20)**

- a. The action proposed to be taken for this drain has not been clearly mentioned.

**Installation of STPs and Solid Waste Management in Hotels/Ashrams/Dharamshalas and Roadside Hotels.**

- a. UEPPCB should ensure that as per applicability, hotels/ashrams/dharamshalas should have their own STPs and no untreated water should go into river Ganga or any stream.
- b. The roadside Dhabas, Hotels should not discharge their waste water down the hill/slopes contaminating the fresh water streams.

**Other Issues**

- a. The report has given status on environmental flows, compliance of Solid Waste Management Rules, Disposal of Bio-medical Waste, Zoning of Flood Plains, Regulation of Mining Activities, Plantation of Biodiversity Parks and evolving the Tourism Policy.
- b. With regard to Mining Activities, it is mentioned that River Bed Mining in the State of Uttarakhand is carried out in highly

regulated unscientific manner as per the provision of State Mining Policy and Uttarakhand Mining Mineral Rules, 2001.

- c. However, it appears large number of illegal mining is taking place which is evidenced as per the statistics given under Para 5 indicating that in the last 5 years 10,167 cases have been reported in posing penalty of 57.71 crore (Para 5 Page 33).

Sl. No.	Financial Year	Illegal Mining/Storage/Transportation cases	Penalty (in Rs. Crore)
1	2015-2016	1324	12.27
2	2016-2017	1424	4.41
3	2017-2018	3231	9.44
4	2018-2019	2649	26.99
5	2019-2020 (Up to October 2019)	1539	4.60
Total		10,167	57.71

#### **River Water Quality (Para 5.8 Page 22)**

- a. The UEPPCB has provided water quality data of river Ganga at 29 locations (Annexure 11, Page 15854) which has indicating that at 11 locations the water of river Ganga is fit for direct drinking and it is worth appreciating that the sanctity and the glory of the Ganga is observed at such locations such as (>2): River Dhauli Ganga B/C Alaknanda at Vshnuprayag, River Alaknanda B/C River Nandakini at Nandprayag, River ALaknanda A/C Nandakini at Nandprayag, River ALaknand B/C River Pindar at Karanprayag, River Mandakini B/C Alaknanda Rudraprayag, River Alaknanda B/C mandakini Rudraprayag, River Alaaknanda A/C Mandakin Rudraprayag, River Alaknanda A/C Bhagirathi Devprayag, River Alaknanda B/C Bhagirathi Devprayag, River Alaknanda B/C Alaknanda Devprayag, River Mandakin D/S Agustmuni Rudraprayag.

- b. Since it is achieving the water quality standards of >2 MPN/100 ML Faecal Coliform, however at other locations such as River Alaknanda B/C Dhauri Ganga at Vishnuprayag, River Akankanda A/C Dhauri Ganga at Vishnuprayag, River Nandakini B/C Alaknanda at Nandprayag, River Pindar B/C Alaknanda at Karanprayag, River Alaknanda A/C Pindar at Karanprayag, River Bhagirathi D/S Uttarkashi, River Ganga U/S Lakshmanjhula Rishikesh, River Ganga U/S Riawala Dehradun, River Suswa at Mathurawala Dehradun, River Song D/S Near Birla Guest House Dehradun, River Ganga D/S Rishikesh, Upper Ganga Canal at Laltarao Bridge Haridwar, Upper Ganga Canal at Rishikul Bridge Haridwar, Upper Ganga Canal D/S Roorkee, Upper Ganga Canal D/S Har Ki Pauri Haridwar, Upper Ganga Canal at Damkoti Haridwar. Where the water quality does not meet the drinking water quality standards of >2 MPN/100ML faecal Coliform. Which requires to be achieved.

#### **Uttar Pradesh**

The Chief Secretary has filed the Quarterly Progress Report dated 11.12.2019. The Report gives a Tabular Statement in respect of expected date of completion of projects and proposes revised timelines for Segment 'B' Phase I and for rest of the State. The report further indicates status of CETPs at Kanpur, utilization of Treated Sewage Water, Bio-remediation of 44-59 drains having sent the proposal/DPR amounting rupees 1796 crores to NMCG, sanitation status in Ganga towns, Solid Waste Management in-situ and safe disposal of chromium dumps at Khanchanpur, Rania and Kanpur Dehat.

It has been further informed that where CETPs are not working properly, Environment Compensation has been imposed. UPPCB is regularly monitoring the status of compliance of STPs and CETPs and during the quarter of September to November, 20 STPs have been found defaulting on which notices have been issued for imposing Environment Compensation of Rupees 39.04 crores. With regard to CETPs, it is stated that out of 07 CETPs, 02 CETPs have been found defaulting against which EC of rupees 45.60 lakhs has been imposed.

Further, Report on Environmental Flow has been filed along with Report of Irrigation and Water Resource Department. Demarcation of Flood Plain Zone of River Ganga in Segment 'B' has been completed and field verification has been done.

**State of Bihar (Page 15526)**

- a. The report has been filed on 30.11.2019 by SPMG Bihar. The report indicates following towns on the bank of River Ganga

S.No	Name of the River	Name of Towns
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1	Ganga	1. Patna A. (Phulwarishariff) 2. Maner 3. Danapur 4. Bakhtiyarpur 5. Barh 6. Mokam 7. Munger 8. Sultanganj 9. Bhagalpur 10. Buxar 11. Barahiya	12. Jamalpur 13. Kahalgaon 14. Chhapra 15. Sonapur 16. Hajipur 17. Begusarai 18. Khagaria 19. Naugachhiya 20. Dighwara 21. Teghra 22. Manihari
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b. Liquid Waste Management

- A total 26 sewerage infrastructure projects sanctioned at a cost of Rs 5089.82 Crore which are at various stages of implementation in towns namely Patna (11 projects), Begusarai, Munger, Hajipur, Mokama, Sultanganj, Naugachia, Barh, Bhagalpur, Sonapur, Chhapra, Khagaria, Bakhtiyarpur, Maner, Danapur and Phulwarishariff. These projects will facilitate in treatment of 616.5 MLD of sewage through creation/rehabilitation of STPs, sewerage network and allied Interception and diversion works.
- 16 projects (Beur STP, Beur Sewerage Network, Saidpur STP & Adjoining Network, Saidpur Sewerage Network, Karmalichak STP, Karmalichak Sewerage Network, Pahari STP, Pahari Zone-IV A (South), Pahari Zone V, Sultanganj, Mokama, Sonapur, Barh, Naugachhiya, Bakhtiyarpur and Maner) are under implementation
- LOA has been issued for 2 projects (Digha, Kankarbagh) and 10 projects (Munger, Hajipur, Bhagalpur, Begusarai, Chhapra,

Khagaria, Munger and Fatua, Danapur, Phulwarishariff in one package) are under tendering stages.

- In addition, revised estimate of 1 project (Buxar) is under process
- Total 126 Nallas in the Ganga towns in which 124 Nallas has been screened. Rest 2 Nallas screening not required.

**State of Jharkhand (P-15508 to 15512)**

- a. 2 STPs have been constructed by SMLP and 7 MLD capacity and the work is completed.
- b. 1 STP of 3.5 MLD capacity is under construction and will be completed by June, 2020.

**State of West Bengal (Page 15522-15524)**

- a. Report has been filed on 29.11.2019 by Programme Director WBSPMG. The quarterly report relates to details of STPs and target dates. According to the report, there will be overshooting of the dates/prescribed timelines given in the Order of the Tribunal dated 22.8.2019.

**Report of CPCB on Biodiversity Parks**

Though the issue has not been finalized, the proposal is to prepare guidelines giving structural components of biodiversity parks with reference to such parks already developed and functional. The report mentions as follows:

*“.....DDA has notified so far 7 Biodiversity Parks (the Yamuna, the Aravalli, the Neela Hauz, the Tilpath Valley, the Northern (Kamla nehru) Ridge, Tughalaqabad and South Delhi Biodiversity Parks, besides the recent order for setting up of Riverfront Biodiversity Parks by DDA. Of these 7 Biodiversity Parks, the Yamuna and Aravalli Biodiversity Parks are fully functional and have become Nature Reserves of Delhi. Both the Biodiversity Parks have become global models for conservation of natural heritage and environmental sustainability. The Yamuna Biodiversity Park model is an appropriate model for replication in the floodplains of the rivers across India.”*

Conservation zone will have biological communities and forest communities as follows:

**"Nature Conservation Zone**

The Nature Conservation zone has biological communities interspersed with wetlands and grasslands. There are altogether 25-30 biological communities, some of which are given below:

- (i) *Mitragyna* dominated communities (Figure 1 a)
- (ii) *Terminalia chebula* dominated communities
- (iii) *Adina* dominated community
- (iv) *Acacia catechu* dominated community (Figure 1 b)
- (v) *Holoptelia* dominated community (Figure 2b)
- (vi) Teak dominated community
- (vii) *Terminalia tomentosa* dominated community
- (viii) *Acacia nilotica* dominated community
- (ix) *Dalbergia sisso* dominated community
- (x) *D. lanceolata* dominated community
- (xi) *Albizia* dominated community (Figure 2a)
- (xii) *A. lebbeck* dominated community
- (xiii) *Cordia* dominated community
- (xiv) Jamun dominated community (Figure 2c)
- (xv) Amla dominated community
- (xvi) Grasslands communities (that include short, intermediate and tall grasslands) (Figure 2b)
- (xvii) Mixed deciduous forest (Figure 3a)
- (xviii) Wetlands ecosystems (wetlands are fully functional and biologically rich and attract 1000s of migratory birds during winter months) (Figures 4a,b,c&d)

Communities have diversified food web and three trophic levels. These riparian forest communities provide a wide range of ecological services and harbour rich wildlife (Figure 7b, 8a&b).

These diversified riparian ecosystems: (a) buffer ambient temperature, (b) prevent evaporation by keeping the water cool, (c) provide detritus (organic matter) to the biota that live in the river water and purify the water more effectively than RO plants, (d) prevent erosion / gully formation on the flood plains, (e) enhance recharging potential of the flood plains, (f) serve as filter for both point and non point source air pollution, (g) act as shelter belt, (h) reduce the flood water velocity that ensure protection of infrastructure and communities in the downstream, and (i) harbour rich wildlife having three trophic levels.

The wetlands alone store flood water of several million gallons and recharge ground water and even provide lateral flow to the river during lean period, clean waste water if it enters into river system (treatment wetlands) through storm drains. The wetlands also serve as habitat for a wide range of animal species that form

*a rich trophic life. These wetlands attract 1000s migratory birds during winter months.”*

A test case has been proposed to rejuvenate Kali river stretch of 200-300 km from Khatauli to the Aligarh-Diwai Railway Bridge (at Chhatari village) where the Kali river exits from Bulandshahr District.

20. We have heard Shri A.N.S. Nadkarni, learned ASG appearing for the State of Uttarakhand and learned Counsel for the States of Uttar Pradesh, Bihar, Jharkhand and NMCG. None appears for the State of West Bengal.
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. It is stated that the work of STPs will be completed within the timeline laid down and bioremediation has been started on seven drains which have not yet been taped. The points raised by the Monitoring Committee have been addressed. Learned ASG, however, stated that more action was required for solid waste management for which CCTV cameras need to be installed, security guards posted and designated areas cordoned off. Legacy waste dump sites which are said to be atleast 12 in major towns need to be bio-remediated. Let such steps be taken expeditiously.

**VII. Consideration:**

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.

**VIII. Future Monitoring Mechanism after submission of final reports by the Committees constituted by the Tribunal earlier**

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.

**IX. Directions:**

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](mailto:judicial-ngt@gov.in).

List for further consideration on 29.04.2020.

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

S.P. Wangdi, JM

Dr. Nagin Nanda, EM

December 18, 2019  
Original Application No. 200/2014  
DV



20

Item No. 1

Court No. 1

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

(By Video Conferencing)

Original Application No. 200/2014

M.C. Mehta

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 13.08.2020

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

Applicant(s): Ms. Katyayni, Advocate

Respondent(s): Mr. Atmaram N.S. Nadkarni, Senior Advocate for NMCG and States of UP and Uttarakhand with Mr. Rahul Verma, AAG for State of Uttarakhand and Mr. Abhishek Yadav, Advocate for State of UP  
Mr. Raj Kumar, Advocate for CPCB

**ORDER**

1. This order may be read in continuation of order dated 18.12.2019 dealing with the review of progress of compliance of directions of this Tribunal dated 10.12.2015, 13.07.2017 and 6.8.2018 on the subject of preventing and remedying the pollution of river Ganga. The matter was earlier being considered by the Hon'ble Supreme Court since the year 1985, before being transferred to this Tribunal, in the year 2014 and 2017<sup>1</sup>.

2. The Tribunal dealt with the issue of pollution caused on account of illegal discharge of untreated sewage and industrial effluents either

<sup>1</sup>M.C. Mehta vs. Union of India & Ors. Writ Petition (Civil) No. 3727/1985 orders dated 29.10.2014 (2015) 12 SCC 764 and 24.01.2017

directly into the River Ganga or its tributaries and connected drains, besides other associated issues including dumping of solid waste, bio-medical waste, hazardous waste, plastic waste, muck and other waste, illegal sand mining, illegal encroachment of the floodplains, absence of steps for conservation of ground water, reuse of treated water, restoration of water bodies and maintenance of e-flow.

3. The matter was dealt with by dividing the area covered by the River Ganga into different 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).

4. As already noted, the proceedings have been pending since 1985. Various orders have been passed by the Hon'ble Supreme Court on the subject before transfer of proceedings to this Tribunal and thereafter by this Tribunal. The result of monitoring for 34 years has not been encouraging. Government of India took initiatives by way Ganga Action Plans I & II and thereafter by way of *Namami Gange*. The progress so far has not been adequate and found to be far from satisfactory in earlier orders.

5. We may give a brief resume of some of the earlier orders of the Tribunal. While considering the progress of compliance of orders of this Tribunal, vide order dated 19.07.2018 with regard to **Phase-I - Segment-A** and order dated 27.07.2018 with regard to **Phase-I - Segment-B**, Monitoring Committees were constituted to be headed by a former Judge of the Uttarakhand High Court for **Phase-I Segment-A** and a former

Judge of the Allahabad High Court for **Phase-I Segment-B** 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. The actions were required to cover interception and diversion of drains carrying sewage to STPs, laying of sewerage network, utilization of treated sewage, compliance of norms by industries in the catchment areas, ground water regulation, flood plain regulation, rain water harvesting systems, good irrigation practices and filing list of industries which have the potential for pollution and creation of bio-diversity parks.

6. Vide order dated 29.11.2018, the Tribunal reviewed the progress in **Segments A and B of Phase-I** on STPs, CETPs and tapping of drains with reference to the laid down timelines and also compliance of MSW Rules, setting up of bio-digesters, sewerage network, improvement in water quality, unregulated ground water extraction, e-flow, public involvement, decentralized waste processing facility close to the source of generation of waste, protection of floodplains and illegal mining. The Tribunal also 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. With regard to **Phase-II to IV**, NMCG, in co-ordination with State Governments of Uttarakhand, Bihar, Jharkhand, West Bengal and Uttar Pradesh, was to 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. 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 to be displayed on their respective websites. CPCB was also to indicate such status on its website. Flood plains were to be demarcated, encroachments removed, bio-diversity parks set up, afforestation works undertaken, guidelines for bio-diversity parks prepared by the CPCB and the MoEF&CC, flood plains were to be handed over to the State Forest Departments.

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 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

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

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.

8. Status of compliance was further considered vide order dated 22.08.2019 and it was observed:-

**“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:

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

\*subject to payment of compensation as mentioned above”

9. The matter was last 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 and it was observed:-

“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.”**

10. The Tribunal also noted the status of setting up of STPs, Interception and Division (I&D) of drains and preventing untreated sewage and effluents in the River Ganga and certain other issues such as status of e-flow, compliance of Solid Waste Management Rules, 2016, protection of flood plains, regulation of mining activities, setting up of bio-diversity parks in the States of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal. The Tribunal observed and concluded:

**“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](mailto:judicial-ngt@gov.in)."

29. Accordingly, reports have been 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). We have perused the reports with the assistance of learned Counsel for the Applicant, Shri N.S. Nadkarni, Senior Advocate, appearing for the NMCG, States of Uttarakhand and Uttar Pradesh and learned counsel for the CPCB. **There is no appearance on behalf of the States of Jharkhand, Bihar and West Bengal.**

30. Learned Counsel for the Applicant has also filed a written note of submissions. 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."***

31. 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 Error! Reference source not found. 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.”*

32. 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.**

33. 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)**

34. The report deals with the guidelines for setting up of bio-diversity 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

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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**

35. 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.

36. 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**

37. 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**

38. 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**

39. 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**

40. 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**

41. 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.

42. 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](mailto: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.

List for further consideration on 08.02.2021.

A copy of this order be sent to the Chief Secretaries of Uttarakhand, U.P., Jharkhand, Bihar and West Bengal, CPCB, NMCG, MoJS and Monitoring Committees constituted by this Tribunal for the States of Uttarakhand and UP and State PCBs of Uttarakhand, U.P., Jharkhand, Bihar and West Bengal by e-mail.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

August 13, 2020  
Original Application No. 200/2014  
A & DV

Annexure - IV

746

Speed-post/E-mail

F.No. B- 190153/WQM-II/CPCB/2018-19

Dated: 22.10.2020

To,

9165-9181

**The Member Secretary,  
State Pollution Control Board and other concerned agencies  
5 Ganga front states.**

**Subject: Compliance of 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- reg.**

**Ref.: CPCB letters dated 03.02.2020 and 16.06.2020**

Sir,

Hon'ble NGT in the matter of M.C. Mehta Vs. Union of India in O.A. No. 200/2014 has passed orders dated 7/22<sup>nd</sup> Aug. 2019, 12/18<sup>th</sup> Dec. 2019 and 13<sup>th</sup> Aug. 2020 (**Annexure 1**) issuing directions regarding stoppage of discharge of untreated sewage in river Ganga and tributaries, status of STP projects and EC to be imposed for delay in the commissioning and starting of projects. In addition, the tribunal has also directed to implement bioremediation/phytoremediation or any other treatment interventions on all the drains till commissioning or starting of the projects and has directed CPCB to calculate EC for the defaulting drains if the interim measures have not started. Accordingly, Environmental Compensation for the defaulting drains has been calculated and communicated to the Chief Secretaries of the 5 Ganga main stem States vide CPCB letter dated 3<sup>rd</sup> February, 2020 and reminder letter dated 16<sup>th</sup> June 2020.

In pursuance of Hon'ble NGT directions, EC for uncompleted STP projects and for the defaulting drains where interim measures have not been initiated till 1<sup>st</sup> July 2020, EC @ of Rs. 10 lakh per month is to be calculated and levied by CPCB. Hence, fresh EC needs to be calculated for the defaulting drains and delayed STP projects after 1<sup>st</sup> July, 2020.

In compliance to the aforementioned directions of the Hon'ble Tribunal, format for providing information regarding status of the STPs and drains is enclosed (**Annexure 2**). You are, requested, to forward the requisite information in the enclosed format by 30<sup>th</sup> October, 2020 for further necessary action.

**Encl.:** As above

Yours faithfully

*A.K. Vidyarthi*  
22/10/20

(A.K. Vidyarthi)

**Additional Director & Divisional Head, WQM-II**

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

*dc*

*SEB' (AC)*

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
दिनांक *27/10*  
दिनांक *27/10*

(104)

**Information sought on drains, sewage treatment plants in compliance to Hon'ble NGT order dated 22.08.2019, 18.12.2019 and 13.08.2020**

**1. Completed, under construction and under process STP projects**

Sl No	Completed/Operational STP projects									Under construction STP Projects							Under tendering/proposed/underprocess STP projects								
	City/Town	STP Projects completed/operational	STP operating agency	Capacity of operational/completed STPs	Drains covered/tapped by operational STP with flow of drain	Current discharge point/ route of treated sewage	Household connectivity status		Under capacity or overcapacity utilization of STP, if any, reason thereof	STPs under construction	Capacity of under-construction STP	Proposed date of completion of project	Targeted date of completion of STP projects	Drains to be tapped in the proposed STP	Status of interception and diversion of drains for respective STP	Status of interim measures adopted in drains (Yes/NO)	Start date of interim measures taken	STP under plan/proposed for construction	Capacity of planned/proposed for construction STP	Proposed date of completion of project	Drains to be Tapped in the STP & targeted household connections, if any	Status of interim measures to be adopted in drains	Start date of interim measures		
							Targeted connection	Achieved connection																	

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Annexure - V

747

Speed-post/E-mail

Dated: 28.10.2020

F.No. B- 190153/WQM-II/CPCB/2018-19

9536-38

To,

**Principal Secretary  
Urban Development Department  
UP, UK and WB**

**Subject: Compliance of 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- reg.**

**Ref.: CPCB letters dated 03.02.2020 and 16.06.2020**

Sir,

Hon'ble NGT in the matter of M.C. Mehta Vs. Union of India in O.A. No. 200/2014 has passed orders dated 7/22<sup>nd</sup> Aug. 2019, 12/18<sup>th</sup> Dec. 2019 and 13<sup>th</sup> Aug. 2020 (**Annexure 1**) issuing directions regarding stoppage of discharge of untreated sewage in river Ganga and tributaries, status of STP projects and EC to be imposed for delay in the commissioning and starting of projects. In addition, the tribunal has also directed to implement bioremediation/phytoremediation or any other treatment interventions on all the drains till commissioning or starting of the projects and has directed CPCB to calculate EC for the defaulting drains if the interim measures have not started. Accordingly, Environmental Compensation for the defaulting drains has been calculated and communicated to the Chief Secretary of the State vide CPCB letter dated 3<sup>rd</sup> February, 2020 and reminder letter dated 16<sup>th</sup> June 2020.

In pursuance of Hon'ble NGT directions, EC for uncompleted STP projects and drains where interim measures have not been initiated till 1<sup>st</sup> July 2020, is to be calculated @ of Rs. 10 lakh per month and levied by CPCB. Hence, fresh EC needs to be calculated for the defaulting drains and delayed STP projects after 1<sup>st</sup> July, 2020.

In compliance to the aforementioned directions of the Hon'ble Tribunal, format for providing information regarding status of the STPs and drains is enclosed (**Annexure 2**). I am directed to request you to arrange to forward the requisite information in the enclosed format by 7<sup>th</sup> November, 2020 for further necessary action.

**Encl.:** As above

Yours faithfully

*A.K. Vidyarthi*  
28/10/20

(A.K. Vidyarthi)

**Additional Director & Divisional Head, WQM-II**

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

o/c

SUB (AC)

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
दिनांक 03/11/20

106

**Information sought on drains, sewage treatment plants in compliance to Hon'ble NGT order dated 22.08.2019, 18.12.2019 and 13.08.2020**

1. Completed, under construction and under process STP projects																							
Sl No	Completed/Operational STP projects								Under construction STP Projects							Under tendering/proposed/underprocess STP projects							
	City/Town	STP Projects completed/operational	STP operating agency	Capacity of operational/completed STPs	Drains covered/tapped by operational STP with flow of drain	Current discharge point/ route of treated sewage	Household connectivity status		Under capacity or overcapacity utilization of STP, if any, reason thereof	STPs under construction	Capacity of under-construction STP	Proposed date of completion of project	Targeted date of completion of STP projects	Drains to be tapped in the proposed STP	Status of interception and diversion of drains for respective STP	Status of interim measures adopted in drains (Yes/ NO)	Start date of interim measures taken	STP under plan/proposed for construction	Capacity of planned/proposed for construction STP	Proposed date of completion of project	Drains to be Tapped in the STP & targeted household connections, if any	Status of interim measures to be adopted in drains	Start date of interim measures
							Targeted connection	Achieved connection															

Annexure V.I

222

Speed-post/E-mail

F.No. B- 190153/WQM-II/CPCB/2018-19

Dated: 27.11.2020

To,

2873-2891

As per list attached

**Subject: Meeting for assessment of Environmental Compensation in Compliance of 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- reg.**

**Ref.: CPCB letter dated 22.10.2020**

Sir,

This has reference to CPCB letter of even no. dated 22.10.2020 wherein it was requested to provide the information in prescribed format regarding status of the STPs and drains w.r.t. above referred Hon'ble NGT orders by 30.10.2020. However, the reply to CPCB letter is still awaited.

In this context, a meeting is scheduled to be held on 7<sup>th</sup> December, 2020 as per attached schedule via video conferencing to review status of drains & STPs to take further action as per Hon'ble NGT order.

You are therefore, requested to provide the requisite information in the prescribed format by 4<sup>th</sup> December, 2020 positively and to make it convenient to attend the scheduled meeting. A line of confirmation through e-mail to [ngrba.cpcb@gmail.com](mailto:ngrba.cpcb@gmail.com) will be highly solicited. Name and contact no. of the nominated officials may be also be communicated.

Yours faithfully

*A.K. Vidyarthi*  
27/11/20

(A.K. Vidyarthi)

Additional Director & Divisional Head, WQM-II

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

O/c  
SUB (AC)

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
निर्गत...  
दिनांक 02/12/2020

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**Minutes of Meeting dated 07.12.2020 held through video conference with respective authorities of 5 Ganga Front States to review the status of drains and STP projects in 5 Ganga Front States in compliance of Hon'ble NGT order dated 13.08.2020 in the matter of M.C. Mehta vs. Union of India &ors, O.A. No. 200 of 2014**

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, meetings were convened sequentially on 07.12.2020 from 11.00 A.M. onwards through video conference with officials of respective State Authorities of the States of Uttar Pradesh, West Bengal, Uttarakhand, Bihar and Jharkhand in order to review the status of interim measures taken on the drains and STP projects in order to calculate EC for the defaulting drains and delayed STP projects.

The list of participants is enclosed at **Annexure 1**.

**Record note of discussions held during the meeting:**

1. At the outset, Dr. A.K. Vidyarthi, from CPCB welcomed all the participants. He apprised the participants about the issues to be discussed in the meeting. Detailed deliberations were held on the data of drains and STP projects with the 5 Ganga Front States. In the meeting representatives of the State Authorities requested to send a format again for filling information on drains and STP projects to be filled collectively by the concerned authorities for onwards submission to CPCB.
2. RD, Kolkata, CPCB apprised that in addition to 56 drains being monitored by CPCB there are 45 additional drains which falls into river Ganga. These additional 45 drains need to be physically verified. Officials of the West Bengal Government informed that there are 56 drains in West Bengal out of which 23 drains are being intercepted and diverted to STPs. State officials were also informed that a follow up meeting will be schedules by the RD Kolkata for gathering information and thereafter calculating EC as per order of the Hon'ble Tribunal. It was also informed that 22 drains could not be connected to STP and no interim measures such as phytoremediation could be taken for these drains.
3. BSPCB representative informed that they have to prepare the list of drains again in order to avoid any confusion.
4. During the meeting, the state authorities of Uttarakhand informed that they have sent the information to CPCB through email.

5. During the meeting with state authorities from Jharkhand, it was informed that the Sahibaganj STP project has been commissioned in September, 2019 and the Rajmahal STP project is at commissioning stage and will be commissioned before 31.12.2020. Also, 08 drains have been tapped to Sahibaganj STP and in 04 drains under Rajmahal Project, interim measures have already been taken.

**Decisions taken in the meeting are as follows:**

1. Format for listing drains and STPs and their details shall be sent to the State Authorities of Uttar Pradesh for filing and onwards submission to CPCB.
2. RD Kolkata will organize a follow up meeting with the respective state authorities of West Bengal to finalize the list of drains and STP projects to calculate EC as per Hon'ble NGT orders.
3. It was decided that a follow up meeting will be organized by CPCB with representatives from Bihar State authorities.
4. The status of drains and STPs as informed by Uttarakhand State authorities shall be considered by CPCB while calculating EC and if required another follow up meeting may be organized.
5. Information of drains and STPs provided by the state authorities of Jharkhand shall be considered in calculating EC.

The meeting ended with vote of thanks to the chair.

The list of participants is as follows:

Annexure I

S. No.	Name of Officer	Organization	Designation	Email-Id
1.	Sh. Anand Kishor	UD&HD, JH	Secretary	<a href="mailto:urbansec-bih@nic.in">urbansec-bih@nic.in</a>
2.	Sh. A.K.Vidyarthi	CPCB- Delhi	Divisional Head-WQM II	<a href="mailto:akvidyarthi@gmail.com">akvidyarthi@gmail.com</a>
3.	Sh. M.K.Biswas	CPCB- RD(K)	Regional Director-Kolkata	<a href="mailto:biswasmrinal@gmail.com">biswasmrinal@gmail.com</a>
4.	Ms Reena Satavan	CPCB- Delhi	Scientist-D	<a href="mailto:Reena.hsw@gmail.com">Reena.hsw@gmail.com</a>
5.	Sh. Prashant Kr	CPCB RD-N		
6.	Sh Ajay Sharma	UPPCB		
7.	Sh Ramesh Ranjan	UP Jal Nlgam		
8.	Dr. T. K. Gupta	WSPCB		
9.	Ms Nandini Ghosh	KMDA		
10.	Representative	KMC		
11.	Ms Neelima Garg	UK Jal Sansthan		
12.	Representative	UKPCB		
13.	Dr. Naveen Kumar	BSPCB	Scientist	
14.	Dr. Lata Chaudhry	BUIDCO	Environment and Social Management Coordinator	<a href="mailto:esmcinpmu.buidco@gmail.com">esmcinpmu.buidco@gmail.com</a>
15.	Representative	UD&HD, Bihar		
16.	Representative	UD&HD, JH		
17.	Sh Bibhuti	JH-SPMG		
18.	Representative	JSPCB		
19.	Ms. Anu Chetal	CPCB- Delhi	Scientist-B	<a href="mailto:chetalanu@gmail.com">chetalanu@gmail.com</a>
20.	Dr. Sachin Mishra	CPCB- Delhi	Senior Research Fellow	<a href="mailto:Sachin.cpcb2019@gmail.com">Sachin.cpcb2019@gmail.com</a>
21.	Megha Chauhan	CPCB- Delhi	Junior Research Fellow	<a href="mailto:Chauhan.megha350@gmail.com">Chauhan.megha350@gmail.com</a>

**Minutes of Meeting dated 14.12.2020 held through video conference to review the status of drains and STP projects in Bihar in compliance of Hon'ble NGT order dated 13.08.2020 in the matter of M.C. Mehta vs. Union of India & ors, O.A. No. 200 of 2014**

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, a follow-up meeting was convened on 14.12.2020 at 03:00 PM through video conference with officials of State agencies viz. SPMG, Urban Development Department, BUIDCO, BSPCB and RD Kolkata, CPCB in order to review the status of interim measures taken on the drains and STP projects in order to calculate EC for the defaulting drains and delayed STP projects.

The list of participants is enclosed at **Annexure 1**.

At the outset, Divisional Head, WQM-II welcomed all the participants. He apprised the participants about the issues to be discussed in the meeting. Detailed deliberations were held on the data of drains and STP projects in the state. The participants were informed that there is variation in the data received from different state authorities.

**Record Note of Discussion:**

1. Secretary, UD & HD Bihar, welcomed the participants and informed that the projects are most likely to be completed by 2021. He apprised the participants about the projects under taken by the UD&HD. He sought information on drains and STPs from the participating authorities. It was informed that the state has started bioremediation on 89 drains and DPR of some proposed STP projects is pending with NMCG for approval.

2. Dr. Lata Choudhary from BUIDCO informed that their department looks after the STP construction projects in the State and the list of drains provided by them is in accordance with their data of STP Projects and there are 139 drains in the state that discharge directly into river Ganga. She also apprised that some STP projects are under proposal stage and it cannot be conformed at this stage which drains would be tapped in the proposed STPs. Also, the authority has requested the concerned departments to provide them information about drains proposed to be tapped in STPs. As per the information, provided there are 15 under construction STPs and 34 STPs are at proposal stage.

3. BSPCB informed that as per their record, bio-remediation/interim measures have started in 89 drains during October-November, 2020. He also informed that more than 500 drains have been identified in the state during a survey done by them.

4. On request by the participants, Secretary constituted a four-member committee nominating officials from BUIDCO, BSPCB and SPMG with Mr. Jai Prakash, Senior Finance Expert, SPMG nominated as the Nodal Officer for this committee. The committee constituted will coordinate with the aforementioned agencies to prepare database for drains and STP in the state in order to avoid any confusion/ discrepancy amongst state authorities.

5. After the detailed deliberations held in the meeting, it was concluded that the information sought on drains and STP will be finalized by the committee and will be sent to CPCB before 24.12.2020 so that report may be filed in Hon'ble NGT before the next date of hearing. Committee was also tasked to finalize criteria for consideration of STP projects for consideration to levy EC. BUIDCO was asked to prepare a time-bound Action Plan for the incomplete STP and drain projects.

6. BSPCB was also requested to provide CPCB the list of 89 drains on which interim measures have been adopted by the State and the list of 500 drains identified by BSPCB at the earliest. They are also requested to provide details of the interim measures taken on these 89 drains.

The meeting ended with vote of thanks to the chair.

The list of participants is as follows:

**Annexure I**

<b>S. No.</b>	<b>Name of Officer</b>	<b>Organization</b>	<b>Designation</b>	<b>Email-Id</b>
1.	Sh. Anand Kishor	UD&HD	Secretary	<a href="mailto:urbansec-bih@nic.in">urbansec-bih@nic.in</a>
2.	Sh. A.K.Vidyarthi	CPCB- Delhi	Divisional Head-WQM II	<a href="mailto:akvidyarthi@gmail.com">akvidyarthi@gmail.com</a>
3.	Sh. M.K.Biswas	CPCB- RD(K)	Regional Director- Kolkata	<a href="mailto:biswasmrinal@gmail.com">biswasmrinal@gmail.com</a>
4.	Ms Reena Satavan	CPCB- Delhi	Scientist-D	<a href="mailto:Reena.hsw@gmail.com">Reena.hsw@gmail.com</a>
5.	Dr. Naveen Kumar	BSPCB	Scientist	
6.	Sh. Azim Khan	SPMG	Environmental Specialist	
7.	Sh. Jai Prakash	SPMG	Senior Finance Expert	
8.	Dr. Lata Chaudhry	BUIDCO	Environment and Social Management Coordinator	<a href="mailto:esmcinpmu.buidco@gmail.com">esmcinpmu.buidco@gmail.com</a>
9.	Ms. Anu Chetal	CPCB- Delhi	Scientist-B	<a href="mailto:chetalanu@gmail.com">chetalanu@gmail.com</a>
10.	Dr. Sachin Mishra	CPCB- Delhi	Senior Research Fellow	<a href="mailto:Sachin.cpcb2019@gmail.com">Sachin.cpcb2019@gmail.com</a>
11.	Megha Chauhan	CPCB- Delhi	Junior Research Fellow	<a href="mailto:Chauhan.megha350@gmail.com">Chauhan.megha350@gmail.com</a>

**Minutes of Meeting dated 12.01.2021 held through video conference with respective authorities of Jharkhand, Uttarakhand and Bihar to review the status of drains and STP projects in Ganga Front States in compliance of Hon'ble NGT order dated 13.08.2020 in the matter of M.C. Mehta vs. Union of India & ors, O.A. No. 200 of 2014**

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, meetings were convened sequentially on 12.01.2021 from 11.00 A.M. onwards through video conference with officials of respective State agencies of the States of Jharkhand, Uttarakhand and Bihar for reviewing the status of interim measures taken on the drains and STP projects in order to calculate EC for the defaulting drains and delayed STP projects.

The list of participants is enclosed at **Annexure 1**.

**Record note of discussions held during the meeting:**

At the outset, Additional Director & Divisional Head, WQM-II from CPCB welcomed all the participants. He apprised the participants about the issues to be discussed in the meeting. Detailed deliberations were held on the data of drains and STP projects with the main stem Ganga States. CPCB had calculated EC for defaulting drains and delayed STP projects in these states. The same was discussed in the meeting to check for any discrepancy.

**Jharkhand**

- As per data, there are total 06 drains, which discharge into Ganga or its tributaries in the state of Jharkhand. Interim measures have been taken on the untapped drains (04 nos.). As on 31.12.2020, Sahibganj STP is operational, Rajmahal STP is under-construction and 3 nos. are in DPR stage.

However, as informed by the State officials, Rajmahal STP came under trial in December 2020. However, work had been delayed due to financial constraint and COVID-19 situation. The DPR for new STPs at Dhanbad, Phusro and Ramgarh (on Damodar River, a tributary of River Ganga) have been submitted to NMCG for financial approval and is under consideration.

**Uttarakhand**

- With reference to data sheet, EC has been calculated on 4 untapped drains namely Nagar palika Nala/Gharat Mahal (Uttarkashi), Tehsil Nala, Dronagiri Nala and Kamet

Lodge Nala at Joshimath. However, the Project Manager, Uttarakhand Pey Jal Nigam informed that nalla tapping at Joshimath was delayed due to frequent landslide and lockdown effect during COVID-19 outbreak. Uttarakhand Pey Jal Nigam has already submitted an affidavit with reference to these nallas to Hon'ble NGT in November 2020.

- With reference to previous EC calculation sheet (from 01.11.2019 to 30.06.2020), State representative requested to exclude two drains from EC calculation namely Lakhar Ghat STP drain and Jagjeetpur STP drain, since these are STP outlets.

### **Bihar**

- As per the inventory, there are total 143 nos. drains in the state of Bihar that discharge in Ganga or its tributaries. Out of these 143 drains, interim measures have been taken on 79 drains whereas, on 53 drains there has not been taken any measures.
- However, as informed by BSPCB and Urban Development & Housing Department (UD&HD) Bihar representatives, interim measures have been taken on 89 drains and these 53 drains carry discharge with BOD less than 40mg/L, hence do not require bioremediation or any other interim measure.
- BSPCB representative informed that as per survey, there are approximately 500 drain in the state and 115 drains are tendered to be bio-remediated. Out of these 115 drains, 17-18 drains discharge into Ganga or its tributaries.
- As per inventory, there are 02 nos. non-operational STPs and 16 are under-construction while 34 are still at tendering stage. Therefore, in pursuance of Hon'ble NGT orders, EC @10 Lakh per STP per month may be calculated for under construction STPs (16 nos.) from 01.07.2020 onwards. However, as informed by UD&HD Bihar, these 02 non-operational STPs will be decommissioned and two new STPs are under trial stage.

State agencies of the three states has requested Hon'ble NGT through CPCB to consider the reasons for delay in the project work and exempt/post pone them from levying EC and also to extend the timelines of the delayed projects.

### **Decisions taken in the meeting are as follows:**

1. As requested by state agencies, CPCB asked the representatives from state agencies of Jharkhand to submit the reasons for delay in STP projects and same shall be done for Sahibaganj STP that has been commissioned in December 2020.

2. As requested by state agencies, CPCB asked Uttarakhand state agencies to submit a request letter to CPCB with the issues and interim measure taken during this period in details, so that the same may be submitted to Hon'ble NGT to consider for EC exemption.
3. As requested by state agencies, CPCB allowed the state agencies of Bihar to submit the reasons for not taking interim measures on 53 drains, and details of interim measures taken on 89 drains to verify that measures have been taken as on 01.07.2020 as in that case, these drains may be exempted from EC and to submit the reasons for delay in STP projects and the request letter to consider the projects on Ganga and its tributaries separately.

The meeting ended with vote of thanks to the chair.

**The list of Participants (Annexure-I)**

S. No.	Name of Officer	Organization	Designation	Email-Id
1.	Sh. Anand Kishor	UD&HD, JH	Secretary	<a href="mailto:urbansec-bih@nic.in">urbansec-bih@nic.in</a>
2.	Sh. A.K.Vidyarthi	CPCB- Delhi	Divisional Head- WQM II	<a href="mailto:akvidyarthi@gmail.com">akvidyarthi@gmail.com</a>
3.	Sh. M.K.Biswas	CPCB- RD(K)	Regional Director- Kolkata	<a href="mailto:biswasmrinal@gmail.com">biswasmrinal@gmail.com</a>
4.	Ms Reena Satavan	CPCB- Delhi	Scientist-D	<a href="mailto:Reena.hsw@gmail.com">Reena.hsw@gmail.com</a>
5.	Ms Neelima Garg	UK Jal Sansthan	Chief General Manager	
6.	Sh. Alok Kr. mandal	UD&HD, JH		
7.	Sh. Radhakant Singh			
8.	P.K. Joshi	UKPCB	Environmental Engineer	
9.	Sh. Sachin Kumar	UK pey Jal Nigam		
10.	Sh. Ahmed			
11.	Sh. Jai Prakash			
12.	Representative	UKPCB		
13.	Dr. Naveen Kumar	BSPCB	Scientist	
14.	Dr. Lata Chaudhry	BUIDCO	Environment and Social Management Coordinator	<a href="mailto:esmcinpmu.buidco@gmail.com">esmcinpmu.buidco@gmail.com</a>
15.	Representative	UD&HD, Bihar		
16.	Representative	UD&HD, JH		

17	Sh Bibhuti	JH-SPMG		
18	Representative	JSPCB		
19	Ms. Anu Chetal	CPCB- Delhi	Scientist-B	<a href="mailto:chetalanu@gmail.com">chetalanu@gmail.com</a>
20	Dr. Pradeep Mishra	CPCB- Delhi	RA-III	
21	Megha Chauhan	CPCB- Delhi	Junior Research Fellow	<a href="mailto:Chauhan.megha350@gmail.com">Chauhan.megha350@gmail.com</a>

**Minutes of Meeting dated 14.01.2021 held through video conference with respective authorities of Uttar Pradesh to review the status of drains and STP projects in compliance of Hon'ble NGT order dated 13.08.2020 in the matter of M.C. Mehta vs. Union of India & ors, O.A. No. 200 of 2014**

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, meetings were convened 14.01.2021 at 11:00 A.M. and 03:00 PM through video conference with officials of concerned authorities of Uttar Pradesh State for reviewing the status of interim measures taken on the drains and STP projects in order to calculate EC for the defaulting drains and delayed STP projects.

The list of participants is enclosed at **Annexure 1**.

**Record note of discussions held during the meeting:**

At the outset, Additional Director & Divisional Head, WQM-II, from CPCB welcomed all the participants. He apprised the participants about the issues to be discussed in the meeting. Detailed deliberations were held on the data of drains and STP projects with the main stem Ganga States. CPCB had calculated EC for defaulting drains and delayed STP projects in these states. The same was discussed in the meeting to check for any discrepancy.

- As per inventory, 212 nos. drains in the state of Uttar Pradesh discharge into River Ganga or its tributaries. 75 nos. drains have been tapped, 04 nos. are either outlets of STPs or dry and hence require no interim measure.
- Thus a total of 133 drains in the state required interim measures. Out of which, measures have been taken for 14 drains. Therefore, CPCB may consider 119 untapped drains for EC calculation @10 Lakh per month per drains from 01.07.2020 to 31.12.2020.
- However, representative from Uttar Pradesh Jal Nigam informed that the number of drains reported by state differs from the inventory and 301 drains (86 in phase-I and 215 in phase-II) discharge into river Ganga or its tributaries in the state.
- In case of STPs, 102 nos. are operational, 44 nos. are under construction and 21 are under tendering stage out of total 169 STPs in the state. Regarding the Hon'ble NGT order an EC may be calculated for 44 nos. STPs @10 Lakh per month per STP for the duration 01.07.2020 to 31.12.2020.
- State agencies has requested Hon'ble NGT through CPCB to consider the reasons for delay in the project work and exempt them from levying EC.

**Decisions taken in the meeting are as follows:**

1. Concerned agencies of Uttar Pradesh state were asked to submit the revised inventory of drains and STPs to CPCB vide a formal letter by 20.01.2021 in order to avoid the discrepancies in the inventory that is to be submitted in Hon'ble NGT.
2. As requested, CPCB allowed the representatives from state agencies of Uttar Pradesh to submit a formal letter listing the reasons for delay in STP projects so that it may be requested to Hon'ble NGT to consider for EC exemption.

The meeting ended with vote of thanks to the chair.

**The list of Participants (Annexure-I)**

<b>S. No.</b>	<b>Name of Officer</b>	<b>Organization</b>	<b>Designation</b>	<b>Email-Id</b>
1.	Sh. Sushil Kumar Patel	Up Jal Nigam	Joint Managing Director	<a href="mailto:jmdupjn@gmail.com">jmdupjn@gmail.com</a>
2.	Sh. A.K.Vidyarthi	CPCB- Delhi	Divisional Head-WQM II	<a href="mailto:akvidyarthi@gmail.com">akvidyarthi@gmail.com</a>
3.	Sh. D.K. Soni	CPCB- RD(N)	Scientist-E	<a href="mailto:biswasmrinal@gmail.com">biswasmrinal@gmail.com</a>
4.	Ms Reena Satavan	CPCB- Delhi	Scientist-D	<a href="mailto:Reena.hsw@gmail.com">Reena.hsw@gmail.com</a>
5.	Rajendra Singh	UPPCB	Environmental Engineer	
6.	Sunil Kapoor	SMCG-UP		
7.	Ms. Anu Chetal	CPCB- Delhi	Scientist-B	<a href="mailto:chetalanu@gmail.com">chetalanu@gmail.com</a>
8.	Dr. Pradeep Mishra	CPCB- Delhi	RA-III	<a href="mailto:Pmishra.cpcb@gmail.com">Pmishra.cpcb@gmail.com</a>
9.	Megha Chauhan	CPCB- Delhi	Junior Research Fellow	<a href="mailto:Chauhan.megha350@gmail.com">Chauhan.megha350@gmail.com</a>

**Minutes of Meeting dated 15.01.2021 held through video conference with respective authorities of West Bengal state to review the status of drains and STP projects in compliance of Hon'ble NGT order dated 13.08.2020 in the matter of M.C. Mehta vs. Union of India & ors, O.A. No. 200 of 2014**

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, a meeting was convened on 15.01.2021 from 04:30 A.M. onwards through video conference with officials of State agencies of West Bengal for reviewing the status of interim measures taken on the drains and STP projects in order to calculate EC for the defaulting drains and delayed STP projects.

The list of participants is enclosed at **Annexure 1**.

At the outset, Additional Director & Regional Director, RD-Kolkata, CPCB welcomed all the participants. He apprised the participants about the issues to be discussed in the meeting. Detailed deliberations were held on the data of drains and STP projects with the main stem Ganga States. CPCB had calculated EC for defaulting drains and delayed STP projects in these states. The same was discussed in the meeting to check for any discrepancy.

**Record note of discussion during the meeting:**

- As per the inventory, 56 nos. of drains in the state of West Bengal discharge directly into River Ganga or its tributaries. Out of these, interim measures have been taken only on one (1) drain whereas; no interim measures have not been taken on 40 untapped drains that discharge directly into River Ganga.
- As informed by state authorities, 18 nos. drains are connected to STPs which are under tendering and 21 major drains among 56 identified drains in the main stem of river Ganga could not be intercepted or diverted due to their typical characteristics (tidal effect, wide cross sectional area and heavy flow). These drainage channels carrying mixed flow of irrigation and storm water, and mostly fall under the purview of Irrigation and Waterways Directorate, Govt. of West Bengal. KMDA representative also informed that the feasibility study for alternative remedial measures to be considered for these channels including second and third order drains contributing to the main

drains (First order) leading to river Ganga is already completed and the action plan for minimising the pollution load in the second and third order drains is proposed to be achieved through different low cost sewage treatment systems.

- As per CPCB inventory, there are 61 nos. STPs and 16 are under-construction while 19 are still at tendering stage. Therefore, in pursuance of Hon'ble NGT orders, EC @10 Lakh per STP per month need to be calculated for under construction STPs from 01.07.2020 onwards and for under tendering STPs from 01.01.2021 onwards. However, as discussed in the meeting, the inventory may be revised and accordingly EC may be calculated by CPCB.
- State agencies of West Bengal requested CPCB to allow them to submit reasons for delay in work and request the same to NGT.

**Decisions taken in the meeting are as follows:**

- The representatives from state agencies requested to submit the revised inventories, the reasons for delay in STP projects and a formal letter to CPCB comprising the explanation for not taking interim measures on untapped drains so that the same may be submitted to Hon'ble NGT to consider for EC exemption.

**The meeting ended with vote of thanks to the chair.**

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Name of the Officer	Organization	Designation	Email-Id
Ms. Antara Acharya, IAS	KMDA	CEO	<ceokmda@gmail.com
Ms Nandini Ghosh, IAS	P & AR, WB	Joint Secretary	
Shri Rabijyoti Majumdar, IAS	Department of Environment, GoWB	Commissioner	environmentwb@gmail.com
Sh. M.K.Biswas	CPCB- RD(K)	Regional Director- Kolkata	<a href="mailto:biswasmrinal@gmail.com">biswasmrinal@gmail.com</a>
Ms Reena Satavan	CPCB- Delhi	Scientist-D	<a href="mailto:Reena.hsw@gmail.com">Reena.hsw@gmail.com</a>
Sh. Tapas K. Gupta	WBPCB	Chief Engineer	<a href="mailto:cta.wbpcb@gmail.com">cta.wbpcb@gmail.com</a>
Rita Saha	Scientist	WBPCB	<a href="mailto:rtsaha70@gmail.com">rtsaha70@gmail.com</a>
Representative		KMC	
Representative		SPMG, WB	
Ms. Anu Chetal	CPCB- Delhi	Scientist-B	<a href="mailto:chetalanu@gmail.com">chetalanu@gmail.com</a>
Sh. Pradeep Mishra	CPCB- Delhi	Research Associate- III	<a href="mailto:pmishra.cpcb@gmail.com">pmishra.cpcb@gmail.com</a>
Megha Chauhan	CPCB- Delhi	Junior Research Fellow	<a href="mailto:Chauhan.megha350@gmail.com">Chauhan.megha350@gmail.com</a>

**The list of Participants (Annexure-I)**

Letter No. SPMG/UD&HD/NGT/2019/17-<sup>07</sup>.....  
Govt. of Jharkhand  
**Urban Development & Housing Department**

From: **Amit Kumar (IAS)**  
Project Director.  
SMCG, Jharkhand

To, **A.K. Vidyarthi,**  
Add. Dir, and I/c WQM-II Div,  
Central Pollution Control Board,  
Parivesh Bhawan,  
East Arjun Nagar,  
New Delhi-110032

Ranchi, Date : 12.01.2021

Sub.: **Hon'ble NGT orders dated 7/22nd Aug. 2019, 12/18th Dec. 2019 and 13th Aug. 2020 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014**

Ref: CPCB E-mail dated 10.01.2021: For Meeting on further discussions by video conferencing for Environmental compensation calculations on 12.01.2021 at 11:00 AM

Respected Sir,

With reference to your above mentioned letter the Order passed by the **Hon'ble National Green Tribunal**, Principal Bench, New Delhi dated 22.08.2019 in **OA No. 200/2014** in the matter of **M.C. Mehta vs Union of India**, it has to be noted that the main stream Ganga River flows through Sahibganj district of Jharkhand and only two Urban local bodies (ULB's) namely Sahibganj and Rajmahal is situated on the bank of the river Ganga.

Under NGRBA/ Namami Gange centrally sponsored scheme Sahibganj 12 MLD STP with 55 Km sewerage network has been completed and currently is under operation and maintenance with 12650 House Service Connections (100% funded by State Govt. of Rs 21.47 Crores). Another project 'Rajmahal Municipal Waste Water' is in last lap of its completion wherein our team has successfully completed dry run of the 3.5 MLD STP on 31.12.2020. Tender for House Service Connections in Rajmahal project for approx. 7700 House connections (100% funded by State Govt.) is expected to be awarded soon.

There has been a huge shift of financial resources for disaster management due to COVID-19 pandemic and subsequent lockdowns. There has been huge impact on the availability of skilled/technical human resource and supply of materials associated with the

the project , which caused the delay in the progress of implementation/construction of various Sewerage projects and hence Hon'ble NGT may kindly consider revised timelines.

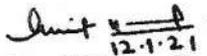
As far as Ganga tributary Damodar is concerned, it flows through three cities namely Dhanbad, Phusro and Ramgarh. Despite our best efforts and regular follow up with NMCG ,and submission of DPR of all three cities to NMCG , only Phusro Interception and Diversion with STP project was sanctioned in December 2020 and tender for the same is expected to be floated soon. During the official meeting, NMCG till now has not agreed to fund the Dhanbad and Ramgarh Interception and Diversion with STP project and has suggested to get it funded from CSR funds of Industries/CPSUs operating in those areas or other such avenues . We have communicated with BCCL and DVC for funding the Dhanbad and Ramgarh Interception and Diversion with STP project under CSR .

In light of the above facts and trying situation arising due to COVID-19 crisis it is requested to the Hon'ble NGT to reconsider the Environmental Compensation to be levied for the delays in construction of the various components of the sewerage projects for the O.A. 200/2014.

Kindly accept the requisite information for further necessary action.

Enclose- A/A.

Yours faithfully

  
12.1.21  
(Amit Kumar )  
Project Director.  
SMCG, Jharkahnd.

STPs of Jharkhand for 200/2014				Remarks
Sl No	Town & Name of STP	Capacity (in MLD)	Current Status	
<b>Main Stream (Ganga)</b>				
1	Sahibganj	12	Operational	
2	Rajmahal (Bengdubbi STP)	3.5	3.5 MLD STP under Trial	
<b>Tribuatry (Damodar)</b>				
1	Dhanbad	144		DPR prepared and sent to NMCG for approval under Namami Gange Scheme. At present DPR send by NMCG to IIT Roorkee for Third Party appraisal.
2	Phusro	15		NMCG Approved the project and Issued Adminstrative Approval and Expenditure Sanction on 12.12.2020
3	Ramgarh	40		DPR for I&D structure & STP for drains is prepared and sent to NMCG for approval on 10th August 2020.

12/12/20  
12.12.20

*[Handwritten signature]*

## TO WHOM IT MAY CONCERN

We take this opportunity to apprise you that we have successfully completed testing of civil structures as well as dry run of Electro-Mechanical equipments as per approved design & drawing for sewerage treatment plant 3.5 MLD STP for Municipal Waste Water Project, Rajmahal on 31.12.2020. All Electro-Mechanical equipments are tested on alternate power source i.e. in plant DG (225 KVA) in presence of Annu Projects, JUIDCO & PMC technical team. The dry run was successful in all civil and Electro mechanical aspects.

This is for your kind information.

### Encl:

- Site Photographs of dry run.
- P&I Diagram.

For Annu Projects Pvt. Ltd.

*(Signature)*  
Authorised Signatory  
(Vijay Kumar Raw)

*(Signature)*

(ROHIT SUMAN)  
Sr. Project Engr.  
Annu Projects Pvt. Ltd.

*(Signature)*  
01/01/2021

(Vikash Kir Rajak)  
APM, JUIDCO.

*(Signature)*  
01/01/2021

(Arjun Tirkey)  
(APM Electrical)  
(JUIDCO)

*(Signature)*  
01/01/2021

(DPM, JUIDCO)  
(ASHISHK DEY)

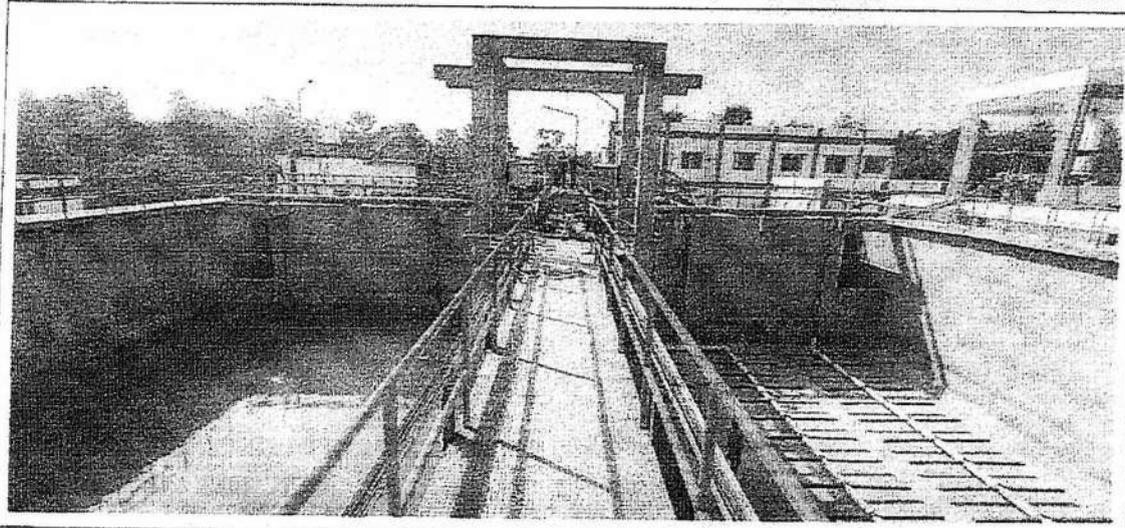
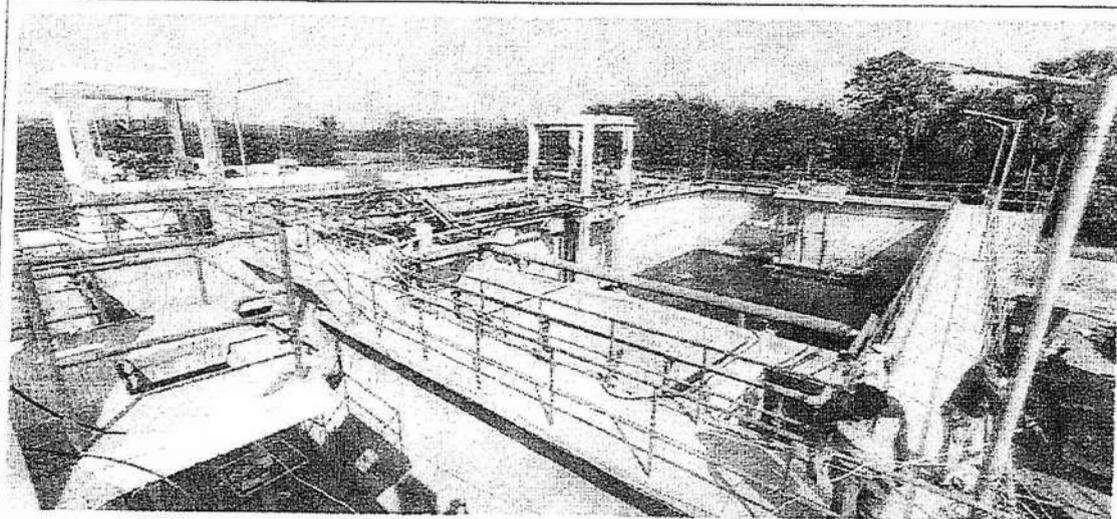
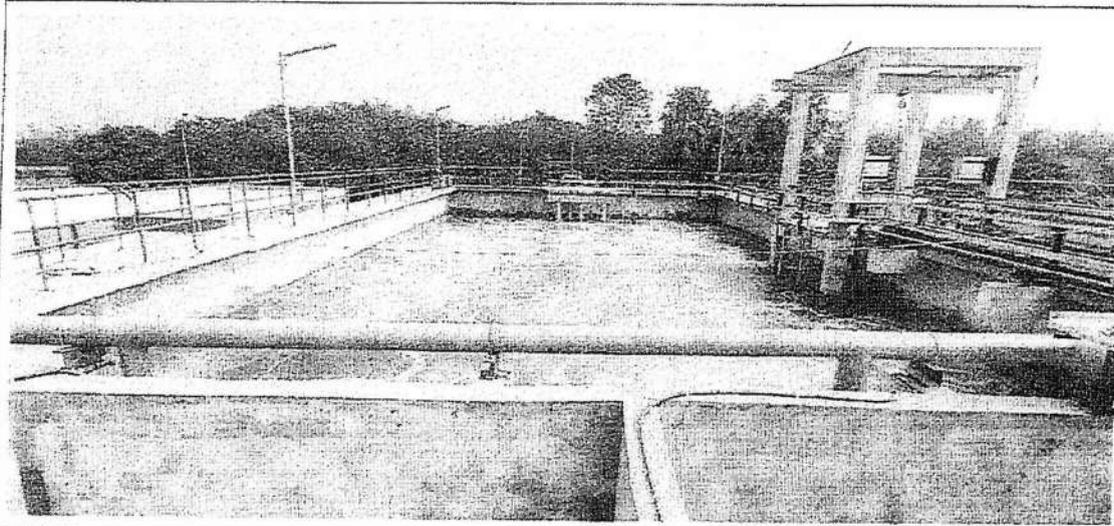
*(Signature)*  
Pm, JUIDCO  
Radhakant Singh

*(Signature)*  
Sr. R.E. Pmc

(Rajesh Yadav)

*(Signature)*

(ERM - PMC)  
(SERMA KUMAR.N)



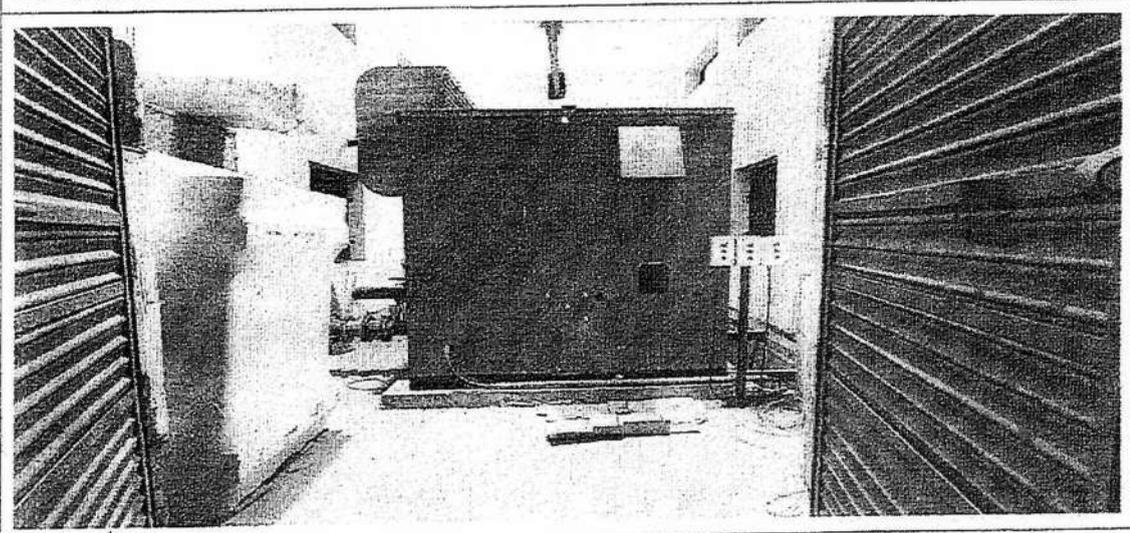
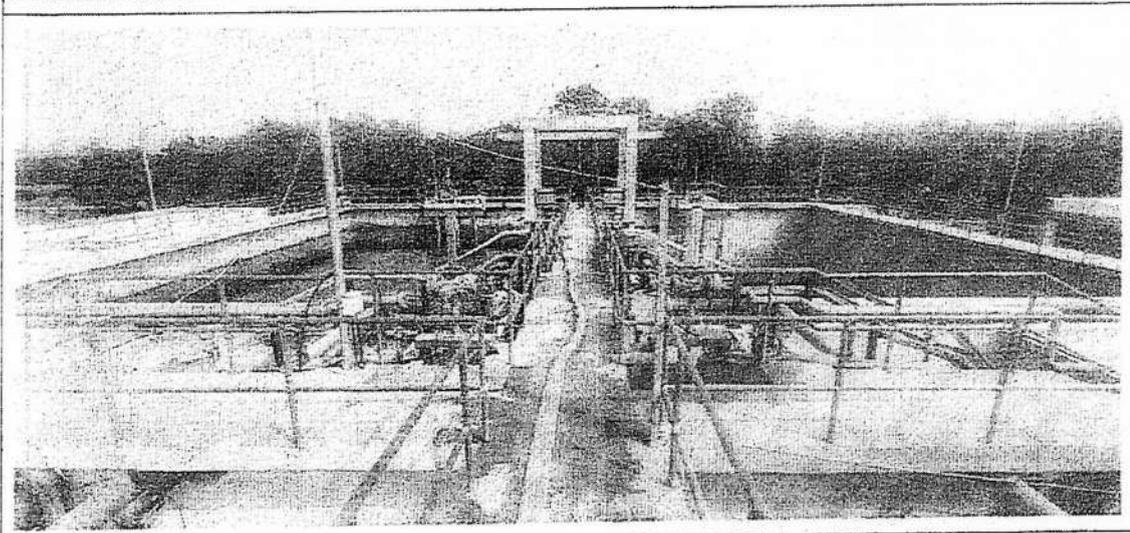
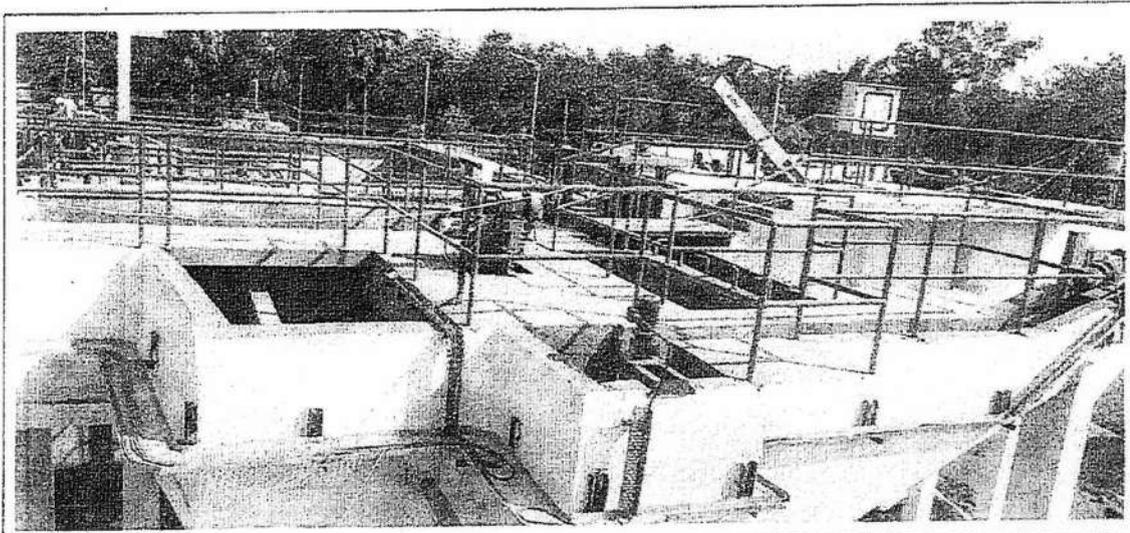
Annu Projects Pvt. Ltd.  
 (Authorized Signatory)  
 P.M.

For Annu Projects Pvt. Ltd.  
 Authorized Signatory

*[Signature]*  
 P.M.

*[Signature]*  
 P.M.

*[Signature]*  
 P.M.



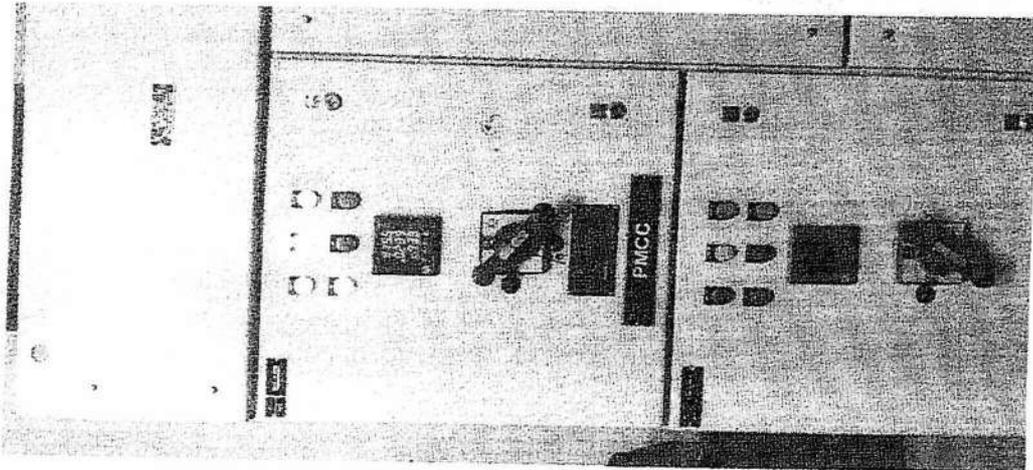
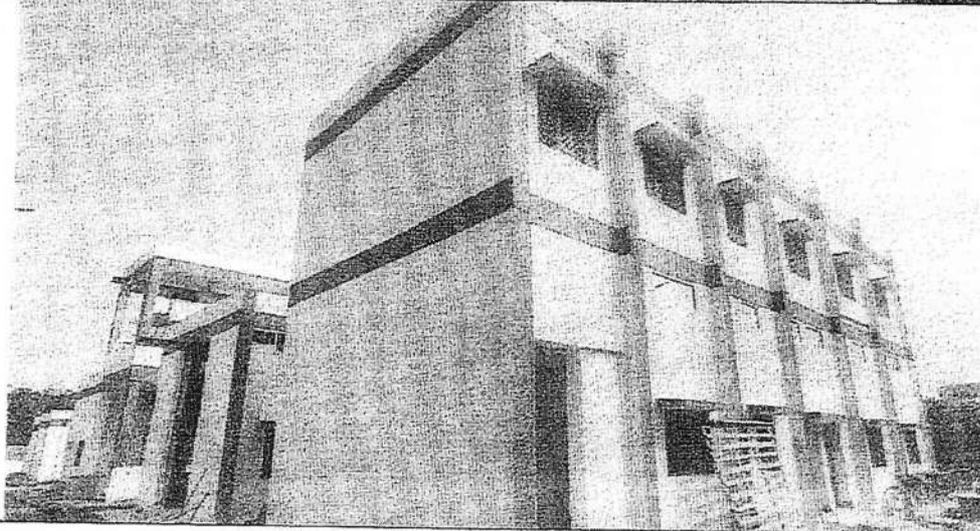
For Annu Projects Pvt. Ltd.  
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Authorised Signatory

For Annu Projects Pvt. Ltd.  
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Authorised Signatory

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PMC

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Srk. E. Pmc

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For Annu Projects Pvt. Ltd.  
Authorized Signatory

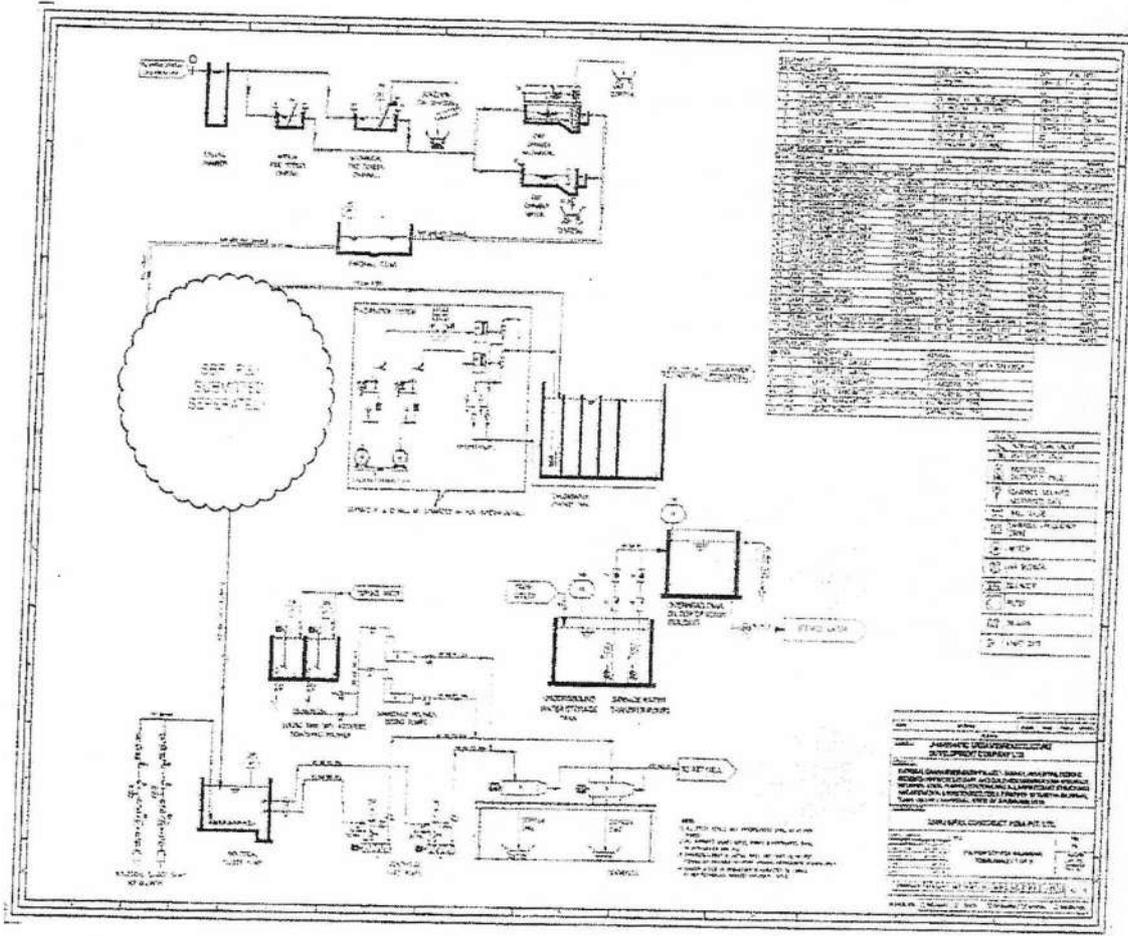
For Annu Projects Pvt. Ltd.  
Authorized Signatory

*[Signature]*  
DME

*[Signature]*  
Sukle, Pmc

*[Signature]*

P & I drawing for 3.5 MLD STP



For Annu Projects Pvt. Ltd.

*Rohit*  
 Authorised Signatory

*PM*  
 P.M.C.

*S.R.E.P.M.E*

*[Signature]*

For Annu Projects Pvt. Ltd.  
*[Signature]*  
 Authorised Signatory



Kolkata Metropolitan Development Authority

No. 07/KMDA/GAP-05/2021

January 19, 2021

From: Program Director  
SPMG & CEO, KMDA

To : Sri A.K. Vidyarthi  
Divisional Head WQM-II, Div. &  
Additional Director  
Central Pollution Control Board  
Parivesh Bhawan, New Delhi - 110032

Sub: Revised Report on the status of STPs on River Ganga.

Sir,

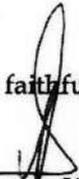
This is with reference to the V. C. held with you on 15.1.2021 and our previous Memo No. 2429-NGRBA/SPMG/AP-NGT-505/2018 dated January 02, 2021. This is to inform you that based on the subsequent developments, work progress and the field inspection report I am sending herewith an updated report/clarifications on the status of STPs and the drains in the following annexures.

Annexure	Descriptions
A	Operational STPs
B	Partially operational STPs
C	Under construction STPs (Modified Version)
D	Under rejuvenation STPs
E	Under Tendering STPs
F	Explanatory Note on 18 drains shown as <b>(untapped and Interim measure not taken as STPs are under Tendering/DPR phase)</b>
G	Revised list of drains with note on status change (modified version)
H	Explanatory Note on 21 Special Category drains (untapped where interim measure could not be taken)

This is for your kind reference.

Encl. As above

Yours faithfully,

  
 Program Director, WBSPMG  
 &  
 CEO, KMDA

## Annexure - H

### Explanatory Note on 21 Special Category drains (untapped where interim measure could not be taken)

21 major drains among 56 identified drains in the main stem of river Ganga could not be intercepted or diverted due to their typical characteristics (tidal effect, wide cross sectional area and heavy flow). These drainage channels carrying mixed flow of irrigation and storm water, and mostly fall under the purview of Irrigation and Waterways Directorate, Govt. of West Bengal. However considering its typical nature KMDA has already completed the feasibility study for alternative remedial measures to be considered for these channels including second and third order drains contributing to the main drains (First order) leading to river Ganga. The Action Plan for minimising the pollution load in the second and third order drains is proposed to be achieved through different low cost sewage treatment system as guided by the CPCB/Ministry of Jal Shakti, Govt. of India. These measures focus on the construction of Faecal Sludge Treatment Plant, Constructed Wetland etc. and providing gratings at the outfall secondary and tertiary drain. Hence considering their peculiar nature it is submitted that these drains may be considered under special category and thus may be exempted from fine regime.

Letter No. 65 /SPMG/NGRBA/CPCB

Dated: 22/01/2021

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: Compliance of the Hon'ble NGT orders dated 22.08.2019, 12.12.2019 and 13.08.2020 in the matter of M.C. Mehta Vs. Union of India, O.A.No.200/2014 reg.**

**Reference: F.No.B-190153/WQM-II/CPCB/2018-19 Dated 22.10.2020 and meeting held on 12.01.2021 through video-conferencing**

Kindly refer to aforementioned letter, wherein it has been cited that the Hon'ble NGT in the matter of M.C. Mehta Vs. Union of India in O.A. No. 200/2014 has passed orders dated 22<sup>nd</sup> August 2019, 12/18<sup>th</sup> December, 2019 and 13<sup>th</sup> August 2020 issuing directions regarding stoppage of discharge of untreated sewage in river Ganga and tributaries, status of STP projects and EC to be imposed for delay in the commissioning and starting of projects. In addition, the tribunal has also directed to implement bioremediation/phytoremediation or any other treatment interventions on all the drains till commissioning or starting of the projects.

2. In light of the above, responses for delay in construction of 07 number of I&D and STPs works as identified by compiled as per the instructions given during the meeting held 12.01.2020 (copy enclosed) in compliance to Hon'ble NGT directives and is hereby forwarded to you for your kind information.

**Encl. As above.**

/s/ (Udayraj Singh)  
Program Director

**Copy to:**

1. Secretary, Department of Drinking Water & Sanitation, GoUK for kind information.
2. Managing Director, Uttarakhand PeyJal Nigam for information & necessary action.
3. Chief General Manager, Uttarakhand Jal Sansthan for information.

/s/ Program Director



Office of the Program Director  
State Program Management Group  
Namami Gange  
Dehradun, Uttarakhand

Letter No. 65 /SPMG/NGRBA/CPCB

Dated: 22/01/2021

Ganga's purity is our responsibility  
Save Ganga- Save Water- Save Life

To,

**A.K.Vidarthi,**  
**Additional Director & Divisional Head, WQM-II**  
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**Parivash Bhawan, East Arjun Nagar,**  
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**Encl. As above.**

  
**(Udayraj Singh)**  
**Program Director**

**Copy to:**

1. Secretary, Department of Drinking Water & Sanitation, GoUK for kind information.
2. Managing Director, Uttarakhand PeyJal Nigam for information & necessary action.
3. Chief General Manager, Uttarakhand Jal Sansthan for information.

  
**Program Director**

**Submission of Response for delay in completion of works related waste water treatment in compliance of Hon'ble NGT orders dated 07 August, 2019, 18<sup>th</sup> December, 2019 and 13<sup>th</sup> August 2020 in the matter of M.C. Mehta Vs. Union of India, O.A. No. 200/2014:**

CPCB through email dated 10<sup>th</sup> January, 2021 and in the meeting held on dated 12<sup>th</sup> January, through video conferencing has sought clarification on delay in completion of works on the following STPs:

Under construction STPs of Uttarakhand						
Sl.	Town	Place of STP	Capacity	Status (DPR/ tendering/ under construction/ ETC etc.)	Remarks	EC Calculated
1	Joshimath	Marwari	2.700	Under construction	Shall be completed by March-21 (Affidavit already submitted to NGT)	Yes
2	Dehradun	Kolagarh	3.000	Under construction	Shall be completed by Nov-21	Yes
3	Ramanagar	STP-1	1.500	Under construction	Shall be completed by March-21	Yes
4	Ramanagar	STP-2	7.000	Under construction	Shall be completed by March-21	Yes
5	Haldwani	Indira Nagar	28.000	Under construction	2 Year	Yes
6	Kashipur	Kashipur	18.000	Under construction	1 Year	Yes
7	Nanital	Narayan Nagar	0.450	Under construction	1 Year	Yes

In response to above, the following is submitted:

- A.** 07 STPs having treatment capacity of 60.650 MLD are under construction at different stages which will be completed within one year. Detail of under construction STPs are as below:

S.No	Location	Capacity of the plant in MLD	Physical progress in %	Completion Timeline
1.	Kolagarh District-Dehradun	3.00	Tender awarded	December-2021.
2.	Marwari, Joshimath District-Chamoli	2.70	40 %	June-2021.
3.	Ramnagar District-Nainital	7.00	100 %	Work completed & fully operational by 31 <sup>st</sup> January, 2021

4.	Ramnagar District-Nainital	1.50	45 %	March 2021.
5.	Haldwani (Indira Nagar) District-Nainital	28.00	15 %	January-2022
6.	Narayan Nagar, Nainital District-Nainital	0.450	80 %	March-2021
7.	Kashipur District-US Nagar	18.00	45 %	June-2021
	<b>Total</b>	<b>60.65</b>		

**In context to above following STP wise responses for delay in construction/completion of work are submitted as below:**

**1. Construction of 03 MLD STP Capacity at Kaulagarh, Dehradun:** An Estimate of construction and E&M works of 3 MLD capacity 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 technically disqualified, so again tender was cancelled vide letter no. 619/Nivida/76 dated 31.01.2020. Third time tender 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 31.12.2021. So the said STP of 3.00 MLD STP at Kaulagarh will be constructed by 31.12.2021. In view of this, it is requested to consider the delay in award of work leading to delay in completion as per the earlier set timelines.

**2. Construction of 2.70 MLD STP at Marwari, Joshimath:-** The construction of 2.70MLD STP work was proposed under the 'I&D with STP' scheme sanctioned by NMCG vide letter no.T-03/2016-17/470/NMCG dated 16th March,2017 and the work was awarded in the month of January'2018 vide letter no.102/A-13(PKG-1)/01 dated 16/01/2018 with date of start 17/01/2018 and date of completion 16/04/2019.

In the month of July, 2018, there occurred a land slide at previously proposed site during the development of the site due to heavy rainfall. As the site was situated just below the NH and Char Dham yatra was in full swing at that time therefore in view of smooth running of yatra and to safeguard men and machineries at site as well at the NH, some protective measures were carried out as per the suggestions given by Geo-Technical experts of IIT Roorkee after their visit in the month of August 2018 and an estimate costing to Rs.17.11 crore

was prepared for soil stabilization and protective measures at site was prepared and forwarded to SPMG.

On 22/01/2019 in the review meeting headed by Secretary, Drinking water and Sanitation, Govt. of Uttarakhand, it was instructed to re-inspect the site to ensure the sustainability of the site. On 27/01/2019, Secretary, Drinking water and Sanitation, Govt. of Uttarakhand visited the construction site and instructed to explore for alternative site for the construction of said STP and demarcated a private land near the last tapping point of drain. It was further instructed to the concerned Project Manager to expedite the procedure for purchase of land immediately.

After the long joint efforts by Distt. Administration & officials of UKPJN, the alternative land for the construction of 2.70 MLD STP was purchased in the month of Nov'2019 by UKPJN and started the development work at site.

In the month of January 2020 BRO stopped the work in view of the NH road widening demanding for 24 meters of Right of Way in front of the new proposed site. The matter couldn't be resolved till the lockdown due to COVID-19 imposed in the month of March 2020.

After unlock of COVID-19, BRO insisted to sign a MoU with UKPJN with several conditions to permit the execution of 2.70 MLD STP at site. The MoU signed on 31st August 2020.

After the assessment of additional technical work and their cost to be incurred for the execution of these foundation protective measures 'Integrated micro-pilling system' the proposal the proposal submitted from Head office, Uttarakhand Peyjal Nigam to SPMG vide letter no.240/ मु0अ0(मु0) गो0 कार्य (गंगा)/61 dated 16/09/2020 for approval from Namami Gange Program. This proposal after appraisal from SPMG further forwarded to NMCG vide letter no.647/SPMG/Namami Gange/AA&ES dated 20/10/2020 for Approval and is under appraisal at NMCG. The work expected to be completed in approximately 5 to 6 working months as soon as the formal approval from NMCG is obtained.

Apart from the above this is also to be reiterated that most of the contamination in the drains occur due to the tourists/pilgrims coming to Joshimath during Chardham yatra. This year due to less movement of tourists because of COVID-19 pandemic the pollution in the drains is very low having BOD less than 30 mg/l as being regularly monitored every month till date (test reports attached). Therefore as per the protocol released by NMCG for the bioremediation of drains the effluent after bioremediation of discharge from the drains must be less than 30mg/l or upto 30mg/l and the drains already discharging the flow having BOD below 30mg/l may not be taken up for treatment through bioremediation. Therefore the three namely Dronagiri drain, Tehsil Drain and Kamet Lodge drain at Joshimath which were not taken up for treatment through bioremediation till date.

In the light of above mentioned unexpected circumstances, it is requested to consider the delay in completion of work for the construction of 2.70 MLD STP at Marwari, Joshimath.

- 3. Construction of 7.00 MLD STP at Transport Nagar, Ramnagar, Nainital :** In compliance of instructions issued by Hon'ble NGT, a project on I&D Works & STP near Kosi

River, Ramnagar was sanctioned by NMCG vide letter No. Pr. 12012/18/2018-O/o Dir (T-III)NMCG, dated 15.02.2019 and the work was awarded on dated 24.08.2019 vide letter No. 2421/613/362 dated 24.08.2019 and as per registered contract bond, date of start of project was 26.08.2019 and completion of project was 25.08.2020 i.e. period of one year which includes trial & testing period also.

The construction of 7.00 MLD STP was started as per above schedule timelines, but in the month of March-2020, due to Corona pandemic (COVID-19) fully lockdown was imposed and all the works were stopped due to non-availability of labours/manpower, which has retarded the progress of works at the site. Once the work was stopped due to full lockdown it could not be started in full swing after 31.05.2020 when partial opening of lockdown took place. The availability of labor and material etc. was not so smooth, so completion of work has been delayed.

At present, progress of work is in full swing and it is assured that all works will be completed by 31.01.2021 and trial & testing with Operation of STP shall be started after this due date.

In the light of above mentioned unexpected circumstances, it is requested to consider the delay completion and operation of 7.00MLD STP at Transport Nagar, Ramnagar.

- 4. Construction of 1.50 MLD STP at Puchhari, Ramnagar, Nainital:-** In compliance to the directions of Hon'ble NGT, a project named I&D Works & STP Kosi River Ramnagar was sanctioned by NMCG vide letter No. Pr. 12012/18/2018-O/o Dir (T-III)NMCG Dated 15.02.2019 and the work was awarded vide letter No. 2421/613/362 dated 24.08.2019 and as per registered contract bond, date of start of project was 26.08.2019 and completion of project was 25.08.2020 i.e. period of one year which includes trial & testing period also.

The construction of 1.50 MLD STP was not started as per scheduled time period at the site due to dispute on land ownership objection raised by local persons residing nearby and subsequently stopped the works on dated 04.09.2019. UKPJN informed the local administration and police department for resolving the dispute.

In the above context Hon'ble Civil Judge (Junior Division) Ramnagar had issued stay order to stop the work at the site. After the long joint efforts of the local and District Administration including officials of UKPJN, the land dispute has been resolved on dated 02.03.2020. After resolving this matter, work was started at this site.

In the month of March-2020, due to Corona pandemic (COVID-19) fully lockdown was imposed and again all the work was stopped due to non-availability of labours/manpower, which has retarded the progress of works at the site. This lockdown has been partially opened from 31.05.2020. However, once the work was stopped due to full lockdown it could not be restarted in full swing after above mentioned date. The availability of labour and material etc. was not so smooth, so completion of work has been delayed. In the light of above mentioned unexpected circumstances, it is requested to consider the delay in completion of work for construction of 1.50 MLD STP at Puchhari, Ramnagar, Nainital.

**5. 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)-"k0fo0&2018&74¼lk0½ 15&Vh0lh0VI fnuakd 23-05-2018. The tendering process of the scheme was initiated in the month of October 2018. The tender was finally awarded in the month of January 2020. The Contracted firm was given date of start as 01.02.2020 with a time period of 2 years to execute the project. Presently the work is under construction. Physical progress of the work is 15% at site. The project is delayed mainly due to complete lockdown as well as labour problem on account of Covid-19 pandemic. However, the work is expected to be completed on due time i.e January 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.

**6. 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)-श0वि0-2017-74(सा0) 15-टी0सी0 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 01.10.2019 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. Thereafter the revised date of start was given to the contractor. Physical progress of the work was also hampered due to complete lockdown as well as labour problem on account of Covid-19 pandemic as well as obtaining power connection from UPCL at the STP site. Presently the civil work is completed & mechanical works are in progress. Overall Physical progress of the work is 80% at site. The work is expected to be completed by the end of March, 2021.

In the light of above facts, it is requested not to impose any penalty as per the NGT orders.

**7. 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 24.10.2017 & 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 Corona Pandemic, the completion time was extended upto 24.06.2021. At present the construction of 18 MLD STP is

under progress. In the light of above mentioned unexpected circumstances, it is requested to consider the delay in completion of work for construction 18 MLD STP at Kashipur.

- B.** 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 18 drains and tender has been invited. Details of the drains proposed for Bio-remediation is as below: -

<b>S.No.</b>	<b>Town</b>	<b>Drain</b>	<b>Status</b>
<b>1</b>	Kichha (Haldwani)	1. Drain No. 1 2. Badi Mohalla 3. Bankhandi Mandir Nala (Left) 4. Bankhandi Mandir Nala (Right) 5. Shiv Mandir wala Nala (Left) 6. Shiv Mandir wala Nala (Right)	Bids have been received, under evaluation. Proposed date for work execution is 1 <sup>st</sup> February, 2021.
<b>2</b>	Raiwala(Dehradun)	1. Nala Saperabasti 2. Nala near BSF Camp	Appointment of TPI agency for monitoring is under progress by SPMG.
<b>3</b>	Dehradun	1. Rispana 2. Bindal	
<b>4</b>	Kashipur	1. Belijudi Nala 2. Kalash Mandap Nala 3. Laxmipur minor Nala 4. Gabia Nala 5. Ice Factory Nala 6. Mukundpur Nala 7. Ghoga Nala	
<b>5</b>	Sitarganj	1. Ukrouli darin	

**In light of above, it is submitted 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 01 year. It is therefore requested to submit to Hon'ble NGT on behalf of Uttarakhand to wave of the penalties for delay in completion work for the above projects. It is assured that the projects shall be completed as per the extended timelines given above. The undersigned shall ever remain grateful to Hon'ble NGT for this act of kindness.**

प्रेषक,

विशेष सचिव,  
नगर विकास एवं आवास विभाग।

सेवा में,

सदस्य सचिव,  
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,  
नई दिल्ली।

पटना, दिनांक—8/11/21

विषय:— गंगा नदी में प्रवाहित होने वाले नालों के Bio-remediation उपचार संबंधित अधिकरोपित पर्यावरणीय क्षतिपूर्ति दंड से मुक्त करने एवं सीवरेज योजनाओं को पूर्ण करने के लिए समय विस्तार के संबंध में।

प्रसंग:— 1. O.A No. 200/2014 M.C Mehta Vs Union of India & Ors. मामले में माननीय NGT द्वारा दिनांक 22.08.2019 को पारित आदेश।  
2. CPCB नई दिल्ली का पत्रांक 12129 दिनांक 03.02.2020

महाशय,

उपर्युक्त विषयक प्रासंगिक आदेशों के संदर्भ में सादर अनुरोधपूर्वक कहना है कि माननीय NGT के O.A No. -200/2014 M.C Mehta Vs Union of India मामले में दिनांक 22.08.2019 को पारित आदेश में सीवरेज योजनाओं के संबंध में निम्न निदेश दिए गए थे :-

- क्रियान्वित एस.टी.पी. एवं सीवरेज योजनाओं के मामले में दिनांक 30.06.2020 तक पूर्ण नहीं होने की स्थिति में दिनांक 01.07.2020 से 10 लाख रु० प्रति योजना प्रतिमाह के दर से CPCB में पर्यावरणीय क्षतिपूर्ति के रूप में जमा करना होगा।
  - प्रस्तावित एस.टी.पी. एवं सीवरेज योजनाओं के 31.12.2020 तक पूर्ण नहीं होने की स्थिति में रु० 10 लाख प्रति योजना प्रतिमाह के दर से CPCB में पर्यावरणीय क्षतिपूर्ति के रूप में जमा करना होगा।
  - उपर्युक्त परियोजनाओं के पूर्ण होने तक Bio-remediation and/or Phytoremediation or any other remediation measure द्वारा नालों (Drains) में प्रवाहित Sewage का शोधन 01.11.2019 तक प्रारम्भ नहीं किये जाने की स्थिति में पर्यावरणीय क्षतिपूर्ति के रूप में रु० 5 लाख प्रति नाला (Drain) प्रतिमाह की दर से CPCB में जमा करना होगा।
2. उक्त आदेश के अनुपालन हेतु बिहार सरकार द्वारा संबंधित 07 CSIRs एवं 02 IITs संस्थानों से गंगा नदी में प्रवाहित होने वाले नालों (Drains) के प्रवाह का Best possible treatment के संबंध में क्रियान्वयन हेतु सुझाव मांगा गया जिसके आलोक में प्रोफेसर एस. के. बारिक, निदेशक, CSIR-NBRI, Lucknow ने पत्र द्वारा सूचित किया कि " Phytoremediation is suitable for use at very large open field sites (minimum size of 50x5 m<sup>2</sup>) where other methods of remediation are not cost- effective or practicable or at sites with low concentrations of contaminants.

There are limitations to this technology that need to be considered carefully before it is selected for site remediation. This includes long duration of time required for pollution remediation, potential contamination of the vegetation and food chain, and difficulty in establishing and maintaining

vegetation at waste sites. **This technology is not successful in fast flowing water.** We know that volume of Sewage flowing into river Ganga is very large, that is why phytoremediation technology alone will not be suitable for this problem. In view of above impediments, it would not be possible for CSIR-NBRI to take up this work."

इसी प्रकार IIT Kanpur के डॉ० विनोद तारे, (Professor and founding Head of eGanga which is Knowledge Partner to NMCG) ने ई-मेल द्वारा सूचित किया कि :-

Bio-remediation generally needs considerable retention time and the process may not give good results were flow rates are variable, partly because the material dosed may get washed out rapidly from drains during high flow pulses. Moreover, domestic wastewater also sometimes gets mixed with small scale or household level industries which carry inorganic pollutants. Bio-remediation generally does not treat such inorganic contaminants or every organic compound in wastewater.

Thus, while bioremediation/phytoremediation may be considered as viable technologies for sewage treatment, if applied on raw sewage they may not work efficiently. Hence primary or even secondary treatment of raw sewage may be desirable before in-situ bioremediation/ phytoremediation.

उपरोक्त CSIR-NBRI, Lucknow के निदेशक, प्रोफेसर एस.के. बारिक तथा IIT Kanpur के प्रो० डॉ० विनोद तारे, से प्राप्त सुझाव के आलोक में BGCMS के पत्रांक- 958 दिनांक- 25.11.2019 द्वारा CPCB को अवगत कराते हुए आवश्यक निदेश की मांग की गई है जो अब तक अप्राप्त है।

3. उपरोक्त के अतिरिक्त सभी क्रियान्वित एवं प्रस्तावित सीवरेज योजनाओं को ससमय पूर्ण कराने का निदेश कार्यकारी एजेंसी बुडको को दिया गया है। साथ ही उक्त परियोजनाओं के पूर्ण होने तक की अवधि के लिए माननीय NGT के आदेशानुसार Bio-remediation and/or Phytoremediation or any other remediation measure द्वारा नालों (Drains) में प्रवाहित Sewage का शोधन प्रारम्भ करने का भी निदेश दिया गया था।

4. बुडको द्वारा Bio-remediation and/or Phytoremediation or any other remediation measure द्वारा शोधन हेतु दिनांक 14.10.2019 को निविदा (NIT No. - BUIDCo/40-1390/19-73) प्रकाशित किया गया। उक्त निविदा में किसी भी Bidder के Qualify नहीं करने के कारण पुनः दिनांक 30.12.2019 को Re-Tender किया गया था जो कि निष्पादित नहीं हो सका। इसलिए माननीय NGT के आदेश का अनुपालन करते हुए न0वि0 एवं आ0वि0, बिहार सरकार ने बुडको को निविदा रद्द करने का निदेश दिया एवं माननीय NGT के आदेशो को शीघ्र अनुपालन करते हुए न0वि0 एवं आ0वि0 ने पुनःनिविदा (NIT No.- BGCMS/2019/Bio-remediation/25/269 dated 08-05-2020) आमंत्रित किया। 12 जून 2020 को एकल निविदा के कारण निविदा को रद्द कर दिया गया। तदपश्चात पुनःनिविदा के लिए NIT 18 जून 2020 को प्रकाशित किया गया और निविदा के मूल्यांकन प्रक्रिया पूर्ण करने के पश्चात 14 सितम्बर 2020 को कार्य आदेश प्रदान किया गया। Contractor के द्वारा गंगा नदी में प्रदूषण फैला रहे सभी नालों (Drains) को Bio-Remediation Treatment का कार्य शुरू कर दिया गया है, साथ ही साथ शहरी सामुदायिक/चलंत शौचालयों के Septic tanks के Sludge को भी उपचारित किया जा रहा है।

5. पूर्व में CPCB के पत्रांक-12129 दिनांक-03.02.2020 द्वारा बिहार राज्य में गंगा नदी में प्रवाहित होने वाले 08 Untreated नालों के प्रवाह के लिए मा0 1.20 करोड़ रु0 पर्यावरणीय क्षतिपूर्ति शुल्क के रूप में जमा करने की मांग की गई है।

मा0 NGT के दिनांक 22.08.2019 के निर्णय में निर्धारित Timeline के अन्तर्गत सीवरेज योजनायें पूरी नहीं होने के लिए निम्न तथ्यों पर सहानुभूतिपूर्वक विचार करने का अनुरोध है :-

i. नमामि गंगे कार्यक्रम के अन्तर्गत बिहार में सीवरेज योजनायें फेज-III में प्रारम्भ की गयी है।

ii. सीवरेज योजनाओं के क्रियान्वयन के लिए बिहार में योग्य संवेदक के नहीं होने तथा बाहरी संवेदक के बिहार में कार्य करने के लिए इच्छुक नहीं होने के कारण पुनर्निविदा आमंत्रण की स्थिति बार-बार

हो जाया करती है, जिसके कारण योजना की स्वीकृति के बाद भी निविदा प्राप्त होने में ही काफी समय व्यतीत हो जाता है, जैसे :-

- a. बाढ़ की I&D. STP से योजना के अगस्त 2017 में स्वीकृति के पश्चात् तीन बार निविदा प्रकाशित करना पड़ा एवं जुलाई 2018 में निविदा अंतिम रूप से प्राप्त हो पाया जिसके कारण एक वर्ष का विलंब हुआ।
  - b. हाजीपुर सीवरेज योजना का मार्च 2018 में स्वीकृति के बाद करीब 18 माह की समावधि में दौरान अब तक तीन बार निविदा प्रकाशित किया जा चुका है। दूसरी निविदा में एक भी निविदादाता ने भाग नहीं लिया था। तीसरी निविदा सितंबर 2019 में प्राप्त हुआ।
  - c. इसी प्रकार नवगछिया आई एण्ड डी एवं एस.टी.पी. योजना का अगस्त 2017 में स्वीकृति के पश्चात् तीन बार निविदा प्रकाशन के उपरान्त सितंबर 2019 में निविदा का निष्पादन कर कार्यादेश निर्गत किया जा सका। इस प्रकार लगभग दो वर्षों का विलंब हुआ।
- iii. World Bank संपोषित योजनाओं के स्वीकृति के बाद निविदा अभिलेख तैयार करने, तकनीकी एवं वित्तीय निविदा की विभिन्न स्तरों पर जाँच एवं World Bank/NMCG से अनापत्ति प्रमाण पत्र प्राप्त करने में भी काफी समय लग जाया करता है उदाहरणस्वरूप :-
- a. दीघा एवं कंकड़बाग सीवरेज योजना HAM आधारित PPP Mode की है। जिसके अगस्त 2017 में स्वीकृति के पश्चात् World Bank से निविदा अभिलेख पर अनुमोदन प्राप्त करने में करीब एक वर्ष लगने के बाद अगस्त 2018 में निविदा आमंत्रित किया गया। तकनीकी एवं वित्तीय निविदा का World Bank से अनापत्ति प्राप्त करते हुए करीब 16 माह बाद दिसंबर 2019 में एकरारनामा संपन्न हुआ। इस प्रकार योजना स्वीकृति के करीब 26 माह बाद एकरारनामा संपन्न हो सका।
  - b. बेगुसराय सीवरेज योजना का मार्च 2018 में स्वीकृति के पश्चात् निविदा अभिलेख की World Bank से स्वीकृति प्राप्त करते हुए करीब 10 माह बाद जनवरी 2019 में एकल निविदा प्राप्त हुआ। तकनीकी कारणों से तकनीकी एवं वित्तीय निविदा पर World Bank की स्वीकृति प्राप्त करते हुए करीब एक वर्ष पश्चात् फरवरी 2020 में एकरारनामा संपन्न हुआ। इस प्रकार योजना स्वीकृति के करीब दो वर्ष पश्चात् एकरारनामा संपन्न हो सका।
  - c. मुंगेर सीवरेज योजना का मार्च 2018 में स्वीकृति के बाद निविदा अभिलेख की World Bank से स्वीकृति प्राप्त करने में हुए विलंब के कारण करीब 21 माह बाद जनवरी 2020 में निविदा प्राप्त की गई। निविदा निस्तार की प्रक्रिया इतनी जटिल है कि जनवरी में प्राप्त निविदा का अब तक निस्तार नहीं हो पाया है।
  - d. भागलपुर आई एण्ड डी एवं एस.टी.पी. योजना भी HAM आधारित PPP Mode की है जिसकी अक्टूबर 2017 में स्वीकृति के पश्चात् अगस्त 2018 में निविदा प्रकाशन एवं फरवरी 2019 में निविदा प्राप्ति के बावजूद भी तकनीकी कारणों से निविदा का निस्तार अभी तक संभव नहीं हो सका है।
- iv. शहरों की घनी आबादी, वाहनों के आवागमन का अत्यधिक दबाव, संकीर्ण सड़क एवं बाह्य विभागों (IOCL, Railway, NHAI आदि) से एनओसी प्राप्त करने में लगने वाले समय के कारण भी कुछ सीवरेज योजनाओं का कार्य ससमय पूर्ण कराने में कठिनाई होती है।
- v. बिहार में प्रत्येक वर्ष जुलाई से सितंबर माह में भारी वर्षा एवं जल जमाव के कारण 03 से 04 माह तक सीवरेज योजनाओं का कार्य प्रभावित हो जाता है। यथा, वर्ष 2020 के माह जुलाई से सितंबर तक बाढ़ अवधि होने की वजह से भी सीवरेज योजनाओं की कार्य प्रगति प्रभावित हुई, फलतः लक्ष्य के समरूप उपलब्धी नहीं हो सकी।

- vi. मार्च, 2020 से कोविड-19 के कारण सम्पूर्ण Lockdown राज्य में प्रभावी होने की वजह से माह मार्च से जुलाई 2020 तक सभी सीवरेज से संबंधित योजनाओं एवं Bio-Remediation का कार्य भी पूर्णतः बाधित हुआ।
- vii. गत वर्ष माह अक्टूबर-नवम्बर में बिहार विधान सभा के चुनाव के कारण भी कार्यों की प्रगति पूर्णतः बाधित हो गयी थी, जिसकी वजह से भी योजनाओं का कार्य समय सीमा के अनुरूप पूर्ण नहीं किया जा सका।
6. उपर्युक्त तथ्यों से स्पष्ट है कि योजना स्वीकृति से निविदा प्राप्ति तक औसतन करीब 12 से 18 माह का समय लग जाता है। सामान्य रूप से कार्यावंटन के उपरान्त छोटी आई. एण्ड. डी. योजनाओं में 18 से 24 माह तथा बड़ी एस.टी.पी. एवं सीवरेज योजनाओं में 30 माह से 36 माह का समय योजना पूर्ण करने में लगता है जबकि माननीय NGT द्वारा उक्त मान्य अवधि से काफी कम समय दिया गया है।
7. उपरोक्त तथ्यों के आलोक में योजनाओं को पूर्ण करने की अवधि विस्तार एवं अधिरोपित पर्यावरणीय क्षतिपूर्ति दंड को विलोपित करने हेतु माननीय NGT से अनुरोध किया गया था, लेकिन माननीय NGT द्वारा उक्त तथ्यों पर कोई संज्ञान नहीं लिये जाने के कारण बिहार सरकार द्वारा माननीय सर्वोच्च न्यायालय में एक अन्तरिम याचिका दायर की जा रही है।
8. अतः उपरोक्त तथ्यों के परिपेक्ष्य में अनुरोध है कि :-
- कार्यान्वित एवं प्रस्तावित सीवरेज योजनाओं का पूर्व निर्धारित समय सीमा को **Annexure-I** के अनुसार समय विस्तार देने तथा नालों के प्रवाह के Bio-remediation and/or Phytoremediation or any other remediation measure से उपचार संबंधी दी गई समय सीमा विस्तारित किये जाने की स्वीकृति देने की कृपा की जाय।
  - माननीय NGT के O.A No. 200/2014 दिनांक 18.12.2019 द्वारा पारित आदेश के आलोक में आपके द्वारा बिहार से मांगी गई पर्यावरणीय क्षतिपूर्ति शुल्क से बिहार सरकार को मुक्त कराने की कृपा की जाय।

अनुलग्नक-यथोक्त।

विश्वासभाजन



विशेष सचिव,

नगर विकास एवं आवास विभाग।

Dr. Prashant Gargava  
Member Secretary  
डॉ. प्रशांत गार्गव  
सदस्य सचिव



स्पीड पोस्ट / ई-मेल

Annexure - XVI

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

फा.स. बी-19123/डब्ल्यूक्यूएम-11/विधि/एनजीटी-2/सीपीसीबी/2020-21

दिनांक : 03.02.2021

सेवा में,

मुख्य सचिव,  
उत्तराखंड सरकार,  
#4, सुभाष रोड, उत्तराखंड सचिवालय,  
देहरादून, उत्तराखंड-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।

महोदय,

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।

भवदीय,

संलग्नक: यथोपरि

प्रशांत गार्गव



'परिवेश भवन', सी.बी.डी.-कम-ऑफिस कॉम्प्लैक्स, 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

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**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...."*

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-II/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।

महोदय,

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।

भवदीय,

संलग्नक: यथोपरि

प्रशांत गार्गव

**प्रतिलिपि**

महानिदेशक,  
राष्ट्रीय स्वच्छ गंगा मिशन,  
प्रथम तल, मेजर ध्यानचंद नेशनल स्टेडियम,  
इंडिया गेट, नई दिल्ली - 110002

चूंकि माननीय राष्ट्रीय हरित अधिकरण के आदेशानुसार, भुगतान की जाने वाली राशि के 50% तक की देयता एनएमजीसी है, अतः आवश्यक कार्रवाई हेतु।

प्रशांत गार्गव



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 x 10 x 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:**

- a) Relevant lists of Drains and STPs are enclosed as annexure.
- 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.



25	Haridwar	Kangra Mandir Nala	0.13	Ganga	Tapped	-	Jagjeetpur 18 & 27 MLD STPs	18 & 27		No		
26		Nai Sota Nala	0.05	Ganga	Tapped	-				No		
27		Nago ki Haweli Nala	0.05	Ganga	Tapped	-				No		
28		Kushaghat Nala	0.04	Ganga	Tapped	-				No		
29		Laltaroo Nala	0.39	Ganga	Tapped	-				No		
30		Mayapur Nala	0.26	Ganga	Tapped	-				No		
31		PWD Nala & Tanki No.-6 Nala	3.30	Ganga	Tapped	-				No		
32		Devpora Nala	1.00	Ganga	Tapped	-				No		
33		Awasi Vikas Nala	0.75	Ganga	Tapped	-				No		
34		Lal Mandir Nala	0.70	Ganga	Tapped	-				No		
35		Latowali Nala	0.40	Ganga	Tapped	-				No		
36		Kasai Nala	8.10	Ganga	Tapped	-			Sarai 18 MLD STP	18	Operational	No
37	Ramrakha Park Nala	0.70	Ganga	Tapped	-		No					
38	Badrinath	Manav Kalyan Ashram Drain	0.35	Alaknanda	Tapped	-	STP Near Bamani Suspension Bridge	1	Operational	No		
39		Iron Bridge to Mandir Drain	0.04	Alaknanda	Tapped	-				No		
40		BSNL Drain	0.069	Alaknanda	Tapped	-				No		
41		Raturi Drain	0.060	Alaknanda	Tapped	-				No		
42		Pindadaan Ghaat Drain	0.01	Alaknanda	Tapped	-				No		
43	Bamani Drain	0.02	Alaknanda	Tapped	-	STP-1: - Bamani	0.026	Operational	No			
44	Joshimath	Nav Ganga Drain	0.91	Alaknanda	Tapped	-	Pokhari STP-1.08 MLD	1.08	Operational	No		
45		Gandhi Nagar Drain	0.04	Alaknanda	Tapped	-				No		
46		Tehsil Nala	0.700	Alaknanda	Untaped	No	Marwari STP	2.7	Under Construction	Yes		
47		Dronagiri Nala	0.421	Alaknanda	Untaped	No					Yes	
48		Kamet Lodge Nala	1.08	Alaknanda	Untaped	No					Yes	
49	Chamoli-Gopeshwar	Chamoli Bazar Drain	0.03	Alaknanda	Tapped	-	STP-1:- Chamoli Near Mahindra - 0.76 MLD	0.76	Operational	No		
50		Chamoli Alaknanda Ghaat Drain	0.02	Alaknanda	Tapped	-				No		
51		Chamoli Bridge Drain	0.02	Alaknanda	Tapped	-				No		
52		Chamoli Old Suspension Bridge Drain	0.03	Alaknanda	Tapped	-			STP-5: - Chamoli Near Old Suspension Bridge - 0.05 MLD	0.05	Operational	No
53		Baitarni Drain	0.39	Alaknanda	Tapped	-			STP-4: - Baitarni (Deen dyal upadhyaya)- 1.12 MLD	1.12	Operational	No

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54	Nandprayag	Water Tank Nala	0.025	Nandakini	Tapped	-	STP-1+3: - Forest Office - 0.10 MLD	0.1	Operational		No		
55		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	Karanprayag	Police Chowki Drain	0.025	Pindar	Tapped	-	STP-1:- Police Chowki - 0.05 MLD	0.05	Operational		No		
58		SBI ATM Drain	0.029	Pindar	Tapped	-	STP-2: Purana Pul (PWD Bridge) - 0.10 MLD	0.1	Operational		No		
59		Saraswati Shishu Mandir Drain	0.032	Pindar	Tapped	-						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	-	STP-5: Ward No. 1 & 3 - 0.10 MLD	0.1	Operational		No		
62		Ward No. 3 Drain	0.033	Pindar	Tapped	-				0.05	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	Srinagar	Kothar Nala	0.700	Alaknanda	Tapped	-	STP Srinagar	3.5	Operational		No		
67		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

80		Gas Godown Drain	0.079	Alaknanda	Tapped	-	1 MLD STP Srinagar	1	Operational	No		
81		Bhakiyana Nala	0.094	Alaknanda	Tapped	-			Operational	No		
82	Rudraprayag	Anoop Negi Nala	0.047	Alaknanda	Tapped	-	STP#1 - near Anoop Negi School - 0.075 MLD	0.075	Operational	No		
83		Rudra complex Nala	0.073	Alaknanda	Tapped	-	STP#2 - Near Rudra complex - 0.1 MLD	0.100	Operational	No		
84		Bus Stand Nala	0.044	Alaknanda	Tapped	-	STP#3 - Bus Stand - 0.075 MLD	0.075	Operational	No		
85		State Bank Nala	0.027	Alaknanda	Tapped	-	STP#4 - SBI & Masjid combined - 0.1 MLD	0.100	Operational	No		
86		Masjid Nala	0.023	Alaknanda	Tapped	-			Operational	No		
87		Steel Bridge Nala	0.084	Alaknanda	Tapped	-	STP#5 - Steel bridge & Syndicate bank - 0.125 MLD	0.125	Operational	No		
88		Syndicate Bank Nala	0.015	Alaknanda	Tapped	-			Operational	No		
89		Belni Drain	0.240	Alaknanda	Tapped	-	STP#6 - Belni - 0.05 MLD	0.050	Operational	No		
90		Devprayag	Bah Bazar	0.029	Alaknanda	Tapped	-	STP#1 - Bah Bazar - 1.4 MLD	1.4	Operational	No	
91	Saraswati Nala (From Sulabh)		0.055	Bhagirathi	Tapped	-	STP#2 - 0.075 MLD	0.075	Operational	No		
92	Sangam Bazar 1		0.017	Alaknanda	Tapped	-	STP#3 - 0.15 MLD	0.15	Operational	No		
93	Sangam Bazar 2		0.027	Alaknanda	Tapped	-			Operational	No		
94	Srikot	Taulia Nala	0.042	Alaknanda	Tapped	-	Taulia Nala 0.05 STP	1	Operational	No		
95		Junior High School Nala	0.065	Alaknanda	Tapped	-	Junior High Sch 0.075 STP	1	Operational	No		
96	Tapovan	Kothari Tirath Niwas nala	0.014	Ganga	Tapped	-	3.5 MLD STP Tapovan	3.5	Operational	No		
97		Sri Ram Ashram nala	0.014	Ganga	Tapped	-						No
98		Lupin herbal center nala	0.028	Ganga	Tapped	-						No
99		Sachha dham nala	0.288	Ganga	Tapped	-						No
100		Kailashanand nala	0.042	Ganga	Tapped	-						No
101		Vanprasath Ashram nala	0.036	Ganga	Tapped	-			Operational	No		
102		Near milan telecome nala	0.028	Ganga	Tapped	-				No		
103		Near Geeta Bhawan, Gali no-3 nala	0.022	Ganga	Tapped	-				No		
104		Near Kirmola village	0.057	Ganga	Tapped	-				No		
105		Near Parmarth niketan nala	0.029	Ganga	Tapped	-				No		

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106	Swargashram	Near Shanta Bhawan nala	0.058	Ganga	Tapped	-	3 MLD STP Swaragashram	3			No			
107		Near Geeta bhawan PNB	0.058	Ganga	Tapped	-					No			
108		Near Handicraft emporium	0.072	Ganga	Tapped	-					No			
109		Near Geeta bhawan Gali no.-1	0.086	Ganga	Tapped	-					No			
110		Near Ravi Daily Needs nala	0.086	Ganga	Tapped	-					No			
111		Near Ganga Hair dresser nala	0.014	Ganga	Tapped	-					No			
112		Near Laxman Jhula SPS nala	0.014	Ganga	Tapped	-					No			
113		Back side of Choti wala hotel nala	0.072	Ganga	Tapped	-					No			
114		Near Shumani Bhawan nala	0.072	Ganga	Tapped	-					No			
115		Near Chouhan hotel nala	0.057	Ganga	Tapped	-					No			
116		Near Baraha manjil Bhawan nala	0.043	Ganga	Tapped	-					No			
117		Near Laxaman Jhula nala	0.021	Ganga	Tapped	-					No			
118		Near Narayan Kunj nala	0.021	Ganga	Tapped	-					No			
119		Near Laxman Jhula PO nala	0.028	Ganga	Tapped	-					No			
120		Muni Ki Reti	Darshan Maha Vidhalya Nala	0.036	Ganga	Tapped			-	26 MLD STP Lakkarghat	26	Operational		No
121			Pracheen Hanuman Mandir nala	0.036	Ganga	Tapped			-					No
122			Sarwajanik Sochalya nala	0.036	Ganga	Tapped			-					No
123			Asian Gems and Handicraft	0.022	Ganga	Tapped			-					No
124			Police Guest House nala	0.038	Ganga	Tapped			-					No
125	Shivanand Bhawan nala		0.072	Ganga	Tapped	-			No					
126	PWD Guest House nala		0.086	Ganga	Tapped	-			No					
127	Nav Ghat nala		0.002	Ganga	Tapped	-			No					

128		Omkaranand public Ghat nala	0.043	Ganga	Tapped	-				No
129		Khara sroat nala (Monsoon nala)	0.144	Ganga	Tapped	-			Operational	No
130		Ganga resort nala	0.144	Ganga	Tapped	-	5 MLD STP Chorpani	5.000		No
131		Muni Ki Reti parking nala	0.216	Ganga	Tapped	-				No
132		Dhalwala Nala (Natural water source)	3.89	Ganga	Tapped	-			Operational	No
133		Chandreshwar Nala	0.144	Ganga	Tapped	-	7.5 MLD STP Chandreshwar Nagar	7.500		No
134		Shamshan Ghat Nala	0.288	Ganga	Tapped	-				No
135	Rishikesh	PWD nala	2.01	Ganga	Tapped	-			Operational	No
136		Saraswati Nala	4.032	Ganga	Tapped	-	26 MLD STP Lakkarghat	26		No
137		Bangali Basti Nala	2.16	Ganga	Tapped	-				No
138		Sai Ghat Nala	0.007	Ganga	Tapped	-				No
139	Kichha (Haldwani)	Drain No. 1			Untaped	No				
140		Badi Mohalla			Untaped	No				
141		Bankhandi Mandir Nala (Left)			Untaped	No				
142		Bankhandi Mandir Nala (Right)			Untaped	No				
143		Shiv Mandir wala Nala (Left)			Untaped	No				
144		Shiv Mandir wala Nala (Right)			Untaped	No				
145	Raiwala(Dehradun)	Nala Saperabasti			Untaped	No				
146		Nala near BSF Camp			Untaped	No				
147	Dehradun	Rispana			Untaped	No				
148		Bindal			Untaped	No				
149	Kashipur	Belijudi Nala			Untaped	No				
150		Kalash Mandap Nala			Untaped	No				
151		Laxmipur minor Nala			Untaped	No				
152		Gabia Nala			Untaped	No				
153		Ice Factory Nala			Untaped	No				
154		Mukundpur Nala			Untaped	No				

Bids have been received, under evaluation. Proposed date for work execution is 1st February, 2021. Appointment of TPI agency for monitoring is under progress by SPMG.

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155		Ghoga Nala			Untaped	No				
156	Sitarganj	Ukrouli darin			Untaped	No				

Status of STPs in Uttarakhand							
Sl 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	Tapowan	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 Masjid	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	Joshinath	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	Landaar North	0.8	Operational	-	UJS	No
54	Mussoorie	Landaar 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	Bhimtal	Bhimtal	1.3	Operational	-	UJS	No
61	Almora	Bakh, Almora	2.0	Operational	-	UJS	No
62	Pithoragarh	Z-1	5.0	Operational	-	UJS	No
63	Pithoragarh	Z-2	1.3	Operational	-	UKPJN	No
64	Joshimath	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	Beljuri	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 Stablisation Pond is decommissioning due to new 26 MLD STP operational

**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-॥/विधि/एनजीटी-2/सीपीसीबी/2020-21

दिनांक : 03.02.2021

सेवा में,

मुख्य सचिव,  
उत्तर प्रदेश सरकार,  
प्रथम मंजिल, कमरा न. 110 ,  
लालबहादूर शास्त्री भवन, उत्तर प्रदेश सचिवालय,  
लखनऊ, - 226001 उत्तर प्रदेश

**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।

महोदय,

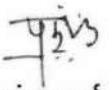
कृपया माननीय राष्ट्रीय हरित अधिकरण के उपरिवर्णित संदर्भित आदेशों को देखने का कष्ट करें जिसके द्वारा केंद्रीय प्रदूषण नियंत्रण बोर्ड को अप्रयुक्त नालों(untapped drains) और अपूर्ण/निर्माणाधीन एसटीपी हेतु पर्यावरणीय प्रतिकर की गणना करने तथा मुख्य सचिव से इसकी मांग करने का निदेश दिया है।

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।

भवदीय,

संलग्नक: यथोपरि

  
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

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**Dr. Prashant Gargava**  
Member Secretary  
**डॉ. प्रशांत गार्गव**  
सदस्य सचिव



**केन्द्रीय प्रदूषण नियंत्रण बोर्ड**  
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दिनांक : 03.02.2021

सेवा में,

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प्रथम मजिल, कमरा न. 110,  
लालबहादूर शास्त्री भवन, उत्तर प्रदेश सचिवालय,  
लखनऊ, - 226001 उत्तर प्रदेश

**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।**

महोदय,

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।

भवदीय,

संलग्नक: यथोपरि

प्रशांत गार्गव

**प्रतिलिपि**

महानिदेशक,  
राष्ट्रीय स्वच्छ गंगा मिशन,  
प्रथम तल, मेजर ध्यानचंद नेशनल स्टेडियम,  
इंडिया गेट, नई दिल्ली - 110002

चूंकि माननीय राष्ट्रीय हरित अधिकरण के आदेशानुसार, भुगतान की जाने वाली राशि के 50% तक की देयता एनएमजीसी है, अतः आवश्यक कार्रवाई हेतु।

प्रशांत गार्गव



**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 & 14.01.2021 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 UTTAR PRADESH DRAINS FOR EC CALCULATION (Annexure-1)**

**EC Calculation Period: 01.07.2020 till 31.12.2020**

1. Drains Discharging into River Ganga	:	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 × @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	:	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 8x 5 = 4800 Lakhs

SUMMARY OF UTTAR PRADESH STPs FOR EC CALCULATION (Annexure-2)

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 × @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

**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.

Status of 86 drains in Phase - I, Segment - B

S. No	City/Town	Name of Drain	River	Average Flow Discharge (MLD)	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 (MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated
1	Bijnor	Hemraj drain/Bijnor drain	Ganga	6.4	Tapped	-	Bijnour STP	24	Operational	-	No
2	Nazibabad	Chhoiya Drain	Ganga	4.66	Untapped	-do-	N. A.	N. A.	N. A.	Not pertaining to U. P. Jal Nigam. Industrial drain, action to be taken by UPPCB.	Yes
3	Khatauli	Sugar mill nala	Kali	-	Untapped	-do-	N. A.	N. A.	N. A.	Not pertaining to U. P. Jal Nigam. Industrial drain, action to be taken by UPPCB.	Yes
4	Modinagar	Kadarabad Drain	Kali	-	Untapped	-do-	Modinagar STP	20	Under Construction	Sewer Network is being laid under AMRUT. Upon completion, the sewage will flow through the sewer line resultin in no discharge in the drain. Progress - 90.00 % as on 15.01.2021	Yes
5	Meerut	Abu Nallah-1	Kali	39.22	Untapped	-do-	Pratap Vihar STP	14	N. A.	PFR submitted to SMCG dated 21.10.2020	Yes
6	Meerut	Abu Nallah-2	Kali	145.95	Untapped	-do-	Kamalpur STP	220	Under Tendering	Revised AA&ES has been issued on 06.05.2020 and Bid document is being prepared by NMCG	Yes
7	Meerut	Slaughter House Drain /Odean Nala	Kali	113.73	Untapped	-do-	Kamalpur STP	220	Under Tendering		Yes
8	Gharmuktheshwar	Garh Drain	Ganga	4	Tapped	-	Garh STP	3.4	Operational	-	No
9	Ghaziabad	Fuldhera drain	Ganga	-	Untapped	-	N. A.	N. A.	N. A.	Not pertaining to U. P. Jal Nigam. Industrial drain, action to be taken by UPPCB.	Yes
10	Rampur	Rampur drain	Ramganga	-	Tapped	-	Moradabad STP	14 & 15	Operational	-	No
11	Moradabad	Jigar Colony	Ramganga	2.59	Tapped	-	Moradabad STP	58	Operational	-	No
12	Moradabad	Katghar Railway Station Drain	Ramganga	1.3	Tapped	-	Moradabad STP	58	Operational	-	No
13	Moradabad	Prabhat Nagar drain (near Chandausi Road)	Ramganga	1.73	Tapped	-	Moradabad STP	58	Operational	-	No
14	Moradabad	Jama Masjid Left Drain	Ramganga	0.5	Tapped	-	Moradabad STP	58	Operational	-	No
15	Moradabad	Jama Masjid Right Drain	Ramganga	0.9	Tapped	-	Moradabad STP	58	Operational	-	No
16	Moradabad	Lalbagh Drain	Ramganga	1.73	Tapped	-	Moradabad STP	58	Operational	-	No
17	Moradabad	Nawabpura Drain 1st	Ramganga	1.3	Tapped	-	Moradabad STP	58	Operational	-	No
18	Moradabad	Nawabpura Drain 2nd	Ramganga	1.3	Tapped	-	Moradabad STP	58	Operational	-	No
19	Moradabad	Ghosiyan Drain	Ramganga	1.3	Tapped	-	Moradabad STP	58	Operational	-	No
20	Moradabad	Jhabbu Ka Nala	Ramganga	3.46	Tapped	-	Moradabad STP	58	Operational	-	No
21	Moradabad	Daheria/ Dateria Drain	Ramganga	3.02	Tapped	-	Moradabad STP	58	Operational	-	No
22	Moradabad	Chakkar Ki Milak (Mukarampur)	Ramganga	2.5	Untapped	-do-	Moradabad STP	58	Under Construction	Work is under Progress	Yes
23	Moradabad	Barbalan Drain	Ramganga	1.73	Untapped	-do-	Moradabad STP	58	Under Construction	Work is under Progress	Yes
24	Moradabad	Kudaghar Drain	Ramganga	6.05	Untapped	-do-	Moradabad STP	58	Under Construction	Work is under Progress	Yes
25	Moradabad	Vivekanand Hospital Drain (Left)	Ramganga	1.08	Untapped	-do-	Moradabad STP	25	Under Construction	LOA issued in Mar-2020 but Land is under Legal dispute.	Yes
26	Moradabad	Vivekanand Hospital Drain (Right)	Ramganga	2.61	Untapped	-do-	Moradabad STP	25	Under Construction	The issue of land matter is under review at Hon'ble High Court, Allahabad and Revenue court. Alternate land is	Yes
27	Moradabad	MIT Drain	Ramganga	7.5	Untapped	-do-	Moradabad STP	25	Under Construction	being identified by District Administration.	Yes
28	Moradabad	Moksh Dham Drain	Ramganga	7.22	Untapped	-do-	Moradabad STP	25	Under Construction		Yes
29	Moradabad	TDI City Drain	Ramganga	4.86	Untapped	-do-	Moradabad STP	25	Under Construction		Yes

S. No	City/Town	Name of Drain	River	Average Flow Discharge (MLD)	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 (MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated	
30	Moradabad	Moradabad drain (Karula drain)	Ramganga	26.11	Untapped	-do-	N. A.	N. A.	N. A.	PFR submitted to NMCG on dated 18.09.2020 for approval	Yes	
31	Amroha	Bagad drain (river)	Ganga	-	Untapped		N. A.	N. A.	N. A.	Not pertaining to U. P. Jal Nigam. Industrial drain, action to be taken by UPPCB.	Yes	
32	Hapur	Chhoiya Drain	Kali	-	Untapped		N. A.	N. A.	N. A.	Not pertaining to U. P. Jal Nigam. Industrial drain, action to be taken by UPPCB.	Yes	
33	Hapur	Hapur Drain	Kali	6	Untapped	-do-	Hapur STP	30	Under Construction	Sewer Network is being laid under AMRUT. Upon completion, the sewage will flow through the sewer line resultin in no discharge in the drain, Progress - 40.00 % as on 15.01.2021	Yes	
34	Hapur	Hapur Drain-1 (City drain)	Kali	25	Untapped	-do-	N. A.	N. A.	N. A.	DPR under review at HQ, UPJN, Lucknow.	Yes	
35	Bulandshahr	Manan Road Nalla (Bulandshahr I)	Kali	7.77	Untapped	-do-	Bulandshahr STP	40	Under Construction	Sewer Network is being laid under AMRUT. Upon completion, the sewage will flow through the sewer line resultin in no discharge in the drain, Progress - 76.00 % as on 15.01.2021	Yes	
36	Bulandshahr	Adil nagar Nala	Kali	2.15	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
37	Bulandshahr	Chandbari Road (Bulandshahr II)	Kali	6.18	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
38	Bulandshahr	Cheel ghat	Kali	0.88	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
39	Bulandshahr	Narshul ghat	Kali	2.41	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
40	Bulandshahr	Adil Nagar 2	Kali	-	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
41	Bulandshahr	Kasai Bada	Kali	0.85	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
42	Bulandshahr	Faisalabad road	Kali	3.25	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
43	Bulandshahr	Behind Shanidev mandir	Kali	-	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
44	Bulandshahr	Devipura	Kali	1.65	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
45	Bulandshahr	Bridge Dhameda Road	Kali	0.34	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
46	Bulandshahr	Behind chamunda mandir	Kali	0.4	Untapped	-do-	Bulandshahr STP	40	Under Construction		Yes	
47	Debai (Bulandshahr)	Neem nala	Kali	-	Untapped		N. A.	N. A.	N. A.		Dry drain, not requiring tapping	Yes
48	Gulaothi	Gulaothi Drain	Kali	6.91	Untapped	-do-	N. A.	N. A.	N. A.		DPR submitted to NMCG on 04.08.2020 for approval	Yes
49	Seohara	Nohra drain (Nasiya drain)	Ramganga	5.88	Untapped		N. A.	N. A.	N. A.	BOD is less than 3 mg/l hence requires no treatment	Yes	
50	Anupsahar	Anupsahar STP Drain-1	Ganga	0.81	Tapped	-	Anupsahar STP	1.7	Operational	-	No	
51	Anupsahar	Anupsahar STP Drain-2	Ganga	1.76	Tapped	-					No	
52	Bareilly	Deveranaiya Nala	Ramganga	62	Untapped	-do-	Bareilly STP	63	Under Tendering	Tender to be invited. Bid document is being prepared by NMCG. Registry of 1 (8000 sq. m) among 2 parcel of private land has been completed. For other parcel of land, conversion of land use is under process at district administration level.	Yes	
53	Bareilly	Chawri Nala (Chodari)	Ramganga		Untapped	-do-	Bareilly STP	63	Under Tendering		Yes	
54	Bareilly	Nakatiya Nala	Ramganga		Untapped	-do-	Bareilly STP	63	Under Tendering		Yes	
55	Kasganj	Kasganj drain	Kali	12.7	Untapped	-do-	Kasganj STP	15	Under Construction	Work in progress.	Yes	
56	Farrukhabad	Bhairoghath drain (Tokaghat)	Ganga	4	Untapped	-do-	Farrukhabad-	43	Under Tendering	Progress - 56.50% as on 15.01.2021 Revised AA& ES has been issued on 12.01.2021 by	Yes	

S. No	City/Town	Name of Drain	River	Average Flow Discharge (MLD)	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 (MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated
57	Farrukhabad	Dhinapur drain	Ganga	1	Untapped	-do-	Fatehgarh STP		Under Tendering	NMCG	Yes
58	Fatehgarh	Hathikhana Nala	Ganga	6.88	Untapped	-do-			Under Tendering		Yes
59	Fatehgarh	Bargadiya Ghat drain	Ganga	1.31	Untapped	-do-			Under Tendering		Yes
60	Fatehgarh	Cantt Nalla	Ganga	3.44	Untapped	-do-			Under Tendering		Yes
61	Kannauj	Patta Nala	Kali	7	Tapped	-	Kannauj	13	Operational	-	No
62	Kannauj	Chhemkali temple to Nadangapur village (Adanga nalla)	Kali	3	Tapped	-	Kannauj	13	Operational	-	No
63	Kannauj	Tammi house to Sadkapur Village (Tammi nalla)	Kali	2	Tapped	-	Kannauj	13	Operational	-	No
64	Kanpur	Air force Nala	Ganga	-	Untapped	-	N. A.	N. A.	N. A.	Storm water drain, Not to be tapped	Yes
65	Kanpur	Permiya Nala	Ganga	6.38	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
66	Kanpur	Sisamai Nala	Ganga	140.146	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
67	Kanpur	Tefco Nala	Ganga	0.43	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
68	Kanpur	Parmath drain	Ganga	1.78	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
69	Kanpur	Muir drain	Ganga	3.25	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
70	Kanpur	Police line drain	Ganga	0.79	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
71	Kanpur	Jail drain	Ganga	1.22	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
72	Kanpur	Bhagwatdas (Guptarghat Nala)	Ganga	2.38	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
73	Kanpur	COD Nala	Pandu	8.81	Tapped	-	Bingawan	210	Operational	-	No
74	Kanpur	Ranighat drain	Ganga	1.89	Untapped	-	Cluster of STPs at Jajmau	-	Operational	DPR submitted to NMCG on 04.08.2020 for approval.	Yes
75	Kanpur	Dabka Nalla-III	Ganga	2.56	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
76	Kanpur	Shetla Bazar (Bangalighat nala)	Ganga	5.75	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
77	Kanpur	Budhiya ghat Drain	Ganga	2.34	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
78	Kanpur	Wazidpur Nalla	Ganga	7.66	Tapped	-	Cluster of STPs at Jajmau	-	Operational	-	No
79	Kanpur	Ganda Nala	Pandu	55.09	Tapped	-	Bingawan STP	210	Operational	DPR submitted for approval, 13.07 cr	
80	Kanpur	Halwa Khand Nala	Pandu	11.44	Tapped	-	Bingawan STP	210	Operational	DPR submitted for approval, 13.07 cr	
81	Kanpur	Panki Nala (Thermal power)	Pandu	30	Untapped	-do-	Pankha STP	30	Under Construction	Work in progress.	Yes

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S. No	City/Town	Name of Drain	River	Average Flow Discharge (MLD)	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 (MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated
82	Kanpur	ICI Nala	Pandu	40	Untapped	-do-	Pankha STP	30	Under Construction	Progress - 30.00% as on 15.01.2021	Yes
83	Kanpur	Satti Chaura	Ganga	2	Untapped		N. A.	N. A.	N. A.	DPR submitted to NMCG on 04.08.2020 for approval.	Yes
84	Kanpur	Golaghat Nala	Ganga	1.44	Untapped		N. A.	N. A.	N. A.	DPR submitted to NMCG on 04.08.2020 for approval.	Yes
85	Unnao	Loni Drain	Ganga	-	Dry		N. A.	N. A.	N. A.	Loni Drain carries Approx 2.0 MLD untreated domestic waste water from the habitation of some part of Unnao city and approx 5.72 MLD Industrial treated water of Industrial area Site -1 & Site - 2, Chandpur and Jamuka, Unnao. Loni drain covering the distance of about 60 K.M. from Unnao city often remains dry near Bihar, District Unnao before meeting to the River Ganga.	No
86	Unnao	City Jail Drain (Dakari drain)	Ganga	19.33	Untapped	-do-	Unnao STP	15	Under Construction	Construction of I&D work with 15 MLD STP at Unnao, including operation and maintenance of 15 years on HAM based PPP mode has been awarded M/s Shappoorji Pallonji and Company Private Limited, Mumbai. Progress - 26.54 % as on 15.01.2021	Yes
87	Ballia	Kathar Nala at the around of Ballia city	Ganga	17	Untapped	Information to be provided by ULB	Ballia	19.6	Under Construction	DPR for remaining works sent to SMCG dated 30.09.2020	Yes
88	Bhadohi	Chauri Nala	Varuna	2.67	Untapped	-do-	N.A.	N.A.	N.A.	DPR sent to PPRBD, U.P.J.N., Lucknow and is under review at HQ, Level	Yes
89	Bhadohi	Rajpura Nala	Varuna	4.33	Untapped	-do-	N.A.	N.A.	N.A.		Yes
90	Bhadohi	Mamdopur Nala	Varuna	3.99	Untapped	-do-	N.A.	N.A.	N.A.		Yes
91	Chunar	Nagarpur	Jargo	0.091	Dry	-do-	N.A.	N.A.	N.A.		Yes
92	Chunar	Teakaur Nagarpur	Jargo	0.100	Dry	-do-	N.A.	N.A.	N.A.	Not proposed to be intercepted and diverted as the same are falling into River Jargo which finally meets River Ganga in the downstream at an approximate distance of 16 kms.	No
93	Chunar	Bharatpur Kabristan	Jargo	0.154	Dry	-do-	N.A.	N.A.	N.A.		No
94	Chunar	Bharatpur Trimohani	Jargo	0.134	Dry	-do-	N.A.	N.A.	N.A.		No
95	Chunar	Saddapur Naipurwa	Jargo	0.960	Dry	-do-	N.A.	N.A.	N.A.	River Jargo dries in dry weather before meeting River Ganga therefore no I&D is proposed for drains falling into River Jargo.	No
96	Chunar	Pashu Chikitsalaya	Jargo	0.126	Dry	-do-	N.A.	N.A.	N.A.		No
97	Chunar	Nagar Palika	Jargo	0.224	Dry	-do-	N.A.	N.A.	N.A.		No
98	Chunar	Parade Ground	Jargo	0.300	Dry	-do-	N.A.	N.A.	N.A.		No
99	Chunar	Tambalganj Nala	Ganga	0.046	Untapped	-do-	Chunar FSTP	0.01	Under Construction		No
100	Chunar	Dargahshareef Nala	Ganga	0.319	Untapped	-do-	Chunar FSTP	0.01	Under Construction	DPR for I & D of drains and construction of STP was earlier approved by NMCG. The tender could not be finalised because the price quoted by the participating firms were too high in comparison to the approved estimate provisions. In view of above, the bids received were rejected by NMCG. The bids for this work were reinvited, 3 times, but no firm participated in the bidding process.	Yes
101	Chunar	BHAIRAMGANJ EAST NALA	Ganga	0.081	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
102	Chunar	BHAIRAMGANJ WEST NALA	Ganga	0.062	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
103	Chunar	TEKAUR BASTI NORTH	Ganga	0.099	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
104	Chunar	TEKAUR BASTI SOUTH	Ganga	0.098	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
105	Chunar	SANTOSHI MATA MANDIR NALA	Ganga	0.125	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
106	Chunar	POST OFFICE SOUTH DRAIN	Ganga	0.393	Untapped	-do-	Chunar FSTP	0.01	Under Construction	Subsequently, project for FSTP was approved and is under execution. Upon completion of this project, the organic	Yes

S. No	City/Town	Name of Drain	River	Average Flow Discharge (MLD)	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 (MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated
107	Chunar	POST OFFICE NORTH DRAIN	Ganga	0.335	Untapped	-do-	Chunar FSTP	0.01	Under Construction	load reaching river Ganga will get reduced considerably.	Yes
108	Chunar	GANGESHWAR NISHAD PARK DRAIN	Ganga	0.088	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
109	Chunar	BALUGHAT DRAIN	Ganga	0.085	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
110	Chunar	BELBEER GHAT DRAIN	Ganga	0.042	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
111	Chunar	CHOURA MATA DRAIN	Ganga	0.125	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
112	Chunar	KASHI RAM AWAS DRAIN	Ganga	0.377	Untapped	-do-	Chunar FSTP	0.01	Under Construction		Yes
113	Dalmau	Padva Nala/(Muraibagh) Shankar Nagar	Ganga	2.68	Untapped	-do-			N.A.	PFR submitted to NMCG on 18.09.2020	Yes
114	Dalmau	Bada Math - Chhota Math ke bich ka Nala/(Sherandajpur)	Ganga		Untapped	-do-	N.A.	N.A.	N.A.	PFR submitted to NMCG on 18.09.2020	Yes
115	Dalmau	Busda Ghat ka Nala/(Sherandajpur)	Ganga		Untapped	-do-	N.A.	N.A.	N.A.	PFR submitted to NMCG on 18.09.2020	Yes
116	Dalmau	Shukla Ghat ka Nala/(Sherandajpur)	Ganga		Untapped	-do-	N.A.	N.A.	N.A.	PFR submitted to NMCG on 18.09.2020	Yes
117	Dalmau	Pathvari Ghat ka Nala/(Tikaitganj)	Ganga		Untapped	-do-	N.A.	N.A.	N.A.	PFR submitted to NMCG on 18.09.2020	Yes
118	Dalmau	Soarakh Ghat Muroop Nala/(Tikaitganj)	Ganga		Untapped	-do-	N.A.	N.A.	N.A.	PFR submitted to NMCG on 18.09.2020	Yes
119	Dalmau	Muskatpal Nala	Ganga		Untapped	-do-	N.A.	N.A.	N.A.	PFR submitted to NMCG on 18.09.2020	Yes
120	Dalmau	Shivala Ghat Nala	Ganga		Untapped	-do-	N.A.	N.A.	N.A.	PFR submitted to NMCG on 18.09.2020	Yes
121	Dalmau	Raja Tiloi Ghat Nala/Mo. shermdajpur(Deen shah Gaora Ghat)	Ganga		Untapped	-do-	N.A.	N.A.	N.A.	PFR submitted to NMCG on 18.09.2020	Yes
122	Fatehpur	Tambeshear Mandir to Mitthanpur	Yamuna		-	Dry	-do-	N.A.	N.A.	N.A.	Dry weather flow from the town doesn't reach the river.
123	Fatehpur	Navabag to Lodhiganj	Yamuna	-	Dry	-do-	N.A.	N.A.	N.A.	Dry weather flow from the town doesn't reach the river.	No
124	Fatehpur	Joniha Chauraha to Jhaupur	Yamuna	-	Dry	-do-	N.A.	N.A.	N.A.	Dry weather flow from the town doesn't reach the river.	No
125	Ghazipur	HARIZAN BASTI	Ganga	0.02	Untapped	-do-	Ghazipur STP	21	Under Tendering	AA&ES issued on 28.05.2020. Financial Bid opened on 18.12.2020 and is under evaluation.	Yes
126	Ghazipur	SAMSHAN GHAT	Ganga	0.103	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
127	Ghazipur	RUI MANDI	Ganga	0.018	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
128	Ghazipur	BUDHAVA MAHADEVA	Ganga	0.049	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
129	Ghazipur	MUGAL PURA	Ganga	0.027	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
130	Ghazipur	POSTA GHAT	Ganga	0.027	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
131	Ghazipur	KHIRKI GHAT	Ganga	0.025	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
132	Ghazipur	THERI BAZAR	Ganga	0.025	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
133	Ghazipur	ANZAH GHAT	Ganga	3.91	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
134	Ghazipur	CHETNAT GHAT	Ganga	0.686	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
135	Ghazipur	STIMER GHAT	Ganga	3.241	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
136	Ghazipur	GOLA GHAT	Ganga	0.102	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
137	Ghazipur	MAKSUD GHAT	Ganga	0.018	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
138	Ghazipur	COLLECTER GHAT	Ganga	3.141	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
139	Ghazipur	DADRI GHAT	Ganga	3.233	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
140	Ghazipur	SAI MANDIR	Ganga	3.119	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes

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S. No	City/Town	Name of Drain	River	Average Flow Discharge (MLD)	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 (MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated
141	Ghazipur	NAUPURA	Ganga	0.018	Untapped	-do-	Ghazipur STP	21	Under Tendering		
142	Ghazipur	AFIM FACTORY COLONY	Ganga	0.018	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
143	Ghazipur	MAHALA BASTI (SIKANDPUR)	Ganga	0.02	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
144	Ghazipur	D.M BANGLO	Ganga	3.141	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
145	Ghazipur	PEAR NAGAR	Ganga	0.027	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
146	Ghazipur	BADA MAHADEVA (GORA BAZAR)	Ganga	3.91	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
147	Ghazipur	BADA MAHADEVA (ADARSH BAZAR)	Ganga	1.27	Untapped	-do-	Ghazipur STP	21	Under Tendering		Yes
148	Kunda	Ganda Nala Raiyapur	Ganga	-	Dry	-do-	N.A.	N.A.	N.A.	Dry weather flow from the town doesn't discharge into the river.	No
149	Kunda	Taar Nala Babaganj	Ganga	-	Dry	-do-	N.A.	N.A.	N.A.		No
150	Kunda	Ganda Nala Baraipur	Ganga	-	Dry	-do-	N.A.	N.A.	N.A.		No
151	Manikpur	Pakka Nala	Ganga	0.582	Untapped	-do-	N.A.	N.A.	N.A.	DPR under review at UPJN level.	Yes
152	Manikpur	Raja Hela Nala	Ganga	0.100	Untapped	-do-	N.A.	N.A.	N.A.		Yes
153	Manikpur	Prathmik Vidyalaya	Ganga	0.086	Untapped	-do-	N.A.	N.A.	N.A.		Yes
154	Manikpur	Mallahani Tola	Ganga	0.086	Untapped	-do-	N.A.	N.A.	N.A.		Yes
155	Manikpur	Post office Nala	Ganga	0.243	Untapped	-do-	N.A.	N.A.	N.A.		Yes
156	Mirzapur	Kachari Drain	Ganga	1.200	Tapped	-	Pakka Pokhra	14	Operational		No
157	Mirzapur	Oliyar	Ganga	0.310	Tapped	-	Pakka Pokhra	14	Operational		No
158	Mirzapur	Sundar	Ganga	0.240	Tapped	-	Pakka Pokhra	14	Operational		No
159	Mirzapur	Badali	Ganga	0.390	Tapped	-	Pakka Pokhra	14	Operational		No
160	Mirzapur	Narghat	Ganga	0.780	Tapped	-	Pakka Pokhra	14	Operational		No
161	Mirzapur	Khandawa	Ganga	9.420	Tapped	-	Pakka Pokhra	14	Operational		No
162	Mirzapur	DiwanGhat old Drain	Ganga	0.100	Tapped	-	Vindhyanchal	4	Operational		No
163	Mirzapur	BalughatPakka Drain	Ganga	0.170	Tapped	-	Vindhyanchal	4	Operational		No
164	Mirzapur	Parasuram Drain	Ganga	1.390	Tapped	-	Vindhyanchal	4	Operational		No
165	Mirzapur	Gudara Drain	Ganga	0.200	Tapped	-	Vindhyanchal	4	Operational		No
166	Mirzapur	Basvariya Drain	Ganga	1.130	Untapped	-do-	Vindhyanchal	7	Under Construction		Yes
167	Mirzapur	DiwanGhat new Drain	Ganga	0.020	Untapped	-do-	Vindhyanchal	7	Under Construction		Yes
168	Mirzapur	BalughatKacha Drain	Ganga	0.010	Untapped	-do-	Vindhyanchal	7	Under Construction		Yes
169	Mirzapur	Malhaya Drain	Ganga	0.270	Untapped	-do-	Vindhyanchal	7	Under Construction		Yes
170	Mirzapur	Patengra (manasarovar) Drain	Ganga	0.740	Untapped	-do-	Vindhyanchal	7	Under Construction		Yes
171	Mirzapur	Bisundarpur Drain	Ganga	1.580	Untapped	-do-	Mirzapur STP	17	Under Tendering	AA&ES issued on 28.05.2020. Financial Bid opened on 18.12.2020 and is under evaluation.	Yes
172	Mirzapur	Hanumanghat Drain	Ganga	0.680	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
173	Mirzapur	Public club Drain	Ganga	0.600	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
174	Mirzapur	Barahmiliab Drain	Ganga	0.390	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
175	Mirzapur	District judge Drain	Ganga	0.400	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
176	Mirzapur	Lif cannal Drain	Ganga	0.400	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
177	Mirzapur	Irrigation colony Drain	Ganga	0.030	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes

S. No	City/Town	Name of Drain	River	Average Flow Discharge (MLD)	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 (MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated
178	Mirzapur	MorchaGhar Drain	Ganga	1.640	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
179	Mirzapur	Ghoreshahid Drain	Ganga	49.300	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
180	Mirzapur	konia	Ganga	0.020	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
181	Mirzapur	Chorawa	Ganga	0.250	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
182	Mirzapur	Balaji temple	Ganga	2.200	Untapped	-do-	Mirzapur STP	17	Under Tendering		Yes
183	Mughalsarai	Kali Mohal Drain (Ganda Nala)	Ganga	8.26	Untapped	-do-	N.A.	N.A.	N.A.	DPR under review at UPJN Level	Yes
184	Mughalsarai	Chandhasi Nala/Railway Nala	Ganga	21.07	Untapped	-do-	N.A.	N.A.	N.A.		Yes
185	Prayagraj	Sasur Khaderi	Yamuna	18.00	Tapped	-	Numayadahi	50	Operational	-	No
186	Prayagraj	Karela Bagh Drain	Yamuna	0.60	Tapped	-	Numayadahi	50	Operational	-	No
187	Prayagraj	Main Ghaghar Nala	Yamuna	25.86	Tapped	-	Numayadahi	50	Operational	-	No
188	Prayagraj	Ghaghar Nala 1-A / Sadiyapur Drain	Yamuna	5.00	Tapped	-	Numayadahi	50	Operational	-	No
189	Prayagraj	Ghaghar Nala 1-A1	Yamuna	3.25	Tapped	-	Numayadahi	50	Operational	-	No
190	Prayagraj	Ghaghar Nala 1-B	Yamuna	1.60	Tapped	-	Numayadahi	50	Operational	-	No
191	Prayagraj	Dariyabad Kakahraghat Drain Meerapur	Yamuna	1.81	Tapped	-	Naini	80	Operational	-	No
192	Prayagraj	Dariyabad Pipalghat Drain	Yamuna	2.00	Tapped	-	Naini	80	Operational	-	No
193	Prayagraj	Dariyabad Jogighat Drain Meerapur	Yamuna	2.30	Tapped	-	Naini	80	Operational	-	No
194	Prayagraj	Chachar Nala	Yamuna	25.00	Tapped	-	Naini	80	Operational	-	No
195	Prayagraj	Emergency Outfall Drain	Yamuna	-	Tapped	-	Naini	80	Operational	-	No
196	Prayagraj	Drain at Gate No. 9	Yamuna	2.15	Tapped	-	Naini	80	Operational	-	No
197	Prayagraj	Drain at Gate No. 13	Yamuna	1.98	Tapped	-	Naini	80	Operational	-	No
198	Prayagraj	Fort Drain No. 1	Yamuna	0.20	Tapped	-	Fort		Operational	-	No
199	Prayagraj	Fort Drain No. 2	Yamuna	0.40	Tapped	-	Fort		Operational	-	No
200	Prayagraj	Morigate Nala	Ganga	8.00	Tapped	-	Rajapur	60	Operational	-	No
201	Prayagraj	Drains Of Daraganj Area	Ganga	2.00	Tapped	-	Rajapur	60	Operational	-	No
202	Prayagraj	Jondhwal drain	Ganga	7.20	Tapped	-	Rajapur	60	Operational	-	No
203	Prayagraj	Shankarghat Colony Drain (Near Phaphamau Bridge)	Ganga	1.25	Tapped	-	Rajapur	60	Operational	-	No
204	Prayagraj	Jondhwal Rasulabad Drain (Murdaghat)	Ganga	1.50	Tapped	-	Rajapur	60	Operational	-	No
205	Prayagraj	Shankarghat Colony Drain (Near Phaphamau Bridge)	Ganga	1.25	Tapped	-	Rajapur	60	Operational	-	No
206	Prayagraj	Unchwagarhi Drain No. 1	Ganga	0.00	Tapped	-	Rajapur	60	Operational	-	No
207	Prayagraj	Unchwagarhi Drain No. 2	Ganga	0.00	Tapped	-	Rajapur	60	Operational	-	No
208	Prayagraj	Beligaon Drain	Ganga	0.00	Tapped	-	Rajapur	60	Operational	-	No
209	Prayagraj	Mumfordganj Drain	Ganga	10.00	Tapped	-	Rajapur	60	Operational	-	No
210	Prayagraj	Shivkuti Drain No. 1	Ganga	1.10	Tapped	-	Salori	43	Operational	-	No
211	Prayagraj	Shivkuti Drain No. 2	Ganga	0.15	Tapped	-	Salori	43	Operational	-	No
212	Prayagraj	Shivkuti Drain No. 3 (North)	Ganga	0.20	Tapped	-	Salori	43	Operational	-	No
213	Prayagraj	Shivkuti Drain No. 4	Ganga	0.25	Tapped	-	Salori	43	Operational	-	No

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214	Prayagraj	Shivkuti Drain No. 5	Ganga	0.30	Tapped	-	Salori	43	Operational	-	No
215	Prayagraj	Shivkuti Drain No. 6	Ganga	0.25	Tapped	-	Salori	43	Operational	-	No
216	Prayagraj	Shivkuti Drain No. 7 (East)	Ganga	0.70	Tapped	-	Salori	43	Operational	-	No
217	Prayagraj	Chilla Drain	Ganga	1.20	Tapped	-	Salori	43	Operational	-	No
218	Prayagraj	Govindpur Colony Drain (Purani Basti)	Ganga	0.20	Tapped	-	Salori	43	Operational	-	No
219	Prayagraj	Govindpur Colony Drain No. 1	Ganga	0.25	Tapped	-	Salori	43	Operational	-	No
220	Prayagraj	Govindpur Colony Drain No. 2	Ganga	0.30	Tapped	-	Salori	43	Operational	-	No
221	Prayagraj	Govindpur Colony Drain No. 3	Ganga	0.15	Tapped	-	Salori	43	Operational	-	No
222	Prayagraj	Govindpur Colony Drain No. 4	Ganga	0.25	Tapped	-	Salori	43	Operational	-	No
223	Prayagraj	Allenganj Nala / Buxi Bund Nala	Ganga	20.00	Tapped	-	Salori	43	Operational	-	No
224	Prayagraj	Salori Nala	Ganga	19.50	Tapped	-	Salori	43	Operational	-	No
225	Prayagraj	Ponghat Nala	Ganga	7.50	Tapped	-	Ponghat	10	Operational	-	No
226	Prayagraj	Kodra Nala	Ganga	13.00	Tapped	-	Kodra	25	Operational	-	No
227	Prayagraj	Nehru Park Nala	Ganga	2.65	Tapped	-	Kodra	25	Operational	-	No
228	Prayagraj	Rasulabad Puccaghat Drain	Ganga	1.55	Tapped	-	Rajapur	60	Operational	-	No
229	Prayagraj	Mehdauri Gaon Drain	Ganga	1.40	Tapped	-	Rajapur	60	Operational	-	No
230	Prayagraj	Mawaiya Nala	Yamuna	28.10	Untapped	-do-	Naini	42	Under Construction	Approved by NMCG vide letter No. T-12/2015-	Yes
231	Prayagraj	Mahewa Ghat Drain no. 1	Yamuna	0.30	Untapped	-do-	Naini	42	Under Construction	16/1076/NMCG dated 19.05.2017. LOA has been issue to	Yes
232	Prayagraj	Mahewa Ghat Drain no. 2	Yamuna	0.22	Untapped	-do-	Naini	42	Under Construction	concerning Firm on 10.11.2018 . Proped date of	Yes
233	Prayagraj	Arail Drain No. 2 (Kharkauni drain)	Yamuna	1.45	Untapped	-do-	Naini	42	Under Construction	completion is Sep,2021. In the mean time Bioremediation	Yes
234	Prayagraj	Sachcha Baba Ashram Drain	Yamuna	2.72	Untapped	-do-	Naini	42	Under Construction	of all the untapped drains is being done by Nagar Nigam	Yes
235	Prayagraj	A.D.A. Colony Nala / Jwaladevi	Ganga	4.50	Untapped	-do-	N.A.	N.A.	N.A.	Under AMRUT scheme Construction of Connecting	Yes
236	Prayagraj	Jondhwal Ghat Drain/Chluhara Mandir	Ganga	1.31	Untapped	-do-	N.A.	N.A.	N.A.	chambers and house connection in District D is being done.	Yes
237	Prayagraj	Rajapur Nala	Ganga	25.00	Untapped	-do-	N.A.	N.A.	N.A.	As per Original proposal 48693 No. connection was	Yes
238	Prayagraj	Tv Tower Nala	Ganga	0.00	Untapped	-do-	N.A.	N.A.	N.A.	proposed but as per actual only 26000 nos. connections are	Yes
239	Prayagraj	Sadar Bazar Nala	Ganga	3.80	Untapped	-do-	N.A.	N.A.	N.A.	to be done out of which 23500 No. connections are	Yes
240	Prayagraj	Muirabad (Ganesh Nagar) Nala	Ganga	0.00	Untapped	-do-	N.A.	N.A.	N.A.	completed and rest is under progress. Due to some gaps	Yes
241	Prayagraj	Nayapurwa Drain	Ganga	0.00	Untapped	-do-	N.A.	N.A.	N.A.	and chockage in old sewer line and Covid-19 lockdown,	Yes
242	Prayagraj	Co-Operative Nala	Ganga	0.27	Untapped	-do-	Phaphamau	14	N.A.	Approved by NMCG vide letter No. T-12/2015-	Yes
243	Prayagraj	Basna Nala	Ganga	2.55	Untapped	-do-	Phaphamau	14	N.A.	16/1076/NMCG dated 19.05.2017. LOA has been issue to	Yes
244	Prayagraj	Indira Awasi Nala / Jai Gurudev Ashram Nala	Ganga	1.15	Untapped	-do-	Phaphamau	14	N.A.	concerning Firm on 10.11.2018 . Proped date of	Yes
245	Prayagraj	Shantipuram Nala	Ganga	4.10	Untapped	-do-	Phaphamau	14	N.A.	completion is Sep,2021. In the mean time Bioremediation	Yes
246	Prayagraj	8 small drains at different locations in Jhushi area	Ganga	0.80	Untapped	-do-	Jhushi	16	N.A.	of all the untapped drains is being done by Nagar Nigam	Yes
247	Prayagraj	Lotey Haren Nala	Ganga	9.98	Untapped	-do-	Jhushi	16	N.A.	Prayagraj.	Yes
248	Prayagraj	Shastri Bridge Nala (03 small drains), Jhushi	Ganga	2.78	Untapped	-do-	Jhushi	16	N.A.		Yes
249	Ramnagar	Rambhag Ghat Drain	Ganga	8.20	Untapped	-do-	Ramnagar	10	Under Construction		Yes

S. No	City/Town	Name of Drain	River	Average Flow Discharge (MLD)	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 (MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated
250	Ramnagar	Balua Ghat Drain	Ganga	0.13	Untapped	-do-	Ramnagar	10	Under Construction	-	Yes
251	Ramnagar	Shakti Ghat Drain	Ganga	0.40	Untapped	-do-	Ramnagar	10	Under Construction	-	Yes
252	Ramnagar	Salotri Ghat Drain	Ganga	0.34	Untapped	-do-	Ramnagar	10	Under Construction	-	Yes
253	Ramnagar	Hanuman Ghat Drain	Ganga	0.09	Untapped	-do-	Ramnagar	10	Under Construction	-	Yes
254	Saidpur	Jauhargaj Drain	Ganga	0.80	Untapped	-do-	N.A.	N.A.	N.A.	PFR submitted to SMCG on 16.09.2020	Yes
255	Saidpur	Rangmahal Ghat Drain	Ganga	0.20	Untapped	-do-	N.A.	N.A.	N.A.		Yes
256	Saidpur	Ward No. 15 Malhiya Basti Drain	Ganga	1.00	Untapped	-do-	N.A.	N.A.	N.A.		Yes
257	Saidpur	Mahaveer Ghat Drain	Ganga	0.60	Untapped	-do-	N.A.	N.A.	N.A.		Yes
258	Saidpur	Sangat Ghat Drain	Ganga	0.50	Untapped	-do-	N.A.	N.A.	N.A.		Yes
259	Saidpur	Pakka Ghat Drain	Ganga	0.50	Untapped	-do-	N.A.	N.A.	N.A.		Yes
260	Saidpur	Budenath Mahadew Ghat Drain	Ganga	0.80	Untapped	-do-	N.A.	N.A.	N.A.		Yes
261	Saidpur	Kot Ghat	Ganga	0.90	Untapped	-do-	N.A.	N.A.	N.A.		Yes
262	Varanasi	Shivala Drain	Ganga	5.00	Tapped	-	Dinapur	80	Operational	-	No
263	Varanasi	Harishchandraghat Drain	Ganga	2.50	Tapped	-	Dinapur	80	Operational	-	No
264	Varanasi	Mansaroverghat Drain	Ganga	4.50	Tapped	-	Dinapur	80	Operational	-	No
265	Varanasi	Pandeyghat Drain	Ganga	30.00	Tapped	-	Dinapur	80	Operational	-	No
266	Varanasi	Dr. R. P. Ghat Drain	Ganga		Tapped	-	Dinapur	80	Operational	-	No
267	Varanasi	Meerghat Drain	Ganga		Tapped	-	Dinapur	80	Operational	-	No
268	Varanasi	Lalitghat Drain	Ganga	4.50	Tapped	-	Dinapur	80	Operational	-	No
269	Varanasi	Jaleshanghat Drain	Ganga		Tapped	-	Dinapur	80	Operational	-	No
270	Varanasi	Manikarnikaghat Drain	Ganga		Tapped	-	Dinapur	80	Operational	-	No
271	Varanasi	Sankthaghat Drain	Ganga	1.50	Tapped	-	Dinapur	80	Operational	-	No
272	Varanasi	Mehtaghat Drain	Ganga		Tapped	-	Dinapur	80	Operational	-	No
273	Varanasi	Ramghat Drain	Ganga		Tapped	-	Dinapur	80	Operational	-	No
274	Varanasi	Panchgangaghat Drain	Ganga		Tapped	-	Dinapur	80	Operational	-	No
275	Varanasi	Bramhaghat Drain	Ganga		Tapped	-	Dinapur	80	Operational	-	No
276	Varanasi	Lalghat Drain	Ganga		Tapped	-	Dinapur	80	Operational	-	No
277	Varanasi	Trilochanghat Drain	Ganga	4.50	Tapped	-	Dinapur	80	Operational	-	No
278	Varanasi	Teliya Drain	Ganga	2.80	Tapped	-	Dinapur	80	Operational	-	No
279	Varanasi	Bhainsasur Drain	Ganga	0.40	Tapped	-	Dinapur	80	Operational	-	No
280	Varanasi	Rajghat Drain	Ganga	0.20	Tapped	-	Dinapur	80	Operational	-	No
281	Varanasi	Phulwariya Drain	Varuna	7.60	Tapped	-	Dinapur	140	Operational	-	No
282	Varanasi	Sadar Bazar Drain	Varuna	2.00	Tapped	-	Dinapur	140	Operational	-	No
283	Varanasi	Raja Bazar Drain	Varuna	0.10	Tapped	-	Dinapur	140	Operational	-	No
284	Varanasi	TeliyaBag Drain	Varuna	18.00	Tapped	-	Dinapur	140	Operational	-	No
285	Varanasi	Nakkhighat Drain	Varuna	0.10	Tapped	-	Dinapur	140	Operational	-	No
286	Varanasi	Narokhar Drain	Varuna	7.50	Tapped	-	Goitha	120	Operational	-	No
287	Varanasi	Sarang Talab Drain	Varuna	1.50	Tapped	-	Goitha	120	Operational	-	No
288	Varanasi	Nai Basti	Varuna	3.00	Tapped	-	Goitha	120	Operational	-	No

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S. No	City/Town	Name of Drain	River	Average Flow Discharge (MLD)	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 (MLD)	Status of STP till 01.07.2020 (Operational/Under construction/DPR Phase/Under Tendering)	Remarks	EC Calculated
289	Varanasi	Nakkhi Drain	Ganga	1.86	Untapped	-do-	Ramna	50	Under Construction	Work is in progress.	Yes
290	Varanasi	Samneghat Drain	Ganga	1.17	Untapped	-do-	Ramna	50	Under Construction		Yes
291	Varanasi	Assi/Nagavan Drain	Ganga	42.81	Untapped	-do-	Ramna	50	Under Construction		Yes
292	Varanasi	Rajghat Outfall (Shahi Nala)	Ganga	130.00	Untapped	-do-	Dinapur	140	Under Construction	Work for diversion of 50 MLD discharge from OTS to RTS is under progress.	Yes
293	Varanasi	Central Jail Drain	Varuna	6.50	Untapped	-do-	N.A.	N.A.	N.A.		Yes
294	Varanasi	Ordely Bazar Drain	Varuna	7.00	Untapped	-do-	N.A.	N.A.	N.A.	Drains are being taken up by Irrigation Deptt.	Yes
295	Varanasi	Chamrautha Drain	Varuna	1.50	Untapped	-do-	N.A.	N.A.	N.A.		Yes
296	Varanasi	Khajury Colony Drain	Varuna	1.50	Untapped	-do-	N.A.	N.A.	N.A.		Yes
297	Varanasi	Banaras Drain No.-5	Varuna	1.00	Untapped	-do-	N.A.	N.A.	N.A.		Yes
298	Varanasi	Hukulganj Drain	Varuna	2.50	Untapped	-do-	N.A.	N.A.	N.A.		Yes
299	Zamania	Gorawa Drain	Ganga	0.60	Untapped	-do-	N.A.	N.A.	N.A.		Yes
300	Zamania	Kankarwa Drain	Ganga	1.01	Untapped	-do-	N.A.	N.A.	N.A.		PFR submitted to SMCg on 16.09.2020
301	Zamania	Karpurimai Ghat Drain	Ganga	2.80	Untapped	-do-	N.A.	N.A.	N.A.	Yes	

Under construction STPs				
S no.	City	Number	Capacity	EC Calculated
1	Baghpat	1	14	Yes
2	Bareilly	4	63	Yes
3	Chunar	1	0.01	Yes
4	Etawah	1	21	Yes
5	Jaunpur	1	30	Yes
6	Kanpur	1	30	Yes
7	Kasganj	1	15	Yes
8	Lucknow	2	40	Yes
9	Mathura	1	30	Yes
10	Meerut	1	220	Yes
11	Moradabad	1	25	Yes
12	Muzaffarnagar - (Budhana)	1	10	Yes
13	Muzzafarnagar	2	54.5	Yes
14	Prayagraj - (Naini, Phaphamau, Jhansi)	3	72	Yes
15	Sultanpur	3	17	Yes
16	Unnao	1	15	Yes
17	Unnao - (Shuklaganj)	1	5	Yes
18	Varanasi - (Ramna)	1	50	Yes
19	Varanasi - (Ramnagar)	1	10	Yes
20	Aligarh	1	45	Yes
21	Bareilly	1	35	Yes
22	Bulandshahar	1	40	Yes
23	Etah	1	24	Yes
24	Hapur	1	30	Yes
25	Mirzapur	1	7	Yes
26	Modinagar	1	20	Yes
27	Rae Bareilly	1	18	Yes
28	Ballia	1	19.6	Yes
29	Firozabad	1	67	Yes
30	Lucknow	1	120	Yes
31	Pratapgarh	1	8.95	Yes
32	Jhansi	1	26	Yes
33	Kanpur - Baniyapur	1	15	Yes
34	Chunar	1	2	Yes
35	Bithoor	1	2.4	Yes
	Total no. of STPs	44		

<b>Under tendering/proposed/DPR Phase STPs</b>				
<b>Sl No</b>	<b>Town &amp; Name of STP</b>	<b>No. of STPs</b>	<b>Capacity (in MLD)</b>	<b>Proposed date of completion</b>
1	Mirzapur	2	17	Tender cancelled in October 2019. Revised by NMCG in May 2020
2	Farrukhabad	1	28	Revised Estimate to be approved by NMCG
3	Ghazipur	1	21	To be completed within 24 months after the issuance of letter of Authorization
4	Agra	13	175.38	Under tendering
5	Shahjahanpur	1	40	To be completed within 24 months after the issuance of letter of Authorization
6	Azamgarh	1	8	Under Tendering process
7	Shahjahanpur	1	40	Under tendering
8	Fatehgarh (as per UPPCB)	1	5	Revised Estimate to be approved by NMCG not included in SMCG list
<b>Total no. of STPs</b>		<b>21</b>		

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## Completed/Operational STPs

Sl No	Name of STP & Town	Capacity (in MLD)	Completed/operational	Operating agency
1	10.445 MLD STP near Tixi Tempel / Etawah	10.445	Operational	Yamuna Pollution Control Unit, UP Jal Nigam, Agra
2	13.5MLD STP at Mauja Umrain / Etawah	13.5	Operational	Nagar Palika Parishad, Etawah
3	03 MLD STP / Firozabad	3	Operational	Jal Kal
4	1.6 MLD Saifai/ Etawah	1.6	Operational	U.P. Jal Nigam
5	23 MLD STP at Mauja Odenya, Padaria / Mainpuri	23.0	Operational	Nagar Palika Parishad
6	3.42 MLD Near Divyang kendra/ Karvi Chitrakoot town	3.42	Operational	U.P. Jal Nigam
7	42 MLD Sajari, Kanpur	42	Operational	U.P. Jal Nigam
8	36 MLD (9 MLD CETP + 27 MLD STP) Kanpur	36 (9 MLD CETP + 27 MLD STP)	Operational	U.P. Jal Nigam
9	210 MLD Bingawan, Kanpur	210	Operational	U.P. Jal Nigam
10	43 MLD Jajmau, Kanpur	43	Operational	U.P. Jal Nigam
11	130 MLD Jajmau, Kanpur	130	Operational	U.P. Jal Nigam
12	Jalalpur Amrapur, Kanpur Dehat	13	Operational	U.P. Jal Nigam
13	2.7 MLD STP Fatehgarh / Farrukhabad	2.7	Operational	U.P. Jal Nigam
14	Prayagraj/Numayadahi	50	Operational	Ganga Pollution control unit, U.P. Jal Nigam
15	Prayagraj/ Ponghat	10	Operational	Ganga Pollution control unit, U.P. Jal Nigam
16	Prayagraj/Kodra	25	Operational	Ganga Pollution control unit, U.P. Jal Nigam
17	Prayagraj/Rajapur	60	Operational	Ganga Pollution control unit, U.P. Jal Nigam
18	Prayagraj/Salori	29	Operational	Ganga Pollution control unit, U.P. Jal Nigam
19	Prayagraj/Salori	14	Operational	Ganga Pollution control unit, U.P. Jal Nigam
20	Prayagraj/Naini-1	20	Operational	Ganga Pollution control unit, U.P. Jal Nigam
21	Prayagraj/Naini-2	60	Operational	Ganga Pollution control unit, U.P. Jal Nigam
22	Bhagwanpur STP 9.8 MLD /Varanasi	8.0 + 1.8	Operational	U.P. Jal Nigam
23	Dinapur STP 80 MLD /Varanasi	80	Operational	U.P. Jal Nigam
24	Goithaha STP 120 MLD /Varanasi	120	Operational	U.P. Jal Nigam
25	Dinapur STP 140 MLD /Varanasi	140	Operational	U.P. Jal Nigam
26	DLW STP 12 MLD /Varanasi	12	Operational	DLW
27	14 MLD Pakka Pokhra /Mirzapur	14	Operational	U.P. Jal Nigam
28	4 MLD Vindhyachal Mirzapur	4	Operational	U.P. Jal Nigam
29	S.T.P. (15 MLD), Jharkhandi, Maherwa ki Bari / Gorakhpur	15	Operational	U.P. Jal Nigam

30	S.T.P. (30MLD) Opp. Manyavar Kanshiram Shahri Garib Awasi Yojna, Deoria bypass Road / Gorakhpur	30	Operational	U.P. Jal Nigam
31	STP, Mahilpur Road / Saharanpur	38	Operational	Jal Kal
32	6.5 MLD Awasi vikas Parishad STP / Lucknow	6.5	Operational	U.P. Awasi vikas Parishad
33	37.5 MLD Awasi vikas Parishad STP / Lucknow	37.5	Operational	U.P. Awasi vikas Parishad
34	STP, Bharwara / Lucknow	345	Operational	U.P. Jal Nigam
35	STP, Daulatganj-1 / Lucknow	14	Operational	U.P. Jal Nigam
36	STP, Daulatganj-2 / Lucknow	42	Operational	U.P. Jal Nigam
37	56 MLD, Trans Hindon (Indirapuram), Ghaziabad	56	Operational	Nagar Nigam
38	74 MLD, S.B.R., Indirapuram, Ghaziabad	74	Operational	U.P. Jal Nigam
39	56 MLD, Indirapuram, (GDA), Ghaziabad	56	Operational	GDA
40	56 MLD, S.B.R., Dudahaida Vijay Nagar, Ghaziabad	56	Operational	GDA
41	56 MLD, S.B.R., Morty, Ghaziabad	56	Operational	GDA
42	70 MLD, U.A.S.B.R. Dudahaida Vijay Nagar, Ghaziabad	70	Operational	Nagar Nigam
43	3 MLD Pilkhaun / Ghaziabad	3	Operational	U.P. Jal Nigam
44	5 MLD Tronica City, Loni / Ghaziabad	5	Operational	UPSIDC
45	56 MLD, S.B.R. Govindpuram, Ghaziabad	56	Operational	GDA
46	3 MLD STP Brijghat Zone, Garhmukeshwar, Hapur	3	Operational	U.P. Jal Nigam (NGRBA)
47	6 MLD STP Garh Zone, Garhmukeshwar, Hapur	6	Operational	U.P. Jal Nigam (NGRBA)
48	78 MLD, Dhadhupura, Agra	78	Operational	U.P. Jal Nigam
49	2.25 MLD, Budi ka Nagla, Agra	2.25	Operational	U.P. Jal Nigam
50	10 MLD, Peelakhar, Agra	10	Operational	U.P. Jal Nigam
51	12 MLD, Devri Road, (Bhimnagri), Agra	12	Operational	U.P. Jal Nigam
52	14 MLD, Jaganpur, Sikandarpur, Agra	14	Operational	U.P. Jal Nigam
53	40 MLD, Sadarban, Bichhpuri, Agra	40	Operational	U.P. Jal Nigam
54	24 MLD, Dhadhupura (New), Agra	24	Operational	U.P. Jal Nigam
55	36 MLD Sadarwan (Bichpuri) New, Agra	36	Operational	ADA
56	4.50 MLD, Kalindi Vihar, Agra	4.5	Operational	ADA
57	03 MLD, Pandav Nagar, Meerut	3	Operational	MDA
58	07 MLD, Pallavpuram-1, Meerut	7	Operational	MDA
59	10 MLD, Lohiya Nagar, Meerut	10	Operational	MDA
60	15 MLD, Shatabdinagar, Meerut	15	Operational	MDA
61	11 MLD, Pallavpuram-2, Meerut	11	Operational	MDA
62	15 MLD, Vedvyasपुरी Meerut	15	Operational	MDA
63	06 MLD, Rakshapuram, Meerut	6	Operational	MDA

64	06 MLD, Shradhapuri-1, Meerut	6	Operational	MDA
65	06 MLD Sainik Vihar, Meerut	6	Operational	MDA
66	5 MLD Modipuram Tiraha, Meerut	5	Operational	U.P. Jal Nigam
67	07 MLD, Sports Goods Complex, Meerut	7	Operational	MDA
68	10 MLD, Ganga Nagar, Meerut	10	Operational	MDA
69	72 MLD Garh road (Jagriti vihar), Meerut	72	Operational	U.P. Jal Nigam
70	06 MLD, Shradhapuri- Phase-2, Meerut	6	Operational	MDA
71	32.5 MLD Nagar Palika Parishad, Muzaffarnagar	32.5	Operational	Nagar Palika Parishad, Muzaffarnagar
72	12 MLD, Ayodhya	12	Operational	U.P. Jal Nigam
73	13.59 MLD, Masani, Mathura	13.59	Operational	Nagar Palika Parishad
74	14.5 MLD, Trans-yamuna, Jamunapar, Mathura	14.5	Operational	Nagar Palika Parishad
75	08 MLD, Near 100 Bed Hospital Vrindavan, Mathura	8	Operational	U.P. Jal Nigam
76	04 MLD, Vrindavan Near Pagal Baba Mandir, Mathura	4	Operational	Nagar Palika Parishad
77	16 MLD, Trans Yamuna, Laxmi Nagar, Mathura	16	Operational	U.P. Jal Nigam
78	2.76 MLD Goverdhan, Mathura	2.76	Operational	Nagar Palika Parishad
79	33 MLD, Sector-54, Noida	33	Operational	Noida Authority
80	25 MLD, Sector-50, Noida	25	Operational	Noida Authority
81	35 MLD, Sector-123, Noida	35	Operational	Noida Authority
82	50 MLD, Sector-168, Noida	50	Operational	Noida Authority
83	2.0 MLD STP, Vill- Badaipur / Greater Noida	2	Operational	Greater Noida Authority
84	ECO tech -2 / Greater Noida	15	Operational	Greater Noida Authority
85	ECO tech -3 / Greater Noida	20	Operational	Greater Noida Authority
86	137 MLD, Kasana, GreaterNoida	137	Operational	Greater Noida Authority
87	34 MLD, Sector -50 Noida	34	Operational	Noida Authority
88	54 MLD, Sector- 54, Noida	54	Operational	Noida Authority
89	0.805 MLD, Ahara Road, Zone-A, Anoopshahar / Bulandhsahar	0.805	Operational	U.P. Jal Nigam
90	1.75 MLD, Ahara Road, Zone-B, Anoopshahar / Bulandhsahar	1.75	Operational	U.P. Jal Nigam
91	04 MLD Narora (NGRBA) Bulandhsahar	4	Operational	U.P. Jal Nigam
92	2.25 MLD, Narora Atomic power Station Narora Township Bulandhsahar	2.25	Operational	Narora Atomic power Station
93	1.5 MLD Anoopshahar Zone A (NGRBA) Bulandhsahar	1.5	Operational	U.P. Jal Nigam
94	1.0 MLD STP, Zone-B Anoopshahar Bulandhsahar	1.0	Operational	U.P. Jal Nigam
95	24 MLD Bijnor	24	Operational	U.P. Jal Nigam
96	58 MLD Moradabad	58	Operational	U.P. Jal Nigam
97	15 MLD Pehrigan / Rampur	15	Operational	U.P. Jal Nigam
98	14 MLD Benzirpur/ Rampur	14	Operational	U.P. Jal Nigam
99	5 MLD Rampur	5	Operational	U.P. Jal Nigam

100	5 MLD Hathia Nala / Sultanpur	5	Operational	U.P. Jal Nigam
101	56 MLD, Bapudham, Ghaziabad	56	Operational	GDA
102	20 MLD Moradabad	20	Operational	U.P. Jal Nigam
103	Loni, Kanpur	30	Non operational	NA
104	Kanwara Road-Banda (Oxidation Pond)	4	Non operational	NA

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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-॥/विधि/एनजीटी-2/सीपीसीबी/2020-21

दिनांक : 03.02.2021

सेवा में,

मुख्य सचिव,  
पश्चिम बंगाल सरकार,  
नाबन्ना, 13 वीं मंजिल, 325  
सरत चैटर्जी रोड, मंदिरताला शिबपूर, हावरा,  
पश्चिम बंगाल - 711102

**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।

महोदय,

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।

भवदीय,

संलग्नक: यथोपरि

प्रशांत गार्गव



'परिवेश भवन', सी.बी.डी.-कम-ऑफिस कॉम्प्लैक्स, 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

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**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-॥/विधि/एनजीटी-2/सीपीसीबी/2020-21

दिनांक : 03.02.2021

सेवा में,

मुख्य सचिव,  
पश्चिम बंगाल सरकार,  
नाबन्ना, 13 वीं मंजिल, 325  
सरत चैटर्जी रोड, मंदिरताला शिबपुर, हावरा,  
पश्चिम बंगाल - 711102

**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।**

महोदय,

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।

भवदीय,

संलग्नक: यथोपरि

प्रशांत गार्गव

**प्रतिलिपि**

महानिदेशक,  
राष्ट्रीय स्वच्छ गंगा मिशन,  
प्रथम तल, मेजर ध्यानचंद नेशनल स्टेडियम,  
इंडिया गेट, नई दिल्ली - 110002

चूंकि माननीय राष्ट्रीय हरित अधिकरण के आदेशानुसार, भुगतान की जाने वाली राशि के 50% तक की देयता एनएमजीसी है, अतः आवश्यक कार्रवाई हेतु।

प्रशांत गार्गव



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**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, 16.12.2020 & 15.01.2021 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 WEST BENGAL DRAINS FOR EC CALCULATION (Annexure-1)

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

1. Drains Discharging into River Ganga	:	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

**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 (Annexure-2)

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 × @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**

**Note:**

- a) Relevant lists of Drains and STPs are enclosed as annexures.
- 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.

## Status of Drains of West Bengal as on 31.12.2020

Sl. No.	City/Town	Name of drains	Average flow of drain (MLD)	Discharge to	Tapped /Untapped	Provision of interim measures for untapped drain (yes/no)	Name of the STP	Capacity of STP where drain is tapped (MLD)	Operational Status of STP	EC to be calculated excluding rejuvnation	Remarks
1	Jangipur	Jangipur Drain	0.20	Ganga	Untapped	Yes	Jangipur	5	Under construction	No	
2	Halisahar	Halisahar Drain	97.2	Ganga	Tapped	no	Halisahar	16	Operational	No	
3	Garifa	Garifa Drain-South / Ramaghat Open pucca drain	113.3	Ganga	Tapped	no	Naihati	6.5	Under Rejuvnation	No	
4	Garifa	Garifa Drain-North	6.5	Ganga	Tapped	no	Naihati	-	Under Rejuvnation	No	
5	Naihati	Thanar Khal	16.2	Ganga	Tapped	no	Naihati	11.56	Under Rejuvnation	No	
6	Hooghly	Imambara Khal	13.0	Ganga	Untapped	no	Hooghly - Chinsurah	26.5	under tendering	Yes	
7	Hooghly	Chinsurah-Majir Rasta Drain	88.1	Ganga	Untapped	no	Hooghly - Chinsurah	-	under tendering	Yes	
8	Chinsurah	Chandni Ghat Drain	1.7	Ganga	Untapped	no	Hooghly - Chinsurah	-	under tendering	Yes	
9	Garulia	Debitala Pancha Khal	64.9	Ganga	Tapped	no	Garulia	7.9	Under Rejuvnation	No	
10	Serampore	Serampore / Bhagirathi Drain	14.6	Ganga	Tapped	no	Serampore	18.6	Under Rejuvnation	No	
11	Serampore	Chatra Khal	70.0	Ganga	Tapped	no	Serampore	18.6	Under Rejuvnation	No	
12	North Barrackpore	Barrackpore Khal (S. P. Banglow)	43.2	Ganga	Untapped	no	North Barrackpore	6.5	under tendering	Yes	
13	Barrackpore	Gandhi Ghat Drain	4.8	Ganga	Tapped	no	Barrackpore	6	Operational	No	
14	North Barrackpore	Dhobi Ghat Drain	1.2	Ganga	Untapped	no	North Barrackpore	6.5	under tendering	Yes	
15	Titagarh	Titagarh Drain (Bishalaxmi Ghat)	21.7	Ganga	Tapped	no	Titagarh	4.5	Under Rejuvnation	No	
16	Rishra	Hasting Ghat Drain	29.0	Ganga	Tapped	no	Konnagar	22	Under Rejuvnation	No	
17	Bally	Dewangazi Ghat Drain	7.6	Ganga	Tapped	no	Kona STP	62	Under Rejuvnation	No	
18	Belur	Jagatnath Ghat Drain-1	17.3	Ganga	Tapped	no	Kona STP	62	Under Rejuvnation	No	

19	Baranagar	Kamarhati Drain @ Jute Mill	25.9	Ganga	Tapped	no	Kamarhati-Baranagar	60	Under Rejuvenation	No
20	Panihati	Kamarhati Drain @ PB	2.9	Ganga	Tapped	no	Panihati	12	Under Rejuvenation	No
21	Baranagar	Kuthighat Drain/Baranagar Khal	2.1	Ganga	Tapped	no	Kamarhati-Baranagar	60	Under Rejuvenation	No
22	Chitpur	Chitpur Ghat Khal/ Circular Canal	458.6	Ganga	Tapped	no	Bangur	52	Operational	No
23	Cossipore	Cossipore / Kashipur drain	9.5	Ganga	Tapped	no	Bangur	52	Operational	No
24	Howrah	Telkal Ghat Drain	13.7	Ganga	Tapped	no	Howrah-Arupara	65	Under Rejuvenation	No
25	Howrah	Ramkrishna Ghat Drain	0.2	Ganga	Tapped	no	Howrah-Arupara	65	Under Rejuvenation	No
26	Howrah	101, Foreshore Road Drain	8.2	Ganga	Tapped	no	Howrah-Arupara	65	Under Rejuvenation	No
27	Kalighat	Tolly Nala	844.5	Ganga	Untapped	no	Wireless Park	15.3	under tendering	Yes
							Sukha pukur	5.06		
							Birji Road	5.7		
28	Kalighat	Nimtala Burning Ghat Drain	24.9	Ganga	Tapped	no	East Kolkata Wetland	910	Operational	No

This particular STP was constructed under GAP Phase-I, subsequently with support from NMCG the project was considered for Rejuvenation. Accordingly Concessioner Agreement signed on 5th June 19. LOI signed on 6th March 2019.

Hence the project is under execution. The work is in progress. Therefore it may be considered for exemption.

The 3 under construction STPs pertained to one drain only i.e. Tolly's Nullah. --- 77 nos. of Toilets and septic tanks, demolishing the make shift toilets over Tolly's nullah, re excavation/dredging at most polluted stretch of upstream, temporary Fencing of Tolly's Nullah at vulnerable places of different wards nearly for 2km for restricting the access towards the Bank of Tolly's Nullah resulting in minimizing the solid wastes being dumped directly to Tolly's Nullah, cleaning of floating garbage on regular basis by installing 10 nos. of floating garbage arrester at Tolly's Nullah, installation of 04 nos. of organic Composter at different locations of Tolly's Nullah. So it may be considered for exemption from EC.

29	Khidderpore	Dhankheti/ PB Ghat Khal	80.9	Ganga	Untapped	no	Surinaam Ghat	16	under tendering	Yes	<p>The 3 under construction STPs pertained to one drain only i.e. Dhankheti. Dhankheti Nikashi is under the tidal impact zone. However, KMC seek 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 to be received. However, the department has installed screens in three different locations on the drains towards downstream of River Hooghly. As a very short term measure a lock gate is provided at the discharge end of Dhankheti Nikashi for abatement of Municipal Waste Water to river Hooghly. Now, KMC is waiting for approval of DPR from NMCG/ World Bank for taking up the work immediately or to get expertise opinion for alternative short term measures as sought for in order to compliance the order of Hon'ble NGT. It may be considered for exemption due the facts as mentioned above.</p>
			-	Ganga		no	Dhankheti Nikashi	25			
			-	Ganga		no	Garden Reach	35			
30	Shibpur-Howrah	Shibpur Burning ghat Drain	5.4	Ganga	Tapped	no	Howrah-Arupara	65	Under Rejuvunation	No	
31	Kanchrapara	Bagher Khal	134.5	Ganga	Tapped	no	Kanchrapara	18	Under Rejuvunation	No	
32	Howrah	130 Foreshore Road Drain	15.6	Ganga	Tapped	no	Howrah-Arupara	65	Under Rejuvunation	No	
33	Jagatddal	Alliance Mill Drain	5.2	Ganga	Tapped	no	Bhatpara	60.5	Operational	No	
34	Bandel	Rosbara Khal	168.3	Ganga	Untapped	no	Hooghly - Chinsurah	26.5	under tendering	Yes	
35	Maheshtala	Old Muni Khali Khal	6.9	Ganga	Untapped	no	Maheshtala	35	under tendering	Yes	
36		Bhatpara Drain	3.1	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
37		Pratapnagar-Rajbari Drain	2.6	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
38		Bhatpara-Open pucca drain	35.3	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
39		Bagh Khal	58.3	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	

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40	Majher Char Khal	29.5	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
41	Champdani Ferry Ghat / Paolghat Drain	3.9	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
42	Khardah Khal	271.5	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
43	N.C. Pal Khal	10.7	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
44	Saraswati Khal	20.6	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
45	Dhopa Ghat Drain	0.1	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
46	Chandannagar Drain	0.4	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
47	Nazerganj Khal	1075.2	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
48	ITC Triveni Drain	0.5	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
49	Akhra Food Ghat drain (New Muni Khali Khal)	362.9	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
50	DVC Canal	353.6	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
51	Bazarpara-Garighat Drain / Sharenga drain	185.9	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
52	Baidyabati Drain	576.0	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	

53		Bally Khal	4860.0	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
54		Singhi More Khal	0.9	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
55		BTPS Out fall Drain-I	5.9	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	
56		Bagher Khal	134.5	Ganga	Untapped	no			It is not possible to connect all those drains to STP by any I&D structure.	No	

Operational STPs (18 nos. of STPs)						
Sl. No. (SPMG)	Maintained By	STP Name or City or Town	Operational/under construction/under rejuvenation/tendering	Capacity (MLD)	Name of the Drain Tapped	Discharging to
1	KMDA	Jagaddal Bhatpara (New)	Operational	31.00	1. Alliance Mill Drain (5.2 MLD)	Ganga Through canal near Jagaddal station of approximate 8.0 KM length.
2	KMDA	Jagaddal Bhatpara (Shyamnagar)	Operational	10.00	Out of 56 designated drain no drain shall be connected to this STP	Ganga Through Pakhimara Khai and Muktarpur Khai. Length of flow about 4.0 KM.
3	KMDA	Jagaddal Bhatpara old	Operational	9.50	Out of 56 designated drain no drain shall be connected to this STP	Kept non operational due lack of sewage.
4	KMDA	Kankinara (Madrail, Bhatpara)	Operational	10.00	Out of 56 designated drain no drain shall be connected to this STP	Ganga Through Muktarpur Drain of length about 3.0 KM.
5	KMDA	Kalyani-I	Operational	11.00	Out of 56 designated drain no drain shall be connected to this STP	Ganga through Majher Char Khai
6	KMDA	Kalyani-II	Operational	10.00	Out of 56 designated drain no drain shall be connected to this STP	Ganga through Majher Char Khai
7	KMDA	Gayeshpur	Operational	8.33	Out of 56 designated drain no drain shall be connected to this STP	Ganga through Kulia Bill (length of flow about 500 m) and subsequently Bagher Khai
8	KMDA	Budge-Budge	Operational	9.33	Out of 56 designated drain no drain shall be connected to this STP	Effluent carries from discharge point to Churial Khai through drain and then Churial Khai outfall to river Ganga
9	KMDA	Barrackpore	Operational	18	Intereption not done from 56 nos of designated drains directly discharge into ganga	STP outlet to Ruiya Canal, it is not connected to river Ganga.
10	KMDA	Barrackpore	Operational	6	Gandhi Ghat Drain (4.8 MLD)	STP outlet to river Ganga through Gandhi Ghat Drain
11	KMDA	Halisahar	Operational	16	Halisahar Drain (97.2 MLD)	STP outlet to river Ganga through Halisahar Drain
39	KMC	Garden Reach, Kolkata	Operational	57	NA	Monikhal
40	KMC	Keorapukur STP, Kolkata	Operational	45	NA	Churial Extension Canal
50	PHED	Murshidabad	Operational	1.96	Sewage collected through I&D system	After treatment discharge to 6 nos maturation pond.
51	PHED	Berhampore	Operational	3.7	Sewage collected through I&D system intercepting drains at i) Saidabad, ii) Khagra and iii) Kadai	Discharge to nearby irrigation canal which runs away from Ganges due to its natural slope. No outfall discharge to River.
52	PHED	Nabadwip	Operational	10	Sewage collected through I&D system	After treatment discharge to series of maturation ponds located Near Phashitala Ghat to Monipur Ghat (Ward No. 24). No outfall discharge to River.

Sl. No. (SPMG)	Maintained By	STP Name or City or Town	Operational/under construction/under rejuvenation/tendering	Capacity (MLD)	Name of the Drain Tapped	Discharging to
53	PHED	Katwa	Operational	5.49	Sewage collected through I&D system intercepting Drain - #1 Pabna Colony, Drain - #2 Shrabani Guest House and Drain - #3 Goyal Para Ghat	After treatment discharge to River Ganga at Near Shankhai Ghat through open field.
54	PHED	Diamond Harbour	Operational	2.03	Sewage collected through I&D system	After treatment discharge to nearby Canals and finally discharge into the river Ganga.

**Partially operational STPs (2 nos. of STPs)**

Sl. No. (SPMG)	Maintained By	STP Name or City or Town	Operational/under construction/under rejuvenation/tendering	Capacity (MLD)	Name of the Drain Tapped	Discharging to
55	MED	Jiaganj- Azimganj	Partially Operational	0.69	1 no	Agriculture Land
56	MED	Jiaganj- Azimganj	Partially Operational	0.69	1 no	Agriculture Land

**Under Construction STPs (Modified Version) - 7 nos. of STPs**

SL. No	Maintained By	STP Name or City or Town	Operational/under construction/under rejuvenation/tendering	Capacity (MLD)	Name of the Drain Tapped	Discharging to	CPCB Monitoring Status	CPCB List (Yes/no)	Remarks
12	KMDA	Nabadwip	Under Construction	9.5	Muri Khal	Ganga through a nullah and the discharge point is 70 Mtr. from Ganga	not in list	No	The work for the STP was awarded 06.03.2019 (date). It is a NMCG funded project. The time frame for completion according to the LOI is 24 (months). Moreover as mentioned in order dated 21.05.2019 in OA 593/2017, Hon'ble NGT has allowed relaxation in time for completion for the ongoing projects by 3 months on account of COVID Pandemic. Hence the approved time for the completion of the project is 27 Months. Presently the work is going on full swing. However we have already made 58% of the physical progress. In OA 673/2018, KMDA, that is the executing wing of the West Bengal has already been deposited Rs. 15 Crore to CPCB as performance guarantee for rejuvenation of 17 river of West Bengal. Hence imposition of additional fine may be considered for exemption.
13	KMDA	Kanchrapara	Under Construction	18	Bagher Khal (134.50 MLD)	Ganga through Fodder Canal and discharge point is 4 Km. from Ganga	not in list	No	The work for the STP was awarded 20.08.2019 (date). It is a NMCG funded project. The time frame for completion according to the LOI is 24 (months). Moreover as mentioned in order dated 21.05.2019 in OA 593/2017, Hon'ble NGT has allowed relaxation in time for completion for the ongoing projects by 3 months on account of COVID Pandemic. Hence the approved time for the completion of the project is 27 Months. Presently the work is going on full swing. However we have already made 22% of the physical progress. In OA 673/2018, KMDA, that is the executing wing of the West Bengal has already been deposited Rs. 15 Crore to CPCB as performance guarantee for rejuvenation of 17 river of West Bengal. Hence imposition of additional fine may be considered for exemption.
14	KMDA	Baharampore	Under Construction	3.5	Jangipur Drain (0.2 MLD)	Direct discharge to Ganga	not in list	No	The work for the STP was awarded 20.01.2020 (date). It is a NMCG funded project. The time frame for completion according to the LOI is 24 (months). Moreover as mentioned in order dated 21.05.2019 in OA 593, Hon'ble NGT has allowed relaxation in time for completion for the ongoing projects by 3 months on account of COVID Pandemic. Hence the approved time for the completion of the project is 27 Months. Presently the work is going on full swing. However we have already made 3% of the physical progress. In OA 673/2018, KMDA, that is the executing wing of the West Bengal has already been deposited Rs. 15 Crore to CPCB as performance guarantee for rejuvenation of 17 river of West Bengal. Hence imposition of additional fine may be considered for exemption.
15	KMDA	Raghunathganj	Under Construction	8		Direct discharge to Ganga	not in list	No	The work for the STP was awarded 20.01.2020 (date). It is a NMCG funded project. The time frame for completion according to the LOI is 24 (months). Moreover as mentioned in order dated 21.05.2019 in OA 593/2017, Hon'ble NGT has allowed relaxation in time for completion for the ongoing projects by 3 months on account of COVID Pandemic. Hence the approved time for the completion of the project is 27 Months. Presently the work is going on full swing. However we have already made 3% of the physical progress. In OA 673/2018, KMDA, that is the executing wing of the West Bengal has already been deposited Rs. 15 Crore to CPCB as performance guarantee for rejuvenation of 17 river of West Bengal. Hence imposition of additional fine may be considered for exemption.
16	KMDA	Jangipur	Under Construction	5		Direct discharge to Ganga	not in list	No	The work for the STP was awarded 20.01.2020 (date). It is a NMCG funded project. The time frame for completion according to the LOI is 24 (months). Moreover as mentioned in order dated 21.05.2019 in OA 593/2017, Hon'ble NGT has allowed relaxation in time for completion for the ongoing projects by 3 months on account of COVID Pandemic. Hence the approved time for the completion of the project is 27 Months. Presently the work is going on full swing. However we have already made 3% of the physical progress. In OA 673/2018, KMDA, that is the executing wing of the West Bengal has already been deposited Rs. 15 Crore to CPCB as performance guarantee for rejuvenation of 17 river of West Bengal. Hence imposition of additional fine may be considered for exemption.

41	KMC	Near WBSETCL, Joka	Under Construction	45	Other drains (not listed in 56 nos. of drains)	Chorial canal	not in list	No	<p>Kolkata Environmental Improvement Investment Program (KEIIP) is a key urban infrastructure initiative of the Kolkata Municipal Corporation (KMC), and aims to improve the urban environment and quality of life in parts of Kolkata Municipal Area mainly through the delivery of improved water supply, sewerage, drainage and sanitation. The Program is also proposed to be implemented using a multi-tranche financing facility (MFF) of Asian Development Bank (ADB) with a loan of 400 million USD.</p> <p>The program is mainly aimed to improve the environmental condition of the added area of KMC. Wards under Borough XIII, XIV and XVI are planned to be covered with extensive Sewerage and Drainage (S&amp;D) network along with STPs to treat the generated DWF in these areas. Works are carried out satisfactorily as per the planned schedule.</p> <p>In this perspective 2 STPs have been planned; a 45 MLD STP near WBSETCL, Joka and a 40 MLD STP at Bank Plot, Joka. Accordingly, tenders for 2 STPs were called and the works of both the STPs were awarded to a nationally renowned agency SNET Pvt. Ltd. through competitive bidding as per the procurement policy of ADB and the Government of West Bengal.</p> <p>The STP is located in Ward 144 of Kolkata beside the Diamond Harbour Road, adjacent to the West Bengal State Electricity Transmission Co. Ltd. (WBSETCL) substation. The available area of the site for the 45 million liters per day (MLD) STP is 1.09 hectare (ha). The STP is planned to treat the DWF generated from S &amp; D systems in wards 125, 126, 144 and parts of ward 123, 124 and 143 under Borough XVI and 127 (Borough XIV). The population of the catchment for the design horizon is 2, 57,882 and its total catchment is approximately 1444 Ha, which will serve as the command area for the STP. Total capacity of the STP in the ultimate design horizon, 2045, is 45 MLD. SBR process is the selected technology for this STP. Treated effluent conforming to national standard will be discharged in the Chorialcanal. This canal is principally a drainage channel to carry storm water and as such there is no human use.</p> <p>The preliminary design had been done using this principle, but the detailed design of the process has been done by the selected contractor as per the turn key contract.</p> <p>After approval of all the designs, construction work of the STP is carrying out in full swing. The scheduled date of completion of the STP for commissioning is in March 2022.</p> <p>Reason behind prayer for exemption of fine GOWB against the non-execution of tapping work of sewage and treatment thereof through two STPs</p> <ul style="list-style-type: none"> <li>• Design and Construction of STP of capacity 30 MLD and above normally needs 36 months for completion in all respect. In this context, the progress of construction of these STPs under KEIIP is on schedule.</li> <li>• The project is executed under loan project of ADB and the procurement policy and execution is guided by the ADB's standard norms</li> <li>• The command areas of both the STPs are in the process of covered by dedicated Sewerage and Drainage network to convey the wastewater to the STPs. Construction of the S&amp;D network is under process. STPs are planned to treat the wastewater conveyed by the said network optimizing the time of completion of the said networks.</li> </ul>
42	KMC	At Bank Plot, M.G Road	Under Construction	40	Other drains (not listed in 56 nos. of drains)	Chorial canal	not in list	No	<p>Kolkata Environmental Improvement Investment Program (KEIIP) is a key urban infrastructure initiative of the Kolkata Municipal Corporation (KMC), and aims to improve the urban environment and quality of life in parts of Kolkata Municipal Area mainly through the delivery of improved water supply, sewerage, drainage and sanitation. The Program is also proposed to be implemented using a multi-tranche financing facility (MFF) of Asian Development Bank (ADB) with a loan of 400 million USD.</p> <p>The program is mainly aimed to improve the environmental condition of the added area of KMC. Wards under Borough XIII, XIV and XVI are planned to be covered with extensive Sewerage and Drainage (S&amp;D) network along with STPs to treat the generated DWF in these areas. Works are carried out satisfactorily as per the planned schedule.</p> <p>In this perspective 2 STPs have been planned; a 45 MLD STP near WBSETCL, Joka and a 40 MLD STP at Bank Plot, Joka. Accordingly, tenders for 2 STPs were called and the works of both the STPs were awarded to a nationally renowned agency SNET Pvt. Ltd. through competitive bidding as per the procurement policy of ADB and the Government of West Bengal.</p> <p>The STP is located by side of the Mahatma Gandhi Road in Ward 143 of KMC primarily identified as Bank Plot. The catchment area covers parts of wards 122 under (Borough XIII) and 123, 124, 142 &amp; 143 wards under Borough XVI. The population of the catchment for the design horizon is 2, 15,745 and its total catchment is approximately 1371.54 Ha, which will serve as the command area for the STP. Total capacity of the STP in the ultimate design horizon, 2045, is 40 MLD. SBR process is the selected technology for this STP. Treated effluent conforming to national standard will be discharged in the Chorialcanal. This canal is principally a drainage channel to carry storm water and as such there is no human use.</p> <p>The preliminary design had been done using this principle, but the detailed design of the process has been done by the selected contractor as per the turn key contract.</p> <p>After approval of all the designs, construction work of the STP is carrying out in full swing. The scheduled date of completion of the STP for commissioning is in March 2022. Reason behind prayer for exemption of fine GOWB against the non-execution of tapping work of sewage and treatment thereof through two STPs</p> <ul style="list-style-type: none"> <li>• Design and Construction of STP of capacity 30 MLD and above normally needs 36 months for completion in all respect. In this context, the progress of construction of these STPs under KEIIP is on schedule.</li> <li>• The project is executed under loan project of ADB and the procurement policy and execution is guided by the ADB's standard norms</li> <li>• The command areas of both the STPs are in the process of covered by dedicated Sewerage and Drainage network to convey the wastewater to the STPs. Construction of the S&amp;D network is under process. STPs are planned to treat the wastewater conveyed by the said network optimizing the time of completion of the said networks.</li> </ul> <p>Kolkata has great scarcity of lands. To identify and acquire lands within the city for construction of STP has consumed considerable effort and time. At the time of award of the contracts, the duration of completion of the packages has been given 3 years' time for both the packages and the work progress is satisfactory.</p> <p>Construction progress has been grossly disturbed for almost 5 months for lockdown for Covid 19 crisis</p>

**Under Rejuvenation STPs (18 nos. of STPs)**

Sl. No.	Maintained By	STP Name or City or Town	Operational/under construction/under rejuvenation/tendering	Capacity (MLD)	Name of the Drain Tapped	Discharging to	CPCB Monitoring Status	CPCB List (Yes /no)
39	KMDA	Baidyabati	Under Rejuvenation	6.00	NA	Effluent is being discharged to open PWD drain which inturned discharging to Baidyabati Khal from where it is being discharged to river Ganga.	Non-Operational	Yes
40	KMDA	Bhadreswar	Under Rejuvenation	7.60	NA	STP outlet to nearby river Ganga	Non-Operational	Yes
41	KMDA	Chandannagore	Operational / Under Rejuvenation	18.16	NA	STP outlet to river Ganga through Garh Khal	Operational	Yes
42	KMDA	Chandannagore	Operational / Under Rejuvenation	4.50	NA	STP outlet to river Ganga through Chandannagar Garh Khal	Operational	Yes
43	KMDA	Bansberia	Under Rejuvenation	0.30	NA	STP outlet to nearby river Ganga	Non-Operational	Yes
44	KMDA	Konnagar	Under Rejuvenation	22.00	Hasting Ghat Drain (29.0 MLD)	STP outlet to river Ganga through open drain	Non-Operational	Yes
45	KMDA	Naihati	Operational / Under Rejuvenation	11.56	Thanar Khal (16.2 MLD)	STP outlet to river Ganga through Thana Khal	Operational	Yes
46	KMDA	Titagarh	Operational/ Under Rejuvenation	4.50	Out of 56 designated drain no drain shall be connected to this STP	(i) STP Outlet to Fisheries Department, GoI (ii) STP outlet to nearby farmers for agriculture purpose (iii) Additional flow discharged from STP outlet to Anti-malaria Khal to Khardah Khal and then discharge to river Ganga.	Operational	Yes
47	KMDA	Titagarh	Under Rejuvenation	4.50	Titagarh Drain (Bishalaxmi Ghat) (21.7 MLD)	(i) STP Outlet to Fisheries Department, GoI (ii) STP outlet to nearby farmers for agriculture purpose (iii) Additional flow discharged from STP outlet to Anti-malaria Khal to Khardah Khal and then discharge to river Ganga.	Non Operational	Yes

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48	KMDA	Bandipur (Khardaha)	Under Rejuvenation	14.00	Out of 56 designated drain no drain shall be connected to this STP	STP outlet to small Khal to Khardah Khal and then discharge to river Ganga.	Non-Operational	Yes
49	KMDA	Champadani	Under Rejuvenation	1.00	Out of 56 designated drain no drain shall be connected to this STP	STP Outlet to DVC Canal through Municipal drain.	Non-Operational	Yes
50	KMDA	Garulia	Under Rejuvenation	7.90	1. Debitala Pancha Khal (64.9 MLD)	STP Outlet to nearby Ganga	Non-Operational	Yes
51	KMDA	Naihati	Under Rejuvenation	6.50	1. Garifa Drain-South / Ramaghat Open pucca drain (113.3 MLD) 2. Garifa Drain-North (6.5 MLD)	STP Outlet to nearby Ganga	not in list	No
52	KMDA	Panihati	Under Rejuvenation	12.00	1. Kamarhati Drain @ PB Ghat (2.9 MLD)	STP outlet to nearby Khal to Khardah Khal and then discharge to river Ganga.	Non-Operational	Yes
53	KMDA	Serampore	Under Rejuvenation	18.60	1. Serampore / Bhagirathi Drain (14.6 MLD) 2. Chatra Khal (70.0 MLD)	STP Outlet to river Ganga through pipeline.	Non-Operational	Yes
54	KMDA	Balli/Kona	Under Rejuvenation	62.00	1. Dewangazi Ghat Drain (7.6 MLD) 2. Jagatnath Ghat Drain-1 (17.3 MLD)	One part use for farmers and others to nearby Khal and then discharge to river Ganga.	Non-Operational	Yes
55	KMDA	Howrah-Arupura	Under Rejuvenation	65.00	1. Telkal Ghat Drain (13.7 MLD) 2. Ramkrishna Ghat Drain (0.2 MLD) 3. 101, Foreshore Road Drain (8.2 MLD) 4. Shibpur Burning ghat Drain (5.4 MLD) 5. 130 Foreshore Road Drain (15.6 MLD)	STP outlet to river Ganga through Corporation drain.	Non-Operational	Yes
56	KMDA	Kamarhati - Baranagar	Under Rejuvenation	60.00	1. Kamarhati Drain @ Jute Mill (25.9 MLD) 2. Kuthighat Drain/ Baranagar Khal (2.1 MLD)	STP outlet to nearby Bagjola Khal to Bidyadhari river.	Non-Operational	Yes

**Under Tendering STPs (16 nos. of STPs)**

Sl. No.	Maintained By	STP Name or City or Town	Operational/under construction/under rejuvanation/tendering	Capacity (MLD)	Name of the Drain to be Tapped	Discharging to
35	KMDA	Maheshtala	Under Tendering	35	Not intercepted out of 56 drain detail by CPCB	STP outlet to nearby Ganga
36	KMDA	Hooghly-Chinsurah	Under Tendering	26.5	1. Imambara Khal -13 MLD 2. Chinsurah-Majir Rasta Drain-88.1 MLD 3. Chandni Ghat Drain -1.7 MLD	STP outlet to Ganga through pipeline
37	KMDA	North-Barrackpore (Babanpur)	Under Tendering	11.25	Out of 56 designated drain no drain shall be connected to this STP	STP outlet to river Ganga through Ichapur Khal
38	KMDA	North-Barrackpore (Monirampur)	Under Tendering	6.5	1. Barrackpore Khal (S. P. Banglow)-43.2 MLD 2. Dhobi Ghat Drain -1.2 MLD	STP outlet to nearby Ganga
43	KMC	Wireless Park	Under Tendering	15.3	21 Drains under 7 Pumping Stations to be tapped	NA
44	KMC	Sukhapukur	Under Tendering	5.06	1 Drain under 5 Pumping Stations to be tapped	NA
45	KMC	Birji Road	Under Tendering	5.7	9 Drains under 1 Pumping Station to be tapped	NA
46	KMC	STP Near L.S 10	Under Tendering	16	Dhankheti Nikashi	NA
47	KMC	Surinaam Ghat	Under Tendering	25	Dhankheti Nikashi	NA
48	KMC	STP Near Bhanga Khal, Garden reach	Under Tendering	35	Dhankheti Nikashi	NA
49	KMC	STP at Rajpur-Sonarpur, Rania	Under Tendering	23	Laying of trunk sewers including house connections is under the scope of KEIIP. Time line for balance work not within the present scope to be finalized based on the time frame of implementation of future loan or from own resources of KMC.	NA
57	MED	Dhuliyani	Under Tendering	5.68	NA	NA
58	MED	Santipur	Under Tendering	16.6	NA	NA
59	MED	Chakdah	Under Tendering	5.06	NA	NA
60	MED	Haldia	Under Tendering	24.29	NA	NA
61	MED	Raiganj	Under Tendering	10.52	NA	NA

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-॥/विधि/एनजीटी-2/सीपीसीबी/2020-21

दिनांक : 03.02.2021

सेवा में,

मुख्य सचिव,  
बिहार सरकार,  
मुख्य सचिवालय,  
पटना, बिहार - 800015

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।

महोदय,

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।

भवदीय,

संलग्नक: यथोपरि

प्रशांत गार्गव



'परिवेश भवन', सी.बी.डी.-कम-ऑफिस कॉम्प्लैक्स, 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

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**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-II/विधि/एनजीटी-2/सीपीसीबी/2020-21

दिनांक : 03.02.2021

सेवा में,

मुख्य सचिव,  
बिहार सरकार,  
मुख्य सचिवालय,  
पटना, बिहार - 800015

**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।

महोदय,

कृपया माननीय राष्ट्रीय हरित अधिकरण के उपरिवर्णित संदर्भित आदेशों को देखने का कष्ट करें जिसके द्वारा केन्द्रीय 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 केन्द्रीय प्रदूषण नियंत्रण बोर्ड को भेजने के लिए कहा जाए। यह भी अनुरोध है कि पर्यावरणीय प्रतिकर केन्द्रीय प्रदूषण नियंत्रण बोर्ड के खाते में जमा किया जाए।

भवदीय,

संलग्नक: यथोपरि

प्रशांत गार्गव

**प्रतिलिपि**

महानिदेशक  
राष्ट्रीय स्वच्छ गंगा मिशन,  
प्रथम तल, मेजर ध्यानचंद नेशनल स्टेडियम,  
इंडिया गेट, नई दिल्ली - 110002

चूंकि माननीय राष्ट्रीय हरित अधिकरण के आदेशानुसार, भुगतान की जाने वाली राशि के 50% तक की देयता एनएमजीसी है, अतः आवश्यक कार्रवाई हेतु।

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

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**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, 14.12.2020 & 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 BIHAR DRAINS FOR EC CALCULATION (Annexure-1)**

**EC Calculation Period: 01.07.2020 till 31.12.2020**

1. Drains Discharging into River Ganga	:	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 × @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	:	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

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SUMMARY OF BIHAR STPs FOR EC CALCULATION (Annexure-2)

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 × @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 tendering/DPR/Proposed STPs (33 nos.) with effect from 01.01.2021

**Note:**

- a) Relevant lists of Drains and STPs are enclosed as annexure.
- 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.

### Status of Drains in Bihar (as on 31.12.2020)

S.No.	City/Town	Name of drain	Average Flow /Discharge (in MLD)	Discharging 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)	Remarks	EC Calculated	
1	Buxer	Sidnath Drain	3.82	Ganga	Untapped	No	Proposed 16 MLD STP with sewerage network approved by NMCG	Yes	
2	Buxer	Nath Baba Drain	4.23	Ganga	Untapped	No		Yes	
3	Buxer	Tadka Drain	8.23	Ganga	Untapped	Bio-remediation		No	
4	Buxer	Sariapur Drain	5.87	Ganga	Untapped	No		Yes	
5	Patna	Danapur Cantt Drain	8.16	Ganga	Untapped	Bio-remediation	STP proposed Beur-43, Sadipur 60, Karmali chak-37, & Pahadi zone-60, Digha 100, Kankarabaag-50) 350 MLD STP with sewerage network approved by NMCG	No	
6	Patna	Digha Ghat Drain	1.80	Ganga	Untapped	No		Yes	
7	Patna	Kurzi Drain	1.31	Ganga	Untapped	Bio-remediation		No	
8	Patna	Rajapur Drain	128.00	Ganga	Untapped	No		Yes	
9	Patna	Bans Ghat Drain	148.00	Ganga	Untapped	Bio-remediation		No	
10	Patna	Collectorate/Anta Ghat/Bakerganj Drain	24.70	Ganga	Untapped	Bio-remediation		STP with sewerage network approved by NMCG	No
11	Patna	Mittan Ghat Drain	48.00	Ganga	Untapped	Bio-remediation			No
12	Munger	ITC Drain	NA	NA	Dry	NA	STP Proposed, This drain dry always. 30 MLD STP with sewerage network approved by NMCG.	No	
13	Munger	Lal Darwaja drain	21.50	Ganga	Untapped	No	Munger Sewerage Project	Yes	
14	Bhagalpur	Sarkikal Drain	13.10	Ganga	Untapped	No		Yes	
15	Bhagalpur	Saklichand Drain	12.69	Ganga	Untapped	No		Yes	
16	Bhagalpur	Barari Ghat Drain	6.61	Ganga	Untapped	No		Yes	
17	Bhagalpur	DN Singh Drain	7.41	Ganga	Untapped	No		Yes	
18	Bhagalpur	Koyal Ghat Drain	7.63	Ganga	Untapped	Bio-remediation		No	
19	Kahalgaon	Kowa Drain	155.52	Ganga	Untapped	No	6 MLD interception & diversion to STP approved by NMCG	Yes	



20	Patna	Krishna Ghat Nala	Pump house	Ganga	Untapped	Bio-remediation	Beur sewerage Project 43 MLD, Karmali chak Sewerage Project 37 MLD, Saidpur Sewerage Project 60 MLD, Pahari Sewerage Project 60 MLD, Digha sewerage project 100MLD and Kankarbagh sewerage project 50 MLD capacity is proposed in Patna with house to house connection. Once these all 6 sewerage schemes will be fully functional no discharge in any nalla listed in Patna municipal area will be observed. Work is under progress in all schemes while 2 STPs are completed i.e. Beur and karmalichak but network connection is under progress.	No	
21	Patna	Barharwa Ghat Nala	0.04	Tributerics	Untapped	Bio-remediation		No	
22	Patna	Rani Ghat Nala	0.007	Tributerics	Untapped	Bio-remediation		No	
23	Patna	Ghagha Ghat Nala	0.03	Tributerics	Untapped	Bio-remediation		No	
24	Patna	Masjid Ghat Nala	0.05	Tributerics	Untapped	Bio-remediation		No	
25	Patna	Loharwa Ghat Nala	0.04	Tributerics	Untapped	Bio-remediation		No	
26	Patna	Gosai Ghat Nala	0.06	Tributerics	Untapped	Bio-remediation		No	
27	Patna	Bhadra Ghat Nala	0.05	Tributerics	Untapped	No		Yes	
28	Patna	Nauzar Ghat Nala	0.02	Tributerics	Untapped	Bio-remediation		No	
29	Patna	Bad shahi Nala	148	Tributerics	Untapped	No		Yes	
30	Patna	Gay Ghat Nala	0.06	Tributerics	Untapped	Bio-remediation		No	
31	Patna	Mahavir Ghat Nala	0.04	Tributerics	Untapped	No		Yes	
32	Patna	Balu Ghat Nala	0.04	Tributerics	Untapped	Bio-remediation		No	
33	Patna	Mandiri Nala	148	Ganga	Untapped	Bio-remediation		No	
34	Patna	Kali Ghat Nala	NA	Tributerics	Untapped	Bio-remediation		No	
35	Phulwari	Khagaol Aasiyana Over bridge crossing Nalla	21.7	Tributerics	Untapped	No		I&D and STP capacity 13 MLD	Yes
36	Phulwari	Issopur Rai chowk nalla	3.86	Tributerics	Untapped	Bio-remediation			No
37	Phulwari	Mitramandal Colony Nalla	6.36	Tributerics	Untapped	No			Yes
38	Phulwari	Birla Colony Nala A	0.8	Tributerics	Untapped	Bio-remediation			No
39	Phulwari	Birla Colony Nala B	1.33	Tributerics	Untapped	Bio-remediation			No
40	Maner Nagar	Maner bazar Nala	3.55	Tributerics	Untapped	Bio-remediation			I&D and STP capacity 6.5 MLD
41		Ram Nagina Singh College Nala	7.59	Tributerics	Untapped	Bio-remediation		No	
42		Ram Ghat Nala	2.36	Tributerics	Untapped	Bio-remediation		No	
43	Danapur Nagar	Danapur Cant Nala	8.16	Tributerics	Untapped	No		I&D and STP capacity 25 MLD	Yes
44	Bakhtiyarpur	Raghopur Dagar Nala	4.3	Ganga	Untapped	No		I&D and STP capacity 10 MLD	Yes
45	Barh	Pipal Ghat Nala	0.48	Tributerics	Untapped	No		I&D and STP capacity 11 MLD proposed	Yes
46	Barh	Shalimpur Nala	0.55	Tributerics	Untapped	No			Yes
47	Barh	Malina Ghat Nala Ward no. 11 Salempur Barh	0.84	Tributerics	Untapped	No			Yes
48	Barh	Dhobiya Ghat, Laxmi flour mill	0.25	Tributerics	Untapped	Bio-remediation			No
49	Barh	Gauri shankar Ghat	1.09	Ganga	Untapped	Bio-remediation			No
50	Barh	Talimpur Nala	1.69	Tributerics	Untapped	Bio-remediation			No
51	Barh	Dayachak Nala	4.24	Tributerics	Untapped	No			Yes
52	Mokama	Tapaswi Ghat Nala	6.02	Ganga	Untapped	No			I&D and STP capacity 8 MLD proposed
53	Mokama	Chaudhry Ghat, Pipaltal	0.17	Tributerics	Untapped	Bio-remediation	No		
54	Mokama	Kamleshwari Asthan Nala	0.96	Tributerics	Untapped	No	Yes		
55	Mokama	Sidhnath Mandir	0.02	Tributerics	Untapped	No	Yes		

56	Sultanganj	Masjid Ghat Nala	1.7	Ganga	Untapped	No	I&D and STP capacity 10 MLD proposed	Yes
57	Sultanganj	Vishari Asthan Ghat Nala (1st)	NA	Tributerics	Untapped	Bio-remediation		No
58	Sultanganj	Vishari Asthan Ghat Nala (2nd)	NA	Tributerics	Untapped	Bio-remediation		No
59	Sultanganj	Jahaj Ghat Nala	NA	Tributerics	Untapped	Bio-remediation		No
60	Sultanganj	Krishngarh Bhattagali Nala	NA	Tributerics	Untapped	Bio-remediation		No
61	Sultanganj	New Sidhi Ghat Nala nearby masjid	NA	Tributerics	Untapped	Bio-remediation		No
62	Sultanganj	New Sidhi Ghat Nala	NA	Tributerics	Untapped	Bio-remediation	No	
63	Buxar	Sati gaht	6.29	Ganga	Untapped	Bio-remediation	Buxar Sewerage Project with STP capacity 16MLD proposed	No
64	Buxar	Bangla Ghat Nala	1.8	Ganga	Untapped	Bio-remediation		No
65	Buxar	Sohani patti Nala	1.31	Ganga	Untapped	No		Yes
66	Bhagalpur	Adampur Nala	18.91	Ganga	Untapped	No	I&D and STP capacity 45 MLD proposed	Yes
67	Bhagalpur	Hathiya Nala near intekwell	7.54	Ganga	Untapped	Bio-remediation		No
68	Bhagalpur	Neel Kothi Nala	1.91	Ganga	Untapped	No		Yes
69	Bhagalpur	Pipalli dham Nala -1	0.7	Tributerics	Untapped	No		Yes
70	Bhagalpur	Pipalli dham Nala -2	1.49	Ganga	Untapped	No		Yes
71	Bhagalpur	Kuppa Ghat	4.43	Ganga	Untapped	No		Yes
72	Bhagalpur	Hathiya Nala, near Tilkamanjhi	22.66	Ganga	Untapped	No		Yes
73	Bhagalpur	S.T.P Nala Bhagalpur	1.77	Ganga	Untapped	Bio-remediation		No
74	Bhagalpur	Shahebganj Miyabari Nala	4.51	Ganga	Untapped	No		Yes
75	Bhagalpur	Champa Nala -1	11.57	Ganga	Untapped	Bio-remediation		No
76	Bhagalpur	Champa Nala -2	8.38	Ganga	Untapped	Bio-remediation	No	
77	Naugachia	New basti Nala	1.04	Tributerics	Untapped	Bio-remediation	I&D and STP capacity 9 MLD proposed	No
78	Naugachia	Maa Tara Bhawan Nala	NA	Tributerics	Untapped	Bio-remediation		No
79	Naugachia	Ward no. -08 Nala	NA	Tributerics	Untapped	Bio-remediation		No
80	Naugachia	Station road Nala (1)	NA	Tributerics	Untapped	Bio-remediation		No
81	Naugachia	Station road Nala (2)	NA	Tributerics	Untapped	Bio-remediation		No
82	Naugachia	Durga Asthan Nala	NA	Tributerics	Untapped	Bio-remediation		No
83	Naugachia	Ward no. -03 Nala	NA	Tributerics	Untapped	Bio-remediation		No
84	Naugachia	Milan Chawk Nala	NA	Tributerics	Untapped	Bio-remediation		No
85	Naugachia	Ward no. - 09 Nala	NA	Tributerics	Untapped	Bio-remediation		No
86	Naugachia	Noniya patti, ward no. -20 Nala	NA	Tributerics	Untapped	Bio-remediation		No
87	Naugachia	Mushar patti, ward no- 13 Nala	NA	Tributerics	Untapped	Bio-remediation		No
88	Naugachia	Rajendra Colony, ward no- 05 Nala	NA	Tributerics	Untapped	Bio-remediation		No
89	Naugachia	Nagar Panchyat karyalay akebagal me ward no- 16	NA	Tributerics	Untapped	Bio-remediation		No
90	Naugachia	Hardiya patti, ward no- 21 Nala	NA	Tributerics	Untapped	Bio-remediation		No

91	Naugachia	Hero Honda showroom, ward no- 21 Nala	NA	Tributerries	Untapped	Bio-remediation		No
92	Khagaria	Daannagar By-Pass Nala	6.99	Tributerries	Untapped	No	I&D and STP capacity 4.5 MLD proposed	Yes
93		P.W High school Nala	3.5	Tributerries	Untapped	Bio-remediation		No
94	Sonepur	Barwatta Nala	0.5	Tributerries	Untapped	No	I&D and STP capacity 3.5 MLD proposed	Yes
95	Chhapra	Khanua Nala	4.87	Tributerries	Untapped	No	I&D and STP capacity 32 MLD proposed	Yes
96	Fatuha	Kali Ghat Samaspur	0.72	Tributerries	Untapped	No	I&D and STP capacity 7 MLD proposed	Yes
97	Fatuha	Maksudpur Nala (East)	0.37	Ganga	Untapped	No		Yes
98	Fatuha	Maksudpur Nala (West)	1.1	Tributerries	Untapped	No		Yes
99	Fatuha	Kataiya Ghat	0.64	Tributerries	Untapped	No		Yes
100	Fatuha	Devanti Ghat	2.3	Ganga	Untapped	No		Yes
101	Fatuha	Mastana Ghat	1.14	Tributerries	Untapped	No		Yes
102	Fatuha	Bankipur Ghorkak Nala	2.95	Tributerries	Untapped	No		Yes
103	Barahiya	Krishn Chawk Nala	NA	Tributerries	Untapped	Bio-remediation		Yes
104	Barahiya	Baba Dani Mohalla Nala	NA	Tributerries	Untapped	Bio-remediation		No
105	Barahiya	Bangal kunjtaal Nala	NA	Tributerries	Untapped	Bio-remediation		No
106	Barahiya	Bah Path Nala	NA	Tributerries	Untapped	Bio-remediation	I&D work and 6 MLD STP has sanctioned by NMCG, AA&ES yet to issued	No
107	Jamalpur	Ramnagar Nalla	NA	Tributerries	Untapped	Bio-remediation	No	
108	Jamalpur	Laxmipur Nalla	NA	Tributerries	Untapped	Bio-remediation	I&D work and STP is proposed	No
109	Jamalpur	Aashikpur Nalla	NA	Tributerries	Untapped	Bio-remediation	No	
110	Jamalpur	Faridapur Nalla	NA	Tributerries	Untapped	Bio-remediation	No	
111	Kahalgaon	Kagali Nala	2.23	Ganga	Untapped	No	No	
112	Kahalgaon	L.C.T Nala	NA	Tributerries	Untapped	No	I&D work and 6 MLD STP has sanctioned by NMCG, AA&ES yet to issued	Yes
113	Kahalgaon	Asamsan Ghat Nala	1.6	Ganga	Untapped	No	Yes	
114	Kahalgaon	Pampu Nala	1.4	Ganga	Untapped	No	Yes	
115	Kahalgaon	Badshahi Nala	NA	Tributerries	Untapped	Bio-remediation	Yes	
116	Kahalgaon	Koyala Nala	NA	Tributerries	Untapped	No	No	
117	Hazipur	Subhash Chowk Nala	NA	Tributerries	Untapped	Bio-remediation	Hazipur Sewerage Project with with STP capacity 22MLD proposed	Yes
118	Begusarai	Pokhariya Nala Mohammadpur Jail kenajdik	NA	Tributerries	Untapped	No	Begusarai Sewerage Project with STP capacity 17 MLD proposed	No
119	Dighwara	Bagahing tola	NA	Tributerries	Untapped	Bio-remediation	I&D work and STP is proposed	No
120	Dighwara	Marchav Baba Mandir	NA	Tributerries	Untapped	Bio-remediation		No
121	Dighwara	UMV Nala	NA	Tributerries	Untapped	Bio-remediation		No
122	Dighwara	Post office road	NA	Tributerries	Untapped	Bio-remediation		No
123	Dighwara	Market Area	NA	Tributerries	Untapped	Bio-remediation		No
124	Dighwara	R. Primary school	NA	Tributerries	Untapped	Bio-remediation		No
125	Dighwara	Barbana	NA	Tributerries	Untapped	Bio-remediation		No
126	Dighwara	M.S Basadpur	NA	Tributerries	Untapped	Bio-remediation		No

127	Teghra	Teghra Chowk	NA	Tributeries	Untapped	Bio-remediation	I&D work and STP is proposed	No
128	Teghra	Mukhtar Maidan drain	NA	Tributeries	Untapped	Bio-remediation		No
129	Manihari	Pirpatra Nala	NA	Tributeries	Untapped	Bio-remediation	I&D work and STP is proposed	No
130	Manihari	Primari Health School Nalla	NA	Tributeries	Untapped	Bio-remediation		No

### Status of STPs in Bihar (as on 31.12.2020)

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	Patna	Pahari	60	Under Construction	24 July'2021	Bihar Urban Infrastructure Development Corporation Ltd.(BUIDCo)	Yes
2	Patna	Beur	43	Under Trial from Aug 2020	05 April'2021		No
3	Patna	Karmali chak	37	Under Trial from Aug 2020	20 May'2021		No
4	Patna	Saidpur	60	Under Construction	30 April'2021		Yes
5	Patna	Digha	100	Under Construction	29 July'2022		Yes
6	Patna	Kankarbagh	50	Under Construction	29 July'2022		Yes
7	Patna	Phulwari sarif-1	7	Under Construction	-		Yes
8	Patna	Phulwari sarif-2	6	Under Construction	June'2022		No
9	Danapur	Danapur	25	Under Tendering	June'2022		No
10	Mokama	Mokama	8	Under Construction	June'2021		Yes
11	Barh	Barh	11	Under Construction	June'2021		Yes
12	Fatuha	Fatuha	7	Under Tendering	June'2022		No
13	Bakhtiyarpur	Bakhtiyarpur	10	Under Construction	December'2021		Yes
14	Maner	Maner	6.5	Under Construction	December'2021		Yes
15	Sonepur	Sonepur	3.5	Under Construction	June'2021		Yes
16	Chhapra	Chhapra	32	Under Construction	3 August'2021		Yes
17	Bhagalpur	Bhagalpur	45	Under Tendering	June'2022		No
18	Sultanganj	Sultanganj	10	Under Construction	31 March'2021		Yes
19	Khagaria	Khagaria	4.5	Under Tendering	December'2021		No
20	Hajipur	Hajipur	22	Under Tendering	June'2022		No
21	Munger	Munger	30	Under Tendering	September'2022		No
22	Begusarai	Begusarai	17	Under Construction	03 February'2022		Yes
23	Buxar	Serinpur	16	Under Tendering	December'2022		No
24	Naugachia	Naugachia	9	Under Construction	30 June'2021		Yes
25	Baraihiya	Baraihiya	6	Under Tendering	December'2022		No
26	Kahalgaoon	Kahalgaoon	6	Under Tendering	December'2022		No

27	Dighwara	Dighwara	NA	Under Tendering	December'2022	Not Available	No	
28	Teghra	Teghra	NA	Under Tendering	December'2022		No	
29	Manihari	Manihari	NA	Under Tendering	December'2022		No	
30	Jamalpur	Jamalpur	NA	Under Tendering	December'2022		No	
31	Khagaul	Khagaul	NA	Under Tendering	December'2022		No	
32	Harinagar (Ramnagar)	Harinagar (Ramnagar)	NA	Proposed	December'2021		No	
33	Narkatiyaganj	Narkatiyaganj	NA	Proposed	December'2021		No	
34	Jogbani	Jogbani	NA	Proposed	December'2021		No	
35	Raxual	Raxual	NA	Proposed	December'2021		No	
36	Dehri	Dehri	NA	Proposed	December'2021		No	
37	Arwal	Arwal	NA	Proposed	December'2021		No	
38	Daudnagar	Daudnagar	NA	Proposed	December'2021		No	
39	Muzaffarpur	Muzaffarpur	NA	Proposed	December'2021		No	
40	Samastipur	Samastipur	NA	Proposed	December'2021		No	
41	Motihari	Motihari	NA	Proposed	December'2021		No	
42	Supaul	Supaul	NA	Proposed	December'2021		No	
43	Saharsa	Saharsa	NA	Proposed	December'2021		No	
44	Madhepura	Madhepura	NA	Proposed	December'2021		No	
45	Darbhangha	Darbhangha	NA	Proposed	December'2021		No	
46	Gopalganj	Gopalganj	NA	Proposed	December'2021		No	
47	Bagha	Bagha	NA	Proposed	December'2021		No	
48	Kisanganj	Kisanganj	NA	Proposed	December'2021		No	
49	Lakhisarai	Lakhisarai	NA	Proposed	December'2021		No	
50	Jamui	Jamui	NA	Proposed	December'2021		No	
51	Patna	Beur Old	20	Non Operational	To be decommissioned		Bihar Rajya Jal Parshad	No
52	Patna	Saidpur Old	45	Non Operational	To be decommissioned			No

Item Nos.01 to 05

Court No. 1

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

Original Application No. 200/2014  
(M.A. No. 254/2018 & M.A. No. 872/2018)  
(C.W.P. No. 3727/1985)

WITH

Original Application No. 668/2017  
(Earlier M.A.No.923/2017 IN O. A. No. 200/2014)

WITH

M.A. No. 141/2016 & M.A. No. 337/2018  
IN

Original Application No. 10/2015

WITH

Original Application No. 390/2018  
(Earlier O.A. No. 44/2017 (EZ))

WITH

Original Application No. 34/2018

M.C. Mehta

Applicant(s)

Versus

Union of India &Ors.

Respondent(s)

With

M.C. Mehta

Applicant(s)

Versus

Union of India &Ors.

Respondent(s)

With

Indian Council for Enviro-legal Action

Applicant(s)

Versus

National Ganga River Basin Authority &Ors.

Respondent(s)

With

Tribunal on its Own Motion (SuoMotu)

Applicant(s)

Versus

State of Bihar &Ors. Respondent(s)  
With  
Vikrant Tongad Applicant(s)  
Versus  
Union of India &Ors. Respondent(s)

Date of hearing: 14.05.2019

**CORAM:** HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Amicus Curiae: Ms. Katyayni, Advocate and  
Mr. Aishani Singh, Advocate for Applicant

For Respondent(s): Mr. Varun Thakur and Mr. Brajesh Pandey,  
Advocates and Dr. Praveen Kumar, Director  
(Technical) for NMCG  
Mr. Rahul Verma, AAG for State of Uttarakhand  
Mr. Mukesh Verma, Advocate for UEPPCB  
Mr. Pradeep Misra, Advocate for UPPCB  
Mr. Santosh Kumar, Advocate for UPSIDC  
Mr. Manish Paliwal, Mr. Vikas Kumar and Mr.  
Aman Modi, Advocate in MA 872  
Mr. Rashi Saeed, Advocate for CETP Banthar and  
Unnao  
Mr. Ruchir Batra, Advocate for Sitarganj CETP  
Mr. I.K. Kapila, Advocate

**ORDER**

1. The issue for consideration relates to execution of directions of this Tribunal dated 10.12.2015 and 13.07.2017 with regard to prevention and remedying of pollution of river Ganga and action against the polluters. The said order dated 10.12.2015 divided the project of cleaning of river Ganga as follows:

Phase-I – Segment-A: Gomukh to Haridwar,  
Segment-B:

Haridwar to Kanpur.

Phase-II: Kanpur Border to Uttar Pradesh Border.

Phase-III: UP Border to/till Jharkhand Border.

Phase-IV: Jharkhand Border to Bay of Bengal (West Bengal).

2. Order dated 10.12.2015 dealt with Phase-I-Segment-A. Remaining area has been dealt with by order dated 13.07.2017.
3. Main problem considered in the above orders is continuous illegal discharge of untreated sewage and industrial effluents in Ganga and its tributaries and the connecting drains, apart from the dumping of solid waste, bio-medical waste, hazardous waste, plastic waste, muck and other wastes. In addition to such discharge and dumping, there are issues of illegal encroachment, illegal sand mining, absence of steps for conservation of ground water, reuse of treated water and restoration of water bodies besides maintenance of e-flows. On testing of water samples, huge amount of pollution was found at several hotspots. The Water (Prevention and Control of Pollution) Act, 1974 requires stringent measures, including immediate closure of any polluting activity, prosecution and recovering compensation from the polluters for restoration of the damaged environment but the said provisions are not being fully enforced. Either the sewage or effluents are not being treated or the treatment equipment are not adequate. Though Uttarakhand Flood Plain Zoning Act, 2012 had been enacted, the same was not fully implemented. The Tribunal in its order dated 10.12.2015 noted that though the proceedings were pending since 1985 and various initiatives were taken at the government level, the pollution of river

Ganga continues. Ganga Action Plan Programme was not a success on account of lack of proper implementation. It was noted that there were 143 drains and nalas in Segment-A of Phase-I. 77 drains were to be trapped. Hotels, Ashrams, etc. in the flood plains were serious source of pollution on account of waste being put into the river directly or through the sewage pipelines which were not treating the sewage. Directions in the order dated 10.12.2015 include collection and disposal of sewage, closing down of polluting industries, closing of hotels, dharamshalas and ashrams being run without STPs and without consent of the Pollution Control Boards, if they were releasing domestic waste or sewage into the river, prohibiting dumping of plastic and municipal waste, zoning of flood plains, treating 100 meters from middle of the river to be eco-sensitive and prohibited zone for any permanent or temporary activity, area from 100 meters to 300 meters to be treated as regulatory zone in hilly terrain, for plain terrain the area will be 200 meters and 500 meters instead of 100 meters and 300 meters, prohibited unregulated river bed mining, mechanized mining, prohibited dumping of bio-medial waste. General directions required collection of environmental compensation from defaulting industries, hotels, and even households depending upon the size and capacity of the establishments and use that fund for environmental restoration.

4. With regard to Segment-B of Phase-I, it was noted that 86 drains were joining the river Ganga directly or its tributaries which were being polluted by discharge of sewage or industrial waste. The matter of river flow was considered in view of need for maintaining

aquatic bio-diversity, recharge of ground water, purification of rivers and other allied issues. The Tribunal also discussed the issue of flood plains, Continuous Emission Monitoring System (CEMS), Online Monitoring System (OMS) and deficiencies of the regulatory bodies. Final directions vide order dated 13.07.2017 broadly relate to preventing discharge of untreated effluent in 86 drains. Specific directions were issued with regard to Jajmau, Banthar and Unnao where Common Effluent Treatment Plants (CETPs) were required to be properly operated to prevent any pollution. Flood plains were required to be identified and demarcated with restrictions against any development or construction within 100 meters from the edge of river and identification of no development/construction zone, regulatory zone, etc, prohibition against dumping of waste and recovery of compensation. Directions were also issued that minimum E-flows of river Ganga should not fall below 20% in the average monthly lean season, prohibiting extraction of ground water for industrial or commercial purposes without permission of the Central Ground Water Authority (CGWA) with total prohibition and regulation in critical, semi-critical or over-exploited areas. Though the orders specify the Committees to monitor the said orders with the prescribed timelines, such compliance has not taken place even after three years of passing of first order and about two years after passing of the first order.

5. The matter has also been monitored by this Tribunal from time to time in the last more than three years with regard to Phase-I -

Segment -A and for almost two years with regard to Phase-I - Segment B and other Phases.

6. Vide order dated 19.07.2018, status report furnished by the State of Uttarakhand was considered with regard to Phase-I, Segment-B. The National Mission for Clean Ganga (NMCG) is the nodal agency to implement the rejuvenation of river Ganga which includes compliance of directions of this Tribunal along with other concerned authorities. The Tribunal directed that District Magistrates heading the District Ganga Committees may furnish reports to the Executive Committee every fortnight and the Executive Committee may furnish its report to the Supervisory Committee once in every month. The Supervisory Committee may meet once in two months. The Principal Committee may meet once in three months. Any member of public may give their views to the said Committees and response to such views may be placed on the websites (of NMCG).
7. With regard to Phase-I Segment-B, vide order dated 27.07.2018, the Tribunal noted that the progress was inadequate inasmuch as tanneries were not meeting the standards of effluent discharge. 14 out of 86 drains have not been cleaned, issue of e-flows has not been addressed, ground water extraction was a matter of concern, water quality was getting deteriorated. The Tribunal directed the CPCB/SPCBs to regularly display the result of analysis of water samples drawn at various locations atleast at one place within 100 km and also display information of places where water is fit for consumption or fit for bathing. The Tribunal also noted that water from Haridwar to Kolkata was reported to be neither fit for

consumption nor for bathing and it was found that the situation at Jajmau, Unnao and Banthar had not been improved, all the drains have not yet been trapped. The Tribunal held that the progress was not upto expectation and considered it appropriate to constitute a Monitoring Committee headed by a former Judge of Allahabad High Court to take stock of the actions taken so far with clear measurable indicators of progress and success. The action plan may include creation of bio-diversity parks. The Committee may involve educational institutions for awareness. NMCG was directed to take action plan from the concerned States with regard to Phases-II, III and IV from the States of Bihar, Jharkhand, West Bengal and remaining part of Uttar Pradesh. Such Action Plan should cover interception and diversion of drains carrying sewage to STP, laying of sewage network, utilization of treated sewage, securing compliance from industries in the catchment of the drains, ground water regulation, flood plain regulation, rain water harvesting system, good irrigation practices. SPCBs were to furnish list of industries having potential for causing pollution of river Ganga in Phases II to IV.

8. On 29.11.2018, the Tribunal considered progress with regard to Phase-I, Segment-A and Segment-B on STPs, CETPs, tapping of drains, compliance of MSW Rules, setting up of bio-digesters and sewerage network, improvement in water quality, unregulated ground water extraction, e-flow, public involvement and awareness. The Tribunal observed that decentralized processing facility should be provided close to the source of generation of waste. Issues of

scientific disposal of waste, protection of flood plains, checking illegal mining etc may be monitored for which a Monitoring Committee for the area falling in Segment-A of Phase-I was to be headed by Justice U.C. Dhyani, former Judge of Uttarakhand High Court.

9. On 11.03.2019, reports received from the Committees with regard to Segments A and B of Phase-I were considered. It was specifically noted as follows:

*"8. We also note that directions of the Tribunal dated 13.7.2017 relating to interception of drains, construction of sewage treatment plants, setting up of common effluent treatment plant at Jajmau, Unnao and Banthar remain un-complied till date. CETPs at Jajmau, Unnao and Banthar are not meeting the stipulated standards which is deemed to be violation by all the tanneries. Since NMCG and UP State have failed to ensure setting up of CETP at Jajmau and upgradation at Unnao and Banthar, we direct NMCG, CPCB and UPPCB to examine whether tanneries who are members of such CETP are to be closed till compliant CETPs are set up. The directions of this Tribunal are clear. Unless and until the sewage and industrial effluents are diverted for their treatment and e-flow is maintained, water quality improvement in Segment 'B', Phase-I cannot be achieved. Therefore, failure in execution of plan for the segment in time may call for coercive action."*

10. It was noted that Action Plans with regard Phases-II, III and IV had not been filed and the affidavit filed by the NMCG presented a dismal picture. There was no justification for delay in filing the action plans. Last opportunity was given to take further steps and file action plans indicating interception and diversion of drains to the STPs, utilization plan for treated sewage, demarcating flood plain zones, preventing encroachments, specifying e-flow applicable to UP,

Bihar, Jharkhand and West Bengal. The Tribunal referred to a study on sanitation status of 97 Ganga Towns. The Tribunal directed NMCG to take steps to rectify the deficiencies.

11. Today's hearing is focused on the issue of consideration of further progress in Segments A and B of Phase-I as well as other Phases.

**SEGMENT-A, PHASE-I**

12. Report dated 09.05.2019 received from Justice U.C. Dhyani shows steps taken for tapping of drains. It is stated that some STPs are still under construction and STPs at some important locations are non-compliant.

13. In view of the said report, Uttarakhand Pollution Control Board needs to prohibit discharge of any sewage or industrial effluents either directly into river Ganga or its tributaries in view of statutory prohibition under the Water (Prevention and Control of Pollution) Act, 1974, apart from orders of this Tribunal. Any failure must result in deterrent compensation being recovered from the persons/authorities responsible for discharge of untreated sewage/effluents into the river. Such compensation must be deterrent and adequate to recover the cost of restoration. This is necessary to ensure that polluting of river Ganga is no longer a profitable activity. Repeated directions of the Hon'ble Supreme Court and this Tribunal in the last 34 years should not remain on paper. The Committee constituted by the Tribunal may identify persons responsible for failure including the officers and authorities of the State Government.

14. Wherever STPs are non-compliant, stringent action must be taken and every polluting activity must be stopped till adequate remedial steps are taken.
15. NMCG may ensure compliance with regard to prevention and removal of encroachments, maintenance of e-flows, afforestation and setting up of bio-diversity parks, ground water regulation, sand mining regulation. State of Uttarakhand may ensure that no illegal camping takes place on the banks of river Ganga and its tributaries. We may make specific mention of alleged illegal camping at Piyani village in District Pauri Garhwal towards Neelkanth road. Policy of e-flows may be clearly spelt out by the State of Uttarakhand. The State may have its own effective mechanism to monitor e-flows.

**SEGMENT-B, PHASE-I**

16. Report dated 30.04.2019 shows that all the 86 identified drains have still not been trapped. There is overflow/leakage at Kanpur. Chromium and other metals are still being discharged by the leather industries at river Ganga at Jajmau, Banthar and Unnao. CETPs are not meeting the stipulated standards. Activities of members of CETPs must be straight-away closed till CETPs are compliant and only treated effluents should be allowed to discharge into river Ganga or its tributaries after reuse of treated effluents.
17. Report received vide e-mail dated 01.05.2019 shows that while the CPCB suggested closure of non-compliant units, the UPPCB and the NMCG opposed the same. We are surprised at the attitude of the UPPCB and the NMCG which is in violation of orders of this Tribunal and the mandate of law. Concerned officers of the UPPCB

and the NMCG are liable to be proceeded against by way of coercive measures. Accordingly, we overrule the views of the UPPCB and the NMCG and upheld the view of CPCB and direct immediate closure of all the polluting discharges by such industries into the river Ganga or its tributaries. Compliance of this direction may be ensured by the UPPCB. The Member Secretary of the UPPCB may remain present in person before this Tribunal on the next date along with compliance report and explanation for violating the directions of this Tribunal and not carrying out the responsibilities statutorily required under the Water (Prevention and Control of Pollution) Act, 1974.

18. As already directed, all the 86 drains falling in Segment-B of Phase-I may be tapped so that no untreated effluent goes into the river Ganga. Action may be taken against any individual or establishment discharging pollutants in the drains/river by way of closure of such activity, prosecution and recovery of deterrent compensation which is adequate to meet the cost of restoration.
19. We also direct the State of UP to provide requisite funds to the CPCB for remediation of Chromium dumps at Kanpur Dehat, Khanpur and RakhiMandi. Proper e-flows may be ensured from the Narora Barrage by the NMCG and the State of UP and a compliance status may be furnished.

**PHASES-II TO IV**

20. Affidavit filed by the NMCG on 30.04.2019 annexing action plans for the States of UP, Bihar, Jharkhand and West Bengal does not show concrete plans with prompt timelines and action for prohibiting

pollution and taking punitive and remedial action against the polluters. It was directed that NMCG in co-ordination with State Governments of Bihar, Jharkhand, West Bengal and part of Uttar Pradesh to file Action Plan for river Ganga and its tributaries with firm timelines after carrying out detailed field assessments of pollution loads. It was also directed that action plan to cover interception and diversion of drains carrying sewage to STP, utilization of treated sewage, securing compliances from industries located within catchment area of river system, ground water regulation, flood plain regulation, rain water harvesting, good irrigation practices to conserve water, etc. The NMCG has not filed the precise information about the status of projects planned and executed between Kanpur to Ganga Sagar. Thus, the affidavit of the NMCG is of no assistance. Learned Counsel appearing for the NMCG is not ready and is merely dependent on Dr. Praveen Kumar, Director (Technical), NMCG who is also not competent to assist this Tribunal. During the interaction, we find his approach to be to help the polluters instead of remedying the pollution which is the mandate of law and the orders of this Tribunal. The NMCG may take remedial action so that assistance of a suitable person is provided to this Tribunal with precise information failing which this Tribunal may consider coercive measures against the NMCG. The concerned States may also take the matter seriously and ensure assistance to this Tribunal with precise information either through senior officers or through Counsel. No Counsel is present on behalf of the States of Bihar,

Jharkhand and West Bengal. It is the responsibility of all the five States to ensure that water quality at every point meets the standards and if there is a violation, the violators are proceeded against in accordance with law by way of prosecution, closure of polluting activities and payment of compensation for the damage to the environment.

21. We direct the States of Uttarakhand, Bihar, Uttar Pradesh, Jharkhand and West Bengal to place the status of water quality in the respective States on their websites and update the same on monthly basis indicating fitness of water at various places for drinking/bathing purposes. The CPCB may indicate water quality of river Ganga at boundaries of the said States on its website. As already directed, flood plains may be duly demarcated; encroachments prohibited and removed, bio-diversity parks set up and afforestation undertaken. The CPCB along with MoEF&CC to develop guidelines for setting up of bio-diversity parks. The CPCB can take the services of an external expert who has successfully guided DDA to set up bio-diversity park in Yamuna flood plain near Delhi. It would be appropriate if MoEF&CC and respective States examine handing over of such flood plain to the respective Forest Department of States for such activities. Such guidelines may be followed with respect to all the rivers in the country which may be monitored by Director General of Forest in MoEF&CC. Time bound Action Plans be furnished by the NMCG and the States. The same may also be placed on the respective websites for information of the

citizens who have attachment with the river Ganga for social or religious or development reasons.

22. Before parting with this order, we may note that river Ganga has been declared to be National River and has distinct significance for the country. Even a drop of pollution in the river Ganga is a matter of concern. Attitude of all the authorities has to be stringent and depict zero tolerance to pollution of river Ganga. 'Precautionary' principle needs to be in full play for preventing and prohibiting any polluting activity. No amount of wealth generation or commercial or industrial activities can get priority over cleanliness of river Ganga. Any individual or establishment violating the environmental norms with respect to river Ganga must be strictly dealt with under the law and special cells must be created in the concerned States to monitor such action on daily basis. Such action can be a model to deal with the pollution of all other rivers in the country. It is a matter of regret that as per report of the CPCB, 351 river stretches are polluted in the country which is a matter being dealt with by this Tribunal in O.A. No. 673/2018, News item published in 'The Hindu' authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB". The Tribunal has directed the Chief Secretaries of all the States/UTs to monitor this aspect along with other important issues and appear before this Tribunal in person with the progress reports. Till date, the Chief Secretaries/Administrators of 32 States/UTs out of 36 States/UTs have appeared in person. This Tribunal has directed highest level monitoring to deal with the situation at the State level as

well as National level. Vide order dated 08.04.2019, this Tribunal has directed setting up of Central Monitoring Committee comprising senior representatives of the Central Government with all the Chief Secretaries of States/UTs. River Ganga needs attention at highest level. We hope that this seriousness will be realized by the concerned States, NMCG and Ministry of Water Resources and steps will be taken in right earnestness in compliance of order of this Tribunal dated 10.12.2015 with regard to Segment-A of Phase-I (in State of Uttarakhand), and 13.07.2017 with regard to Segment-B of Phase-I (in the State of UP), Phase-II (in the State of UP), Phase-III (in the States of Bihar and Jharkhand) and Phase-IV (in the State of West Bengal) as enough time has already passed after the orders of this Tribunal. Every time the progress has been found to be unsatisfactory. The Tribunal will now have no option but to take more stringent measures unless satisfactory remedial action is taken.

Copies of this order be sent to the concerned States and the NMCG by e-mail for compliance.

List for further consideration on 29.05.2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

May 14, 2019  
Original Application No. 200/2014  
(M.A. No. 254/2018 & M.A. No. 872/2018)  
(C.W.P. No. 3727/1985) and other connected matters  
A





**35 SPCBs/PCCs list**

1.	<b>The Member Secretary, Andhra Pradesh Pollution Control Board</b> Paryavarana Bhavan, A-3 Industrial Estate, Sanath Nagar, Hyderabad -500 018
2.	<b>The Member Secretary Andaman &amp; Nicobar Pollution Control Committee</b> Department of Science & Technology Dollygunj Van Sadan, Haddo P.O. Port Blair - 744 102
3.	<b>The Member Secretary, Arunachal Pradesh State Pollution Control Board</b> Department of Environment & Forests, Paryavaran Bhawan, Yupia Road, Papu Nalah, Naharlagun- 791110
4.	<b>The Member Secretary, Pollution Control Board, Assam</b> Bamunimaidan, Guwahati Assam - 781 021
5.	<b>The Member Secretary, Bihar State Pollution Control Board,</b> 2 <sup>nd</sup> floor, Beltron Bhavan, Jawaharlal Nehru Marg, Shahstri Nagar, Patna - 800 023
6.	<b>The Member Secretary, Chandigarh Pollution Control Committee,</b> Additional Town Hall Building, 2 <sup>nd</sup> floor, Sector 17-C, Chandigarh - 160 017
7.	<b>The Member Secretary, Chhattisgarh Environment Conservation Board,</b> Nanak Niwas, Civil Lines, Raipur, Chhattisgarh - 421 001
8.	<b>The Member Secretary, Daman, Diu &amp; Dadra Nagar Haveli Pollution Control Committee,</b> Office of the Deputy Conservator of Forests, Moti Daman, Daman - 396 220
9.	<b>The Member Secretary, Delhi Pollution Control Committee,</b> 4 <sup>th</sup> Floor, ISBT, Building Kashmere Gate, Delhi-6

10.	<b>The Member Secretary, Goa Pollution Control Board, Dempo Tower, EDC Plaza, 1<sup>st</sup> floor, Patto Plaza, Panji, Goa - 403 001</b>
11.	<b>The Member Secretary, Gujarat Pollution Control Board, Sector 10-A, Gandhi Nagar Gujarat- 382 043</b>
12.	<b>The Member Secretary, Haryana Pollution Control Board, C-11, Sector 6, Panchkula, Haryana-134 109</b>
13.	<b>The Member Secretary, Himachal Pradesh Pollution Control Board, Him Parivesh, Phase III, New Shimla - 171 009</b>
14.	<b>The Member Secretary, Jammu &amp; Kashmir Pollution Control Board, Parivesh Bhawan, Forest Complex, Gladni, Narwal, transport Nagar, Jammu-180004 (J&amp;K)</b>
15.	<b>The Member Secretary, Jharkhand State Pollution Control Board, T.A Building, HEC, P.O. Dhurwa, Ranchi - 834 004</b>
16.	<b>The Member Secretary, Karnataka Pollution Control Board, Parisara Bhavan, 4<sup>th</sup>&amp; 5<sup>th</sup> floors, Church Street, Bengaluru - 560 001</b>
17.	<b>The Member Secretary, Kerala Pollution Control Board Plamoodu Junction, Pattam Palace P.O., Thiruvananthapuram - 695 004</b>
18.	<b>The Member Secretary Lakshadweep Pollution Control Committee Lakshadweep Administration, Department of Science, Technology &amp; Environment Kavaratti Island-682 555</b>

19.	<b>The Member Secretary, Madhya Pradesh Pollution Control Board, ParyavaranParisar, E-5 Arera Colony, Bhopal - 462 016</b>
20.	<b>The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3<sup>rd</sup>&amp; 4<sup>th</sup> floors, Sion Matunga Scheme Road No. 6, Opp. Cine Planet, Sion Circle, Sion (E), Mumbai, Maharashtra - 400 022</b>
21.	<b>The Member Secretary, Manipur Pollution Control Board, Lamphalpat, Imphal - 795 004</b>
22.	<b>The Member Secretary Meghalaya State Pollution Control Board Arden, Lumpynggad, Shillong - 793 014</b>
23.	<b>The Member Secretary, Mizoram Pollution Control Board, New Secretariat Complex, Khatla, Aizwal -796001</b>
24.	<b>The Member Secretary Nagaland Pollution Control Board Signal Point, Dimapur, Nagaland - 797112</b>
25.	<b>The Member Secretary, State Pollution Control Board, Odisha A-118, Nilakanta Nagar, Unit -VIII, Bhubaneshwar - 751 012</b>
26.	<b>The Member Secretary, Puducherry Pollution Control Committee, Department of Science, Technology &amp; Environment, Housing Board Complex, 3<sup>rd</sup> floor, Anna Nagar, Puducherry - 600 005</b>
27.	<b>The Member Secretary, Punjab Pollution Control Board, VatavaranBhavan, Nabha Road, Patiala - 147 001</b>

28.	<b>The Member Secretary, Rajasthan Pollution Control Board, A-4 JalaneDungri Institutional Area, Jaipur - 302 004</b>
29.	<b>The Member Secretary, Sikkim Pollution Control Board, State land Use &amp; Environment Cell, Govt. of Sikkim, Deorali, Gangtok, Sikkim-737 102</b>
30.	<b>The Member Secretary, Tamil Nadu Pollution Control Board, No. 76, Mount Salai, Guindy, Chennai- 600 032</b>
31.	<b>The Member Secretary, Telangana State Pollution Control Board, A-3, Paryavaran Bhavan, Sanath Nagar Rd, Sanath Nagar Industrial Estate, Sanath Nagar, Hyderabad, Telangana 500 018</b>
32.	<b>The Member Secretary, Tripura Pollution Control Board, VigyanBhavan, Pt. Nehru Complex, Gorkhabasti P.O. , Kunjaban, Agartala (W)-799 006.</b>
33.	<b>The Member Secretary, Uttar Pradesh Pollution Control Board, Building No. TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow, Uttar Pradesh - 226 010.</b>
34.	<b>The Member Secretary, Uttarakhand Pollution Control Board, Gaura Devi Bhawan, 46 B IT Park Sahastradhara, Dehradun, Uttarakhand-248 001.</b>
35.	<b>The Member Secretary, West Bengal State Pollution Control Board, Paribesh Bhavan, 10-A, Block LA, Sector 3, Salt Lake City, Kolkatta-700 091.</b>



F.No.:B-190153/WQM-II/CPCB/2018-2019/E-Flow

Date: 25.02.2020

**OFFICE MEMORANDUM**

**Subject:** Minutes of the workshop on "*Impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along river Ganga*" held on 06.02.2020 at CPCB, Delhi

Please find enclosed herewith minutes of the workshop entitled "*Impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along river Ganga*" held on 06.02.2020 at Central Pollution Control Board, Delhi.

Encl: As above

*A.K. Vidyarthi*  
25/02/20

(Dr A.K.Vidyarthi)

Additional Director &amp; I/c WQM-II

Copy to:

1. Director, Zoological Survey of India, Prani Vigyan Bhawan, M-Block, New Alipore, Kolkata-700053
2. Director, Botanical Survey of India, CGO Complex, 3rd MSO Building, Block F (5th and 6th Floor), DF Block, Sector I, Salt Lake City, Kolkata- 700 064
3. Director, Wildlife Institute of India Post Box # 18, Chandrabani, Dehadun 248 001 Uttarakhand
4. Sh N N Rai, Director Hydrology (South) Directorate, Central Water Commission, 3rd Floor (South), Sewa Bhawan, R.K. Puram, Sector-1, New Delhi-110066
5. Prof C.R. Babu, Centre for Environmental Management of Degraded Ecosystems (CEMDE), Department of Environmental Studies, University of Delhi, Delhi – 110 007
6. Dr J V Tyagi, Head, Environmental Hydrology Division, National Institute of Hydrology, Roorkee – 247667 (Uttarakhand)
7. Prof Prakash Nautiyal, Department of Zoology and Biotechnology, Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal) Uttarakhand-246174

8. **Dr. Pawan Labhasetwar, Scientist and Head Water Technology and Management Division, CSIR-National Environmental Engineering Research Institute, Nehru Marg, Nagpur-440020**
9. **Prof. Radhey Shyam Sharma, Department of Environmental Studies, University of Delhi, Delhi – 110 007**
10. **Prof Ram Kumar, Centre for Environmental Sciences, Central University of South Bihar, SH-7, Gaya Panchapur Road, Village-karhara Post Fatehpur, Gaya-824236 (Bihar)**
11. **Dr. Suman Kumari, Reservoir & Wetland Fisheries Division, ICAR- Central Inland Fisheries Research Institute, Monirampur (Post), Barrackpore Kolkata, West Bengal-700120**

**Copy for information:**

1. **PS to Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Shahdara, Delhi – 110032**



**Minutes of the workshop on “Impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along river Ganga” held on 06.02.2020 at 10.30 a.m. in CPCB, Delhi**

MoWR, RD&GR vide gazette notification dated 09.10.2018 has notified that “*minimum ecological flows to be maintained at locations downstream of structures or projects meant for diversion of river flows*”. Later, Hon’ble NGT vide order dated 29.11.2018 in OA no. 200/2014, para 21 (page no.9) also directed that “*impact of riverine aquatic life as a result of newly mandated e- flows regime needs to be compiled by CPCB led/ constituted agencies and compiled report of study to be submitted to the tribunal*”. The tribunal in its order dated 12.12.2019 in OA no 200/2014 directed that “*CPCB and SPCBs may periodically undertake biological assessment of Ganga. NMCG and States concerned may depict biological diversity of Ganga in public domain*”.

In compliance to the above orders, a workshop on “***Impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along river Ganga***” was held in CPCB, Delhi on 06.02.2020. The workshop was attended by prominent scientists and experts from various institutions/ university having expertise on the subject matter (List annexed). Dr Prashant Gargava, Member Secretary, CPCB also joined during concluding session of the workshop. Dr A. K. Vidyarthi, Addl Director & Divisional Head, WQM-II, welcomed the experts and briefed about the purpose of the workshop.

The main objective of the workshop was to discuss and finalize methodology to assess the impact of minimum ecological flow in downstream of reservoir on riparian ecosystem (aquatic life) and biological assessment of river Ganga. Following salient factors were discussed at length:

- i. Quality and quantity parameters like wetted depth, velocity of flow etc
- ii. Impact of selection of suitable indicator species
- iii. Methodology/model for e-flow
- iv. Locations or stretches to be selected

A presentation was made by Sh N C Durgapal, Divisional Head, Water & Wastewater Lab and Biological Lab , CPCB, wherein he briefed about the ongoing studies on biomonitoring of river Ganga water quality carried out by CPCB since 2014. He also discussed at length, the methodology of biomonitoring and bioassessment being used in CPCB. Saprobic score and biodiversity scores are being used for assessment the water quality of the river. CPCB is in the process of developing an app on Biomonitoring, which will automatically calculate biodiversity score and saprobic score. However, the project is in the trial phase. Once the web application will be fully functional, it may be circulated for use by the concerned/ related institutes.

Director, Zoological Survey of India (ZSI), added that more than 10000 faunal species have been documented by ZSI in the entire stretch of Ganga, of which more than 267 are fish species. Species such as alligators, invertebrates etc can be used as indicator species for the proposed study.

Dr P K Labhasetwar, Scientist and Head WT&M, National Environmental Engineering Research Institute (NEERI), Nagpur, through his presentation discussed the various types of environmental flow components and their ecological roles. Affected and the unaffected area would be identified from the stretch mentioned in the Gazette notification of MoWR, RD&GR based on factors of flow, and congenial conditions required for the healthy river ecosystem.

Prof C R Babu, Professor Emeritus, Centre for Environmental Management of Degraded Ecosystems (CEMDE), University of Delhi, through his presentation dwelled upon the concept of ecological flows and highlighted the complexities involved in the determination of the health of riparian ecosystem. Prof Babu suggested that a comparative study be undertaken at upstream and downstream stretches of the reservoir w.r.t. following parameters:

- i. Hydraulics that include sediment load and its distribution, flow rates, erosion potential and recharging potential of groundwater.
- ii. Kinds of riparian ecosystems and their habitat characteristics including fish spawning sites and bird nesting sites.
- iii. Assessment of Biodiversity in terms of Biodiversity index, species richness and diversity indices and taxonomy of some major groups that can yield indicator species of ecosystem health.
- iv. Analysis of water and sediment quality with respect to physicochemical properties.

- v. Based on the data generated, a model may be developed for the quantum of water to be considered as the minimum ecological flow for a given river and that ensures sustenance of self-purification system of the river.

Prof Prakash Nautiyal of HNB Garhwal University opined that since the previous study by WWF has defined flows for various human uses, anthropogenic effect/ pressure should not be considered for the present study. He suggested that the bio-geographic regions of River Ganga defined by Wildlife Institute of India (WII) may be used for the demarcation of the study area and effect of dams and barrages on water temperature, velocity, turbidity and transparency ought to be taken into consideration. He suggested that Diatom indices and ecological value, Biological Monitoring Working Score (BMWP) and Lotic-Invertebrate Index for Flow Evaluation (LIFE) may be used for bioassessment of river Ganga.

Prof Ram Kumar, Central University of South Bihar, through his presentation, explained that hydrodynamic forcing of the river has an effect on the behaviour (such as predation, ingestion rates) of aquatic species and also on the shape of community i.e. biodiversity. He suggested that the biodiversity has an impact on the river purification as the microbial communities' act as biofilters.

Based on the opinions and valuable inputs of the experts, the following decisions were made:

1. The objective of the proposed study will be to determine whether the impact of the notified ecological flow is positive, negative or neutral.
2. The impact will be studied between 10-15 km upstream and downstream of the structures or projects meant for diversion of river flows.
3. Participating experts were requested to forward their suggestion for finalization of methodology, Term of reference (TOR) etc for the proposed study.
4. A format should be developed by CPCB and circulated to the experts. The format shall include the following subheads:
  - i. Details of the past study
  - ii. Parameters to be considered for the study
  - iii. Methodology to be adopted for the study
  - iv. Scope of the work
  - v. Duration/ Time Schedule of the study
  - vi. Institutes to be included in proposed consortium

5. The methodology/TOR of the proposed study will be finalized based on the inputs from the experts.
6. Information in the above format shall be filled and submitted to CPCB by February 2020.
7. A consortium of Institutes/ Universities may be formed as the proposed study requires diverse experience and expertise.
8. Fresh proposal shall be invited after finalization of methodology/TOR from expert institutes who would participate individually or as a consortium of institutes.
9. A coordination committee may be formed to coordinate and share information among members of the consortium.
10. Prof Babu consented to help in finalization of the consortium, coordination committee, methodology after receipt of the required information.

The meeting ended with a vote of thanks to the Chair



F.No.:B-190153/WQM-II/CPCB/E-Flow/2019-2020

Date: 26.10.2020

**OFFICE MEMORANDUM**

**Subject:** Minutes of the webinar on “*Impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along river Ganga*” held on 21.10.2020.

Please find the enclosed herewith minutes of the webinar entitled “*Impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along river Ganga*” organised by Central Pollution Control Board, Delhi on 21.10.2020.

Encl: As above

*A. K. Vidyarthi*  
26/10/20  
(Dr A. K. Vidyarthi)

Additional Director &amp; I/c WQM-II

To:

1. The Director, Zoological Survey of India, Prani Vigyan Bhawan, M-Block, New Alipore, Kolkata-700053
2. Prof. C. R. Babu, Centre for Environmental Management of Degraded Ecosystems (CEMDE), Department of Environmental Studies, University of Delhi, Delhi – 110 007
3. The Director, Wildlife Institute of India, Post Box # 18, Chandrabani Dehradun 248 001 Uttarakhand.
4. The Director, ICAR- Central Inland Fisheries Research Institute, Monirampur (Post), Barrackpore Kolkata, West Bengal-700120
5. Prof. Prakash Nautiyal, Department of Zoology and Biotechnology, Hemvati Nandan Bahuguna Garhwal University, Srinagar (Garhwal) Uttarakhand-246174
6. Prof. Ram Kumar, Centre for Environmental Sciences, Central University of South Bihar, SH-7, Gaya Panchapur Road, Village- Karhara Post Fatehpur, Gaya-824236 (Bihar)
7. Prof. M. M. Saxena, Vice Chancellor, Tantiya University Campus, Hanumangarh Road, Near RIICO Bus stand, Sri Ganganagar-335002, Rajasthan (IN).
8. Dr. Dilip Kumar, Bihar Animal Sciences University, Bihar Veterinary College Campus, Patna – 800014
9. Sh. N. N. Rai, Director Hydrology, Central Water Commission 3rd Floor (South), Sewa Bhawan , R.K. Puram, Sector-1, New Delhi – 110066
10. Dr. Pawan Labhassetwar, Scientist and Head Water Technology and Management Division, CSIR-National Environmental Engineering Research Institute, Nehru Marg, Nagpur-440020



**Minutes of the webinar on “Impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along river Ganga” held on 21.10.2020 at 11.00 a.m. in CPCB, Delhi**

MoWR, RD&GR vide gazette notification dated 09.10.2018 has notified that “*minimum ecological flows to be maintained at locations downstream of structures or projects meant for diversion of river flows*”. Later, Hon’ble NGT vide order dated 29.11.2018 in OA no. 200/2014, para 21 (page no.9) also directed that “*impact of riverine aquatic life as a result of newly mandated e- flows regime needs to be compiled by CPCB led/ constituted agencies and compiled report of study to be submitted to the tribunal*”. The tribunal in its order dated 12.12.2019 in OA no. 200/2014 directed that “*CPCB and SPCBs may periodically undertake biological assessment of Ganga. NMCG and States concerned may depict biological diversity of Ganga in public domain*”.

In compliance to the above orders, a workshop on “*Impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along river Ganga*” was held in CPCB, Delhi on 06.02.2020. Further, in continuation with the above workshop, a webinar was organized on 21.10.2020 in CPCB, Delhi.

The webinar was attended by prominent scientists and experts from various institutions/ university having expertise on the subject matter (List annexed). Dr A. K. Vidyarthi, Addl Director & Divisional Head, WQM-II, welcomed the experts and briefed about the purpose of the webinar. He identified the need for finalization of two studies that have to be integrated and carried out simultaneously namely i) impact of minimum ecological flows in downstream of reservoir on riparian ecosystem (aquatic life) along River Ganga from origin to Unnao region and ii) biological assessment of entire stretch of River Ganga from origin to confluence at Bay of Bengal.

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Following objectives were addressed and discussed during the webinar:

- Finalization of the sampling locations/sites with reference to structures as well as hydroelectric projects, confluence of tributaries and major drains and sample size.
- Selection and finalization of significant parameters/bio-indicators to be considered for both the studies.
- Sampling frequency of each parameter/bio-indicators.
- Finalization of indices/approach to be used for specific bio-indicator components in the proposed studies.
- Issues related to specific work and budget allocation to the participatory organizations.

Sh. N. C. Durgapal, Divisional Head, Water & Wastewater Lab and Biological Lab, CPCB, emphasized on proper selection of stretch and sampling locations.

Dr. Kailash Chandra, Director, Zoological Survey of India (ZSI), stated that approximately 9000 species have been identified in River Ganga and the list of the same can be provided for the proposed studies. Dr. Lalith Kumar Sharma, Scientist D, ZSI also added that 375 species of fishes are reported in River Ganga. He further suggested that seasonality of monitoring is an important aspect and should be considered during finalization of proposal.

Prof. C. R. Babu, Professor Emeritus, Centre for Environmental Management of Degraded Ecosystems (CEMDE), University of Delhi, emphasized that the proposal should be simplified in terms of methodology and bio-indicator species by making them more uniform and specific. He also suggested that macrophytes should also be as integral part of studies as they are good indicators of water quality. He further added that a brainstorming session may be undertaken among the participatory organizations for bringing out a uniform protocols regarding the proposal in a timely manner. Regarding the budget, he recommended that the funds for the proposed studies should be allocated in project mode rather than tender mode.

Prof. M. M. Saxena, Vice-Chancellor, Tanta University emphasized on frequency of monitoring should be based on estimating the occurrence of species i.e. monthly and sampling duration should be increased. He also suggested to incorporate sessile as well as lesser motile forms of macroinvertebrates such as sponges, molluscs, leeches, and snails as Bio-indicators.

Dr. B. K. Das, Director, CIFRI gave a brief overview of the activities undertaken by the CIFRI regarding fish monitoring in River Ganga basin including GIS mapping and major habitat atlas. He also agreed to provide specific 6-8 fish species that could be specifically used as bio-indicators for the proposed studies. He informed that CIFRI has another additional project with NMCG, Ministry of Jal Shakti which is different in terms of aim and objectives from the present proposed study. However, he told that the fish related as well as any other relevant data generated under that project can be provided to supplement the present proposed studies. Dr. Samatha Das, Head, River and Estuarine Fisheries division, CIFRI emphasized on the role of floodplain wetlands fish diversity and also suggested inclusion of heavy metals and pesticides parameters for the e-flow studies. Dr A. K. Sahoo, Senior Scientist, CIFRI explained the importance and methodology of fish migration and fish reproduction in riverine ecosystems. He also emphasized that monsoon sampling is essential and further added that alkalinity is yet another important parameter that affects the fishes and should be incorporated during the monitoring.

Prof. Prakash Nautiyal, HNB Garhwal University, suggested that the sampling stretch should be increased from 1-5 km to 15-20 km both upstream and downstream the barrages or dams specifically for the river stretch that passes through mountainous regions. He also recommended that sampling should also be conducted in monsoon season, wherein the month of August could be considered for monsoon sampling uniformly along the entire stretch of the river.

Prof. Ram Kumar, Central University of South Bihar, explained that the present studies will help to understand what amount of minimum ecological flows are essential for proper functionality of the ecosystems. He suggested that the sampling of Benthic-macroinvertebrates, zooplankton and phytoplanktons should be conducted monthly or fortnightly so that data could be generated in terms of frequency of occurrence of these bio-indicators in addition to abundance, richness etc. Also, he recommended inclusion of flow rate as parameter to provide prevailing flow conditions at the time of sampling. Also, he suggested that in order to understand resilience of river as it moves away from downstream of the dam, samples should be collected at an interval of 500 m continuously.

Dr. Niladri Dasgupta, Project Scientist, Wildlife Institute of India forwarded his comments that mentioned that otters should be reconsidered as Bio-indicators for the present studies.

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Also, those species should be considered that are more constant in terms of availability rather than have the possibility of opportunistic sightings.

Dr. Ranjan Kumar, Central Water Commission, informed about the monitoring of conducted by CWC for discharge estimation and also suggested large-scale discussion among the participatory organizations for finalization of Terms of Reference.

Based on the opinions and valuable inputs of the experts, the following conclusions and decisions were made:

1. Physico-chemical parameters including flow velocity measurements as well as benthic-macroinvertebrates (including lesser motile and sessile species such as sponges, molluscs, leeches, and snails), zooplankton, phytoplankton, periphytons, fishes, mammals, amphibians, reptiles, macrophytes emerged to be specific bio-indicators to be used for the present studies.
2. Frequency of sampling should be monthly for most of the parameters/bio-indicators. The proposed studies should to be carried out concurrently for one year covering all the three seasons namely summer, monsoon and winter in a uniform manner. Additional six months were may be allowed for compilation of results, data analysis and report preparation.
3. Different types of indices for analyses of bio-indicator species and statistical models to analyse and predict long-term impacts of the variations in flow regime may be used.
4. The monitoring locations for the river stretch in the plains should be between 10-15 km whereas, monitoring locations for the river stretch in the hilly regions specifically in upper stretches should be between 15-20 km upstream and downstream of the dams and barrages (depending upon the accessibility) beyond 500 m to 1 km of upper reservoir level for studying the impact of the same on the aquatic life.
5. The proposed study has various diverse components that requires expertise on bio-monitoring approaches, ecology of various species such as fishes, zooplankton, phytoplankton, periphytons, benthic-macroinvertebrates, mammals, amphibians, reptiles, macrophytes as well as statistical analysis. Therefore, consortium of technical institutions and individual experts may be formed and specific stretches could allocated to them to ensure unified study approach, application of standard methodologies as well as timely execution of the proposed study.

## Annexure-I

## LIST OF PARTICIPANTS

Sr. no.	Name	Designation	Organization
<b>CENTRAL POLLUTION CONTROL BOARD</b>			
1.	Dr. A. K. Vidyarthi	Divisional Head	WQM – II, CPCB Delhi
2.	Sh. N. C. Durgapal	Divisional Head	Bio-Lab, CPCB Delhi
3.	Dr. Prabhat Ranjan	Scientist 'B'	WQM-II Division, CPCB Delhi
4.	Ms. Garima Dublsh	RA – III	WQM-II Division, CPCB Delhi
5.	Dr. Firoz Ahmad	RA – III	WQM-II Division, CPCB Delhi
6.	Dr. Swati Singh	RA – I	WQM-II Division, CPCB Delhi
7.	Dr. Richa Bhardwaj	RA – I	WQM-II Division, CPCB Delhi
8.	Dr. Vivek Rana	RA – I	WQM-II Division, CPCB Delhi
9.	Dr. Jaya	RA – III	Bio-Lab, CPCB Delhi
10.	Dr. Annu Goel	RA – III	Bio-Lab, CPCB Delhi
<b>EXPERTS FROM PARTICIPATORY INSTITUTES/ORGANIZATIONS</b>			
11.	Prof. C. R. Babu	Professor Emeritus	CEMDE, University of Delhi
12.	Prof. M. M. Saxena	Vice Chancellor	Tantia University, Shri Ganganagar
13.	Prof. Dilip Kumar	Former director	CIFE, Mumbai
14.	Prof. Prakash Nautiyal	Professor	HNB Garhwal University, Srinagar
15.	Dr. Kailash Chandra	Director	ZSI
16.	Dr. Lalith Kumar Das	Scientist 'D'	
17.	Dr. B. K. Das	Director	CIFRI
18.	Dr. S. Samanta	Principal Scientist	
19.	Dr. A. K. Sahoo	Scientist	
20.	Dr. Syed Ainul Hussain	Scientist 'G'	WII
21.	Dr. Niladri Dasgupta	Project Scientist	
22.	Sh. Zeeshan Ali	Research Scholar	
23.	Prof. Ram Kumar	Professor	Central University of South Bihar
24.	Sh. N. N. Rai	Director	Hydrology, CWC
25.	Dr. Pawan Labhasetwar	Scientist	Water Technology and Management Division, NEERI

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