

# **Submission of Monthly Progress Report for the Month of August-September, 2024 in the NGT Matter OA No. 673 of 2018 (in compliance with the NGT order dated 24.09.2020)**

## **I. Details of Sewage Treatment Plant (STP):**

- **Total Generation of Sewage:** 82.4 MLD (in 20 ULBs)
- **Total Treatment Facility Operationalized:** 10.12 MLD (8.72 MLD STP with co-treatment facility at Chandinamura under Agartala MC & 1.4 MLD In-Situ Nalla Treatment of drains flowing to river Howrah at Agartala MC).
- Another STP of 8 MLD capacity at Akhaura ICP has been constructed.
- Present Gap in Sewage Management:  $(82.4 - 18.12)$  MLD = 64.28 MLD

### **Detailed Status of existing STP/ Sewage Treatment Facilities:**

- One 8 MLD STP is operational since 2017 at North Zone of Agartala Municipal Corporation, having around 10-12% additional treatment capacity of faecal sludge as input. Faecal sludge from Agartala city and surrounding areas is carried in by cesspool emptier vehicle and treated at this plant. To increase the utilization of STP to its optimal capacity through interception and diversion of drains, the work of installing additional sewage pumping station has been started and shall be completed by November 2024.
- In-Situ Nalla Treatment of drains: - 1.4 (One point four) MLD capacity In-Situ Nalla Treatment of five drains flowing to river Howrah at Agartala, which are smaller & can't be remediated through STP. The project is completed and all drains have been commissioned. The project has been taken up from Agartala Smart City on pilot basis.
- Another STP of 8 MLD capacity at Akhaura ICP has been constructed.

### **New Proposal for STPs & other treatment Plants to mitigate the gap:**

To mitigate the gap in sewage management (64.28 MLD), the following projects have been taken up:

Detailed status of Ongoing Projects (67.7 MLD):

- i) 4 (Four) STPs of total 31.5 MLD capacity has been taken up at Katakhal & Kalapania Khal in Agartala MC. Accordingly, works started by Agency is M/s Swapan Ch. De, Central Road Extension, Town Pratapgarh, Agartala, West Tripura vide LoA No.4 (131)/2022/ 8831-41 dated 22-06-2023. Construction Works going on.
- ii) 17.5 MLD STP in 11 ULBs – Total works has been divided in 4 cluster wise package. Phased Work-order has been issued to agency and simultaneously works has started.  
(Name of 11 ULBs: Dharmanagar MC, Udaipur MC, Mohanpur MC, Kailashahar MC, Ranirbaza MC, Melaghar MC, Belonai MC, Khowai MC, Kumarghat MC, Ambassa MC & Teliamura MC ).
- iii) In-Situ Nalla Treatment of drains having total capacities of 9.7 MLD covering 8 ULBs:- Works started by the agency and shall be completed by 31-12-2024.  
(Name of 8 ULBs: Sabroom NP, Panisagar NP, Sonamura NP, Santirbazar MC, Jirania NP, Kamalpur NP, Amarapur NP, Bishalgarh MC).
- iv) 2 (two) nos. Oxidation Pond having total capacity of 1 MLD covering 2 ULBs: - Works started by the agency and shall be completed by 31-12-2024
- v) One STP of 8 MLD capacity over Howrah: The project is under tendering stage.

Additional measures for Used Water Management:

- All drains flowing to river or water bodies are retrofitted with wired mesh to prevent the flow of solid waste into the water body.
- A vast range of IEC activities targeting littering of water bodies, drains are being carried out in all ULBs. Several awareness campaigns involving eminent personalities, brand ambassador, school children, NGOs, market association, clubs, District Magistrate & Collectors, Elected Representatives etc. have been carried out. Short videos and Audio message are also being disseminated to aware citizens. Rigorous Social Media post are also being done to aware citizens.

## **II. Solid Waste Management:**

- **Door to Door Waste Collection & Source Segregation of Waste** - Presently 100% door to door waste collection along with source segregation is being practiced in **all 334** wards.
- Total municipal solid waste generated: - 350.2 TPD
- 350.2 TPD is collected, segregated and transported.
- Presently 350.2 TPD waste is being processed.

**Bio-Degradable And Non-Biodegradable Waste Processing:**

- There are total 20 ULBs in Tripura.
- In the State, biodegradable waste is managed with the help of 19 nos. decentralized Solid Waste Processing Facilities, while 2 (two) ULBs namely Bishalgarh MC and Jirania NP are using the neighboring facilities of Agartala MC and Ranirbazar MC respectively. These Waste Processing Facilities are equipped to process both Wet and Dry waste.

| Name of ULB    | No. of Solid Waste Processing Facilities/<br>MRF Centres | Capacity of Solid Waste Processing Facilities/<br>MRF Centres<br>(in TPD) |
|----------------|----------------------------------------------------------|---------------------------------------------------------------------------|
| Agartala MC    | 2*                                                       | 275                                                                       |
| Bishalgarh MC  | 0                                                        | Using plant of Agartala MC                                                |
| Kamalpur NP    | 1                                                        | 6                                                                         |
| Dharmanagar MC | 1                                                        | 15                                                                        |
| Panisagar NP   | 1                                                        | 10                                                                        |
| Kailashahar MC | 1                                                        | 10                                                                        |
| Kumarghat MC   | 1                                                        | 10                                                                        |
| Ambassa MC     | 1                                                        | 10                                                                        |
| Khowai MC      | 1                                                        | 10                                                                        |
| Teliamura MC   | 1                                                        | 10                                                                        |
| Ranirbazar MC  | 1                                                        | 10                                                                        |
| Jirania NP     | 0                                                        | Using plant of Ranirbazar MC                                              |
| Santirbazar MC | 1                                                        | 10                                                                        |
| Mohanpur MC    | 1                                                        | 10                                                                        |
| Sabroom NP     | 1                                                        | 10                                                                        |
| Melaghar MC    | 1                                                        | 10                                                                        |
| Sonamura NP    | 1                                                        | 10                                                                        |
| Udaipur MC     | 1                                                        | 10                                                                        |
| Amarpur NP     | 1                                                        | 10                                                                        |
| Belonia MC     | 1                                                        | 10                                                                        |
| Total          | 19                                                       | 446                                                                       |

\* 1 MRF 25 TPD & 1 Solid Waste Processing Facility 250 TPD

- There are total 85 (eighty five) numbers of Segregation Sheds which are already functional and are linked to the 19 Solid Waste Processing Facilities/MRF Centres set up in decentralized manner to cover all 20 ULBs.

| Facility                         | Type of Plant                                                                                   | Location       | Number  | Present Status     |
|----------------------------------|-------------------------------------------------------------------------------------------------|----------------|---------|--------------------|
| De-centralized Plants (ULB wise) | Segregation Sheds (Only Segregation of Dry waste into various categories is done by Women SHGs) | Agartala MC    | 16      | All are functional |
|                                  |                                                                                                 | Bishalgarh MC  | 2       |                    |
|                                  |                                                                                                 | Kamalpur NP    | 3       |                    |
|                                  |                                                                                                 | Dharmanagar MC | 3       |                    |
|                                  |                                                                                                 | Panisagar NP   | 3       |                    |
|                                  |                                                                                                 | Kailashahar MC | 3       |                    |
|                                  |                                                                                                 | Kumarghat MC   | 4       |                    |
|                                  |                                                                                                 | Ambassa MC     | 4       |                    |
|                                  |                                                                                                 | Khowai MC      | 6       |                    |
|                                  |                                                                                                 | Teliamura MC   | 6       |                    |
|                                  |                                                                                                 | Ranirbazar MC  | 3       |                    |
|                                  |                                                                                                 | Jirania NP     | 3       |                    |
|                                  |                                                                                                 | Santirbazar MC | 3       |                    |
|                                  |                                                                                                 | Mohanpur MC    | 5       |                    |
|                                  |                                                                                                 | Sabroom NP     | 5       |                    |
|                                  |                                                                                                 | Melaghar MC    | 3       |                    |
|                                  |                                                                                                 | Sonamura NP    | 3       |                    |
|                                  |                                                                                                 | Udaipur MC     | 3       |                    |
|                                  |                                                                                                 | Amarpur NP     | 3       |                    |
|                                  |                                                                                                 | Belonia MC     | 4       |                    |
| Total                            |                                                                                                 |                | 85 nos. |                    |

#### **Landfill/ Dumpsite Remediation:**

- Total 13 nos. Legacy Waste Dumpsites are identified in 13 ULBs as per SBM-U 2.0 guidelines.
- Remediation works is taken up in all 13 ULBs (Santirbazar MC, Belonia MC, Sabroom NP, Dharmanagar MC, Panisagar NP, Kailashahar MC, Kumarghat MC, Udaipur MC, Amarpur NP, Khowai MC, Melaghar MC, Sonamura NP & Ambassa MC).
- Out of 13 identified sites 10 nos. are already remediated and 3 nos. will be remediated by December, 2024.

### III. Details of Industrial Pollution:

- **No. of industries in the State:** 2466 Nos. industrial units exist in the state. However, there are only 179 nos. of industrial units have been identified through survey within the 500 meters of catchment areas of the six identified river stretches in Tripura.
- **No. of water polluting industries in the State:** There are only 179 nos. of industrial units has been identified within 500 meters of the catchment area. Among these 179 nos. of industrial units, only 18 industrial units are foremost generator of industrial effluents. And almost all the industrial units have installed ETPs.
- **Quantity of effluent generated from the industries in MLD:** The total estimated industrial discharge from the industries within the 500 meters of catchment area is 14427 LPD. A total of 179 industries are present within 500 meter of the catchment areas of the Six identified river. Out of 179 industries, most of the industries are not generating any industrial effluent and those who generates are already equipped with ETP.

### IV. Bio-medical Waste Management:

- **Total Bio-medical generation:** 1789.97 kg/day (For the State, as per Annual Report 2023-24)
- **No. of Hospitals and Health Care Facilities:** Total No. of Hospitals and nursing homes: 158 (bedded). 7 (seven) District hospitals are equipped with Liquid Waste Treatment Plant. Installation of ETP/STP is going on in other hospitals.
- **Status of Treatment Facility/ CBMWTF:** One CBWTF Operator has been selected by Health & Family Welfare Department, Govt. of Tripura through open tendering through e-Procurement for the whole State of Tripura. The CBWTF is presently working at Devendra Chandra Nagar in West Tripura District covering all the bedded Hospital of the State. There is no gap in processing the BMW in the State. Amongst the Public Health Facilities 03 state level hospitals namely GBP Hospital, IGM Hospital & Cancer hospital have their own incinerator.

### V. Hazardous Waste Management:

- **Total Hazardous Waste generation:** 360.14 MTA
- **No. of Industries generating Hazardous waste:** 172 nos.
- **Treatment Capacity of all TSDFs:** There is no TSDF facility available in the State.
- **Avg. Quantity of Hazardous waste reaching the TSDFs and Treated:** There is no TSDF facility available in the State.
- **Details of on-going or proposed TSDF:** Yet to be finalized.

- Fresh inventorization of the Hazardous Waste generation has been done through National Productivity Council.

## **VI. Plastic Waste Management:**

- Total Plastic Waste generation: As per annual report 2023-24, 259.64 TPA
- Treatment/ Measures adopted for reduction or management of plastic waste: Collected through 85 nos. MRF in each ULBs. There are 13 registered Recyclers in the State.
- Details of Alternate Treatment Technology being adopted by the State/UT : Recently, the State has started using the plastic wastes in road making purpose.
- The RD Department has notified a Policy regarding use of plastic waste in road making in the State.
- An Action Plan for phasing out Single Use Plastic is under implementation.
- The State has launched *Plastic Mukta Tripura Abhiyan*.

## **VII. Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;**

Tripura State Pollution Control Board (TSPCB) is conducting water quality monitoring on monthly basis under National Water Quality Monitoring Programme (NWMP) of Central Pollution Control Board for the following six identified polluted river stretches in the State: River Stretch Burigaon: along Bishalgarh, Gumti :Telkajila to Amarapur, Haora : Agartala to Champaknagar, Juri along Dharmanagar, Khowai along Teliamura, Manu along Kailashahar. From the analytical report for all the monitoring locations of six rivers entered in EWQDES portal of CPCB by TSPCB since June, 2016, it has been observed that the BOD values for the six identified polluted river stretches were within prescribed standard limit (3 mg/l) except for some specific months in respect of Gumati river (June, July, August & September, 2016 at Sonamura location), Haora river (June & July, 2016 at Chandrapur location; June to August, 2016 at Dashamighat location) Juri river (June to November, 2016 at Krishnapur location) Manu river (June to August, 2016 at Kailasahar location). It is relevant to mention that for all the monitoring locations of Khowai river, the BOD value was within prescribed standard limit (3 mg/l) since June, 2016. According to the latest analytical report of the six river water, the BOD level were found within prescribed standard limit for the 5 identified rivers of Tripura. However, few parameters exceed the normal standard for the Haora River occasionally.

### **River Wise Details:**

| <b>Name of the River</b> | <b>River Stretch</b>     | <b>Priority</b> | <b>Action Plan under implementation/ Proposed</b>                                                                                                                                                                   | <b>Present Status</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------|--------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Burigaon                 | Along Bishalgarh         | -               | Compressive Action Plan for rejuvenation of the identified river stretches covering individual rivers have been prepared and submitted to Central Pollution Control Board. The Action Plan is under implementation. | Since June, 2016, it has been observed that the BOD values for the six identified polluted river stretches were within prescribed standard limit (3 mg/l) except for some specific months in respect of Gumati river (June, July, August & September, 2016 at Sonamura location), Haora river (June & July, 2016 at Chandrapur location; June to August, 2016 at Dashamighat location) Juri river (June to November, 2016 at Krishnapur location) Manu river (June to August, 2016 at Kailasahar location). It is relevant to mention that for all the monitoring locations of Khowai river, the BOD value was within prescribed standard limit (3 mg/l) since June, 2016. According to the latest analytical report of the six river water, the BOD level were found within prescribed standard limit for the 5 (Burigaon, Gomati, Juri, Manu, Khowai) identified rivers of Tripura. However, few parameters exceed the normal standard for the Haora river occasionally. The analytical report of the six river water are being submitted to the CPCB on Regular basis. However, implementation of the Action Plan is going on. The River Rejuvenation Committee (RRC), Tripura is reviewing the implementation of the said Action Plan on regular basis. Minutes of the last meeting is enclosed herewith as <b>Annexure-1.</b> |
| Gumti                    | Telkajila To Amarpur     | -               |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Haora                    | Agartala to Champaknagar | v               |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Juri                     | Along Dharmanagar        | .               |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Khowai                   | Along Teliamura          | -               |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Manu                     | Along Kailashahar        | -               |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                                                                                                            |  |  |  |                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                            |  |  |  | Further, the Chief Secretary, Tripura is regularly reviewing the status of implementation of the Action Plan for rejuvenation of the river stretches through State Level Committee meeting. A copy of the minutes of the said meeting is enclosed herewith as <b>Annexure-2</b> . |
| The Water Quality analysis report of the six identified river stretches is enclosed as <b>Annexure-3</b> . |  |  |  |                                                                                                                                                                                                                                                                                   |

#### **VIII. Ground water regulation :**

- As per report of the Central Ground Water Board, in Tripura State Annual Replenishable Ground Water Resources is 2.19 billion cubic meter (BCM), Net Annual Ground Water' Availability is 1.97 BCM, Annual Ground Water Draft is 0.17 BCM, Stage of Ground Water Development is 9%. Critical stage of Ground- water development is 70 % or above.
- As per earlier NRDWP guidelines (para 9.4 page number 11), 10% of the NRDWP fund shall be utilized for Sustainability of rural water supply schemes. Relaxation will be available only to those areas that are 'Water Surplus' (with annual normal rainfall more than 1500mm). In the State of Tripura the average annual rainfall is more than 1500mm recorded.
- In the year 2005, analysis of 3682 water samples was carried out through the All India Institute of Hygiene & Public Health (AIHH&PH), Kolkata and presence of Arsenic in 8 samples above permissible limit (0.05 mg/ltr as per BIS 10500), iron in 3511 samples above permissible limit (1 mg/ltr as per BIS 10500) were found. No other heavy metals i.e. Lead, Zinc, Manganese were found. The presence of Arsenic beyond permissible limit was detected in Ordinary Hand Pump and Mark-11 only. As Arsenic in drinking water is health hazard, at once all the above 8 no. water sources were sealed and alternative sources were created for drinking water supply to that locality.
- Accordingly, 17 numbers new water testing laboratory in the District and DWS Sub Division level have been setup and strengthened the existing water testing laboratory to develop adequate competency and efficiency of the water quality monitoring & surveillance throughout the State. Every year, almost 80% of water supply sources are being tested through laboratory as well as Field Test Kits and the results are being uploaded in the online IMIS of Ministry of Drinking Water & Sanitation, Government of India.

- From the test results, it is observed that the underground water of Tripura State is mainly infested with iron beyond permissible limit. There is no presence of Arsenic beyond permissible limit in drinking water sources at present. Moreover, presence of Lead, Zinc, Manganese etc. in the drinking water sources is not detected so far. Iron removal plant (IRP) has been installed in almost every place in Tripura.
- While issuing the Consent to Establish & Operate Certificate by TSPCB to any industry where extraction of ground water has been done, the permission of Central Ground Water Authority is required as pre requisite condition for obtaining the consent certificate from Tripura State Pollution Control Board. In addition, the industries using ground water are also being directed to recharge the ground water through ground water recharging pit.
- Moreover, the industries handling with chemicals and hazardous wastes are also being directed not to inject any chemicals/hazardous wastes into the ground water as well as water body without any treatment.
- Central Ground Water Board under the Ministry of Jal Shakti, Department of Water Resources, Government of India issued Show Cause Notice to 04 nos. of Industries for not applying to the Board to renew the NOC for extracting ground water in due time.
- Direction has been issued to all the industries which are extracting ground water for industrial purpose and also for compliance of environmental norms.

#### **IX. Good irrigation practices being adopted by the State:**

Generation of mass awareness to conserve water and also for good irrigation practices is being carried out by the farmers in the catchment areas of the river.

#### **X. Rain Water Harvesting:**

- All the industries using in the catchment areas responsible for using ground water for industrial purpose is directed to construct rain water harvesting plant and the compliance has been ensured. Accordingly, Rain water harvesting plant has been constructed by almost all the concerned units.
- A comprehensive Rain water harvesting plan has submitted to CPCB.
- In the new Building Rules, the roof top Rain Water Harvesting systems have been included for all new building.

#### **XI. Demarcation of Floodplain and removal of illegal encroachments:**

Flood Plane Zones of six identified river stretches were already identified.

## **XII. Model River:**

The State of Tripura has identified **Haora** River stretch as the **Model River** for implementation of Action Plan for restoration of the river. This is also communicated to the NMCG with a copy to CPCB. Some of the major initiatives taken by the State in this regard are as follows:

- a. 5 (five) drains have been identified discharging in the Haora River. *In-situ* Bioremediation is being carried out in those 5 drains. Work Completed.
- b. Haora River Front Development Project has been launched having several objectives to protect this river.
- c. Extensive river bank plantation has been done already.
- d. Regular monitoring of Water Quality is being done by the State Board.
- e. Flood Plain Zone has been identified.
- f. The river bank is made encroachment free and regular monitoring is being done by the concerned Authority.
- g. Proper monitoring is being done so that no solid waste dumped into the river from nearby markets.

## **XIII. Plantation activities along the rivers:**

Bamboo Plantation on sides of the river banks has been done in collaboration with Forest Department, Tripura.

## **XIV. Reuse of Treated Water:**

- The Urban Development Department and Urban Local Bodies has taken many initiatives for utilization of treated sewage effluent.
- AMC had prepared the Action Plan for utilization of treated waste water from Sewage Treatment Plant (STP) located at Barjala, Tripura, Agartala. The said Action Plan was sent to Central Pollution Control Board (CPCB) in March 2019.
- AMC is already using treated waste water from the Barjala (Near Lankamura) STP for various activities including watering of gardens & open space in Agartala city, road watering in dry seasons, irrigation of agricultural fields etc.
- A notification has been issued by AMC to use only treated water for the watering of gardens & open space in Agartala city, road watering in dry seasons and never to allow use of drinking water for these activities. AMC also confirms that presently no surface or ground water is used for watering parks and gardens in the city.
- As per the revised Action Plan for utilization of treated water, the additional steps taken by AMC for full compliance of the Hon'ble NGT order. A dedicated team is formed to look after the gardens and parks in Agartala city.

**Minutes of the meeting of River Rejuvenation Committee (RRC), Tripura held on 25/04/2024 at 11:30 am in the Office Chamber of the Director, Department of Science, Technology & Environment, Government of Tripura, Gorkhabasti, Agartala.**

The meeting of River Rejuvenation Committee (RRC), Tripura was held on 25/04/2024 at 11:30 am under the Chairmanship of the Director, Science, Technology & Environment, Govt. of Tripura and Chairman, RRC, Tripura in the office Chamber of the Director, Science, Technology & Environment, Government of Tripura, Gorkhabasti, Agartala. This apart, the following members of RRC and other officials were present in this meeting:

1. Sri S. C. Das, Additional Director, Industries & Commerce Department, Government of Tripura.
2. Sri Pinku Debbarma, Deputy Director, Urban Development Department, Government of Tripura.
3. Dr. Bishu Karmakar, Member Secretary, Tripura State Pollution Control Board.

The following agenda was discussed in the meeting:

- i) Implementation of the action plan for rejuvenation of the identified polluted river stretches of the state
- ii) To review the methodology adopted by the State for calculation of sewage generation and share the revised quantum of sewage generation of the State to Central Pollution Control Board

At the outset, the Chairman, RRC discussed the main objective of the meeting and also reviewed the present status of implementation of the action plan for rejuvenation of the identified polluted river stretches of the state.

The Member Secretary, TSPCB has informed that water quality of the five identified river stretches is well within the standard limit of Central Pollution Control Board. However, the water quality of Haora River was found beyond standard limit occasionally. In the minutes of the 16<sup>th</sup> meeting of Central Monitoring Committee in the NGT matter OA No. 673 of 2018 held on 12.05.2023, it was mentioned that the number of polluted river stretches have been reduced from 6 to 1 in Tripura, which is only river Haora along Agartala city under priority V. The Member Secretary, TSPCB has also informed that the Central Pollution Control Board has requested the State to review the methodology adopted by the State for calculation of sewage generation and share the revised quantum of sewage generation of the State to Central Pollution Control Board.

The Urban Development Department has informed that they have taken necessary initiatives including setting up of Sewage Treatment Plan, Bio-remediation of small drains and setting up of small oxidation ponds for sewage management in the urban areas. Initiatives have also been taken by the Agartala Smart City Limited and Agartala Municipal Corporation for rejuvenation of Haora River.

I/116833/2024

After threadbare discussions the following decisions were taken:

- i) The Urban Development Department and the PWD(DWS) may be requested to review the methodology adopted for calculation of sewage generation in urban and rural areas respectively and share the revised quantum of sewage generation along with methodologies of calculation for onward submission to Central Pollution Control Board.
- ii) All concerned Departments/ Organization shall take necessary initiatives for proper implementation of the action plan for rejuvenation of the Haora River and also to submit ATR on monthly basis to the TSPCB.
- iii) All concerned Department and ULBs may be requested to provide the ATR on implementation of action plan for rejuvenation of other 5(five) river stretches to keep the rivers clean on monthly basis to the TSPCB.
- iv) The representatives of the Agartala Smart City Limited and Agartala Municipal Corporation may be requested to remain present in the next RRC meeting.

The meeting was ended with thanks to the Chair.

Signed by Mahender Singh

Date: 02-05-2024 11:24:22

Reason: Approved  
(Mahender Singh, IFS)

Director

Science, Technology & Environment

Government of Tripura &

Chairman, River Rejuvenation Committee, Tripura

No.F.19(7)/TSPCB/NGT/2018/S/  
2024

April 30,

To

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Copy to the :

- i) PPS to Chief Secretary, Tripura for kind information of Chief Secretary.
- ii) PA to the Secretary, Science, Technology & Environment Department, Government of Tripura for kind information of Secretary.
- iii) The Member Secretary, Tripura State Pollution Control Board.

## ANNEXURE-2

**Minutes of 35<sup>th</sup> meeting of the State Level Committee held on 31/08/2024 at 5:30 PM in Video Conference Room of the Civil Secretariat under the Chairmanship of Chief Secretary, Tripura to review the progress of implementation of the Directions dated 13.04.2023 and 16.05.2024 passed by the Hon'ble NGT in OA No. 606 of 2018 in the matter of compliance of Solid Waste Management Rules, 2016 and other environment related issues of the State.**

The 35<sup>th</sup> meeting of the State Level Committee was held under the Chairmanship of the Chief Secretary, Government of Tripura, on 31.08.2024 at 5:30 PM in Video Conference Room of the Civil Secretariat to review the progress of implementation of the Directions dated 13.04.2023 and 16.05.2024 passed by the Hon'ble National Green Tribunal in O.A. No.606/2018 in the matter of Compliance of Solid Waste Management Rules, 2016 and other environment related issues of the State.

The list of officers attended the VC meeting is mentioned at **Annexure-I**. The District Magistrate and Collectors of 8 (eight) Districts, DFOs of all 8 (eight) Districts, Sub-Divisional Magistrates, BDOs of all RD Blocks and Commissioners/CEOs/EOs of all Urban Local Bodies participated in the meeting through Video Conferencing.

At the outset, Director, Urban Development Department elaborated various actions taken to mitigate the gaps in solid waste management and sewage management in urban as well as rural areas of the State through PPT. The Member Secretary, Tripura State Pollution Control Board also briefed the status of implementation of the Action Plan for rejuvenation of the identified river stretches of the State, Status of enforcement of ban on Single Use Plastic, Status of implementation of BMW Management Rules, matter related to OA No.693/2023, OA No. 156/2023, 263/2022, 22/2024(CZ).

The decisions taken in respect of each of the issues are as follows:

| Sl. No                                                                         | Responsible Department / Organization   | Action Points as per NGT order                                                                                                                                                              | Progress as on Date                                                                                                                                                                                                                                                                                                   | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Issue: Solid Waste Management &amp; Sewage Management</b>                   |                                         |                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Ref: NGT Orders dated 13.04.2023 &amp; 16.05.2024 in O.A. No : 606/2018</b> |                                         |                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 1.                                                                             | UDD/PWD (DWS)/RD D/ Panchayet/ DMs/ULBs | The Chief Secretary, Tripura may take further remedial measures to ensure compliance of SWM Rules considering the statutory timelines to be sacrosanct as already directed by this Tribunal | <b>Urban Area</b><br><b>➤ Solid Waste Management:</b> <ul style="list-style-type: none"> <li>• Present Solid waste generation of 20 ULBs is estimated to be 350.2 TPD. The same quantity is being collected and processed.</li> <li>• There are 19 Solid Waste Processing Facilities/MRF Centres set up in</li> </ul> | <ul style="list-style-type: none"> <li>• Necessary initiatives shall be taken by concerned ULBs and UDD to check the functional status of all the solid waste treatment facilities already set up keeping view of the Hon'ble NGT direction.</li> <li>• The UDD shall take necessary initiatives to execute the proposed sewage treatment plants/ oxidation ponds /In-situ Nalla Treatment (31.5</li> </ul> |

| Sl. No | Responsible Department / Organization | Action Points as per NGT order                                                                                                                                                                                                                | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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|        |                                       | <p>vide judgment dated 22.12.2016 (para-10). Similarly, the timelines ensuring setting up of necessary sewage management systems have to be accepted as rigid timelines in view of judgment of the Hon'ble Supreme Court dated 22.02.2017</p> | <p>decentralized manner to cover all 20 ULBs which are linked with 85 (eighty-five) numbers of Segregation Sheds. 2 (two) ULBs namely Bishalgarh MC and Jirania NP are using neighbouring facilities of Agartala MC and Ranirbazar MC respectively. At present, the state has surplus capacity of waste processing, i.e. 446 TPD.</p> <ul style="list-style-type: none"> <li>• The Solid Waste Treatment Facilities at Panisagar, Amarpur and Melaghar has been set up and ready for inauguration.</li> <li>• The Bishalgarh MC will set up a Solid Waste Treatment Facility. Accordingly, land identification is going on.</li> <li>• Further, additional equipment for augmentation of 5 solid waste treatment facilities has already been reached at Mohanpur and Ambassa. For other ULBs, materials are in transit.</li> <li>• Few ULBs namely Teliamura, Udaipur &amp; Mohanpur MCs are making paver blocks using C &amp; D Waste.</li> </ul> | <p>MLD STP at Kantakhal &amp; Kalapania Khal, 8 MLD STP at Kantakhal, 9.7 MLD in-Situ nalla treatment in 8 small ULBs, 17.5 MLD STP in 11 ULBs and 1 MLD oxidation pond at Bishalgarh &amp; Kamalpur) within at the earliest.</p> <ul style="list-style-type: none"> <li>• PWD (DWS) / RDD shall take necessary initiatives to ensure the compliance of SWM Rules, 2016 and also for ensuring setting up of necessary sewage management systems in rural areas of the State to mitigate the Liquid Waste Management in rural areas within the stipulated timeline.</li> <li>• All DMs shall monitor &amp; review the compliance of SWM Rules, 2016 and also to ensure setting up of necessary sewage management systems in rural areas as well as urban areas in coordination with the concerned line departments.</li> <li>• Bishalgarh MC shall identify suitable land for TWTP by September, 2024.</li> <li>• Khowai, Teliamura and Melaghar shall identify suitable land for setting up of FSTP by September, 2024.</li> <li>• All ULBs shall conduct weekly meetings with the</li> </ul> |

| Sl. No | Responsible Department / Organization | Action Points as per NGT order | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|        |                                       |                                | <ul style="list-style-type: none"> <li>• Work Order has been issued to the Agency for setting up of C &amp; D Waste Management Plant at Agartala.</li> <li>• The Departmental Secretaries are regularly reviewing the progress made in ensuring setting up of necessary Solid Waste Processing Plants and Sewage Management systems alongwith other issues.</li> </ul> <p>➤ <b>Sewage Management:</b></p> <ul style="list-style-type: none"> <li>• Total sewage generation in 20 ULBs : 82.4 MLD.</li> <li>• Total Treatment Facility operationalized : 9.4 MLD</li> <li>• Treatment facility under construction/Proposed: 74.70 MLD</li> </ul> <p>➤ <b>Existing/Under construction:</b></p> <ul style="list-style-type: none"> <li>• 8 MLD STP at Chandinamura AMC already operational.</li> <li>• 8 MLD STP at Akhaura ICP, Agartala constructed and it will be made operationalized shortly.</li> <li>• 1.4 MLD <i>In-Situ</i> Nalla Treatment at AMC area is completed and functional. Initiatives have been taken to</li> </ul> | <p>stakeholders alongwith representatives of the construction agency of STPs to monitor progress and resolve intermittent issues. Ground truthing of the progress made in different projects shall be done through field visit.</p> <ul style="list-style-type: none"> <li>• Details of total numbers of drains present in ULBs alongwith flow, length, depth etc. shall be prepared by the concerned ULBs.</li> <li>• The Udaipur MC shall identify the land and also handed over to TUDA for construction of STPs at Udaipur MC.</li> <li>• ASCL shall take necessary initiatives to complete the construction activities of 8 MLD STP at Akhaura ICP, Agartala and make it functional by September, 2024.</li> <li>• AMC may take initiatives to install the OCEMS system in the existing 8 MLD STP at chandinamura and also to connect with the CPCB server and TPCB portal.</li> <li>• All the concerned Departmental Secretaries may review the progress made in setting up of the Solid Waste &amp; Sewage Management plants and other such issues. A copy of the minutes be shared with the TSPCB for record.</li> </ul> |

| Sl. No | Responsible Department / Organization | Action Points as per NGT order | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024 |
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|        |                                       |                                | <p>enhance the capacity of this plant.</p> <p>➤ <b>New proposal:</b></p> <ul style="list-style-type: none"> <li>• 31.5 MLD STP at Katakhal &amp; Kalapania Khal of AMC - work order has already been issued and works started. Target Completion date is 31<sup>st</sup> July, 2025.</li> <li>• 8 MLD STP is taken up (Katakhal &amp; Kalapania Khal) which is under tendering stage. Target date of completion is June, 2025</li> <li>• 9.7 MLD In-Situ Nalla Treatment in 8 small ULBs - work order issued and works started at Bishalgarh &amp; Kamalpur. Target date of completion is December, 2024.<br/>[Bishalgarh MC, Kamalpur NP, Panisagar NP, Sabroom NP, Jirania NP, Sonamura, Santirbazar MC, Amarpur NP]</li> <li>• 1 MLD Oxidation Pond in two ULBs. Target date of completion is March, 2025. [Bishalgarh MC &amp; Kamalpur NP]</li> <li>• <b>17.5 MLD STP in 11 ULBs</b> – Total works has been divided in 4 packages. LOA has</li> </ul> |                                                                                        |

| Sl. No | Responsible Department / Organization | Action Points as per NGT order | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024 |
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|        |                                       |                                | <p>already been issued to the Agency and preliminary works started. Target date of completion is 31<sup>st</sup> July, 2025.<br/> [Ranirbazar, Mohanpur, Belonia, Melaghar, Udaipur, Kumarghat, Kailasahar, Dharmanagar, Ambassa, Khowai, Teliamura]</p> <p><b>Total new proposed {(31.5+8) + (9.7+1+17.5)} = 67.7 MLD</b></p> <p><b><u>Rural Area:</u></b></p> <ul style="list-style-type: none"> <li>➤ Total estimated Solid Waste Generation: 263.70 TPD (Biodegradable &amp; non-biodegradable)</li> <li>➤ Total GP/VC: 1176 nos.</li> <li>➤ <b>Biodegradable Waste:</b> In rural areas 192.50 TPD solid waste is being generated and 100% treatment is ensured. Present solid waste treatment capacity of Rural areas is 262.20 TPD. Present treatment facilities are 79548 individual compost pit and 41899 Cattle feeding, 4046 community compost pit, Individual Biogas</li> </ul> |                                                                                        |

| Sl. No | Responsible Department / Organization | Action Points as per NGT order | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024 |
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|        |                                       |                                | <p>Plant: 640 nos. (0.16 TPD).</p> <p>➤ <b>Non-Biodegradable Waste:</b> In Rural areas 71.20 TPD non-Biodegradable waste generated and existing treatment facility is 68.36 TPD (1130 waste segregation sheds/storage/composting facilities at village level and using existing MRF facilities of nearby ULBs). The gap in treatment of non-biodegradable waste is 2.84 TPD and this will be mitigated through proposed 47 waste segregation storage sheds and utilization of existing MRF facility of adjacent ULBs.</p> <p><b>Sewage Management (Rural):</b></p> <p>➤ Total gray water generation in rural areas is 145.03 MLD. Present treatment capacity is 105.14 MLD through 16396 nos. Individual Soak Pits (3.20 MLD), 5159 nos. Community Soak Pits (33.17 MLD) and 351254 kitchen gardens (68.77 MLD). The gap in treatment of gray water of 39.89 MLD will be mitigated through construction of 57093 nos. of</p> |                                                                                        |

| Sl. No | Responsible Department / Organization  | Action Points as per NGT order                                                                                                                     | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                       |
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|        |                                        |                                                                                                                                                    | <p>Individual Soak Pit and 4470 nos. of Community Soak Pits.</p> <p><b>Faecal Sludge Management in Rural Tripura:</b></p> <p>➤ In rural areas, household rely on onsite sanitation and predominantly on twin pit system which do not generate faecal sludge. Mou Signed with ULBs for all 58 blocks to treat faecal sludge generated in rural areas. Moreover, 20971 single pit toilets have been converted into twin pits during 2023-24.</p> <p>➤ 8 nos. FSTP will be constructed on cluster basis with technical assistance from Consortium for DEWATS Dissemination, India during 2024-25. The team of CDD, India has visited/surveyed all the districts. Land has been identified and found feasible in six districts. Site selection is going on at Khowai, Teliamura and Melaghar.</p> |                                                                                                                                                                                                                              |
| 2      | Finance/ UDD/PWD (DWS)/RD D/ Panchayet | As per the order of Tribunal dated 13.04.2023, the State was required to ring fence an amount of Rs. 282.5 crores + Rs. 100 crores for urban solid | <ul style="list-style-type: none"> <li>• As per decision of the Cabinet, State has already Ring Fenced an amount of Rs. 282.58 crores.</li> <li>• A separate Ring-Fenced bank a/c was opened in Tripura Garmin Bank.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>• Initiatives shall be made to keep/credit the remaining Ring-Fenced amount in the bank account as directed by the Hon'ble NGT.</li> <li>• All concerned departments shall</li> </ul> |

| Sl. No | Responsible Department / Organization          | Action Points as per NGT order                                                                                                                                                                                                                                                         | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                              | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                 |
|--------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        |                                                | and sewage management, but, there is no clarity about the amount actually credited in the dedicated account. It is also not disclosed as to why full directed amount could not be ring fenced instead of mentioning separate funding sources from various Agencies.                    | <ul style="list-style-type: none"> <li>• A/C Name- Ring Fenced Account for Waste Management Tripura.</li> <li>• A/C No.- 8004010016746.</li> <li>• The present account balance of the Ring-Fenced Account is Rs.176.42 Cr.</li> <li>• Fund released by Finance to Ring Fenced Account (191.58 cr. + 50 cr.) = Rs. 241.58 cr.</li> <li>• Balance fund amounting Rs. 41.0 cr yet to be received from Finance Dept.</li> </ul>                      | incur the necessary expenditure to create facilities for Solid Waste Management and Sewage Management from the Ring-Fenced amount.                                                                                                                                                                                     |
| 3      | <b>UDD/PWD (DWS)/RD D/ Panchayet /DMs/ULBs</b> | It has been disclosed that 350.2 TPD waste generated by 20 urban local bodies (ULBs) is processed and existing designed facilities are for 446.0 TPD. When asked on adequacy of facilities to process daily incoming waste for composting, proper justification could not be provided. | <ul style="list-style-type: none"> <li>• All the ULBs were instructed to carry out fresh assessment of Solid Waste Generation based on the latest statistic of population and reassess the capacities of the Solid Waste Processing Plants including composting facilities. Further, it was also instructed to prepare action plan to mitigate any gap for both dry &amp; wet waste.</li> <li>• An RFP for the same is being prepared</li> </ul> | <ul style="list-style-type: none"> <li>• Fresh assessment of solid waste generation in each ULBs based on 2023-24 RoR population by engaging third party agency shall be done.</li> <li>• Proper calculation of solid waste processing capacity (dry &amp; wet) of each ULBs be done by UDD &amp; all ULBs.</li> </ul> |
| 4      | <b>UDD/PWD (DWS)/RD D/ Panchayet /DMs/ULBs</b> | It has been disclosed that there are 19 existing MRF Centres with segregation                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>• All the ULBs were instructed to carry out fresh assessment of Solid Waste Generation based on the latest statistic of</li> </ul>                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• The UDD and all ULBs shall take necessary initiatives for reconciliation of data with respect to each ULB on waste generation,</li> </ul>                                                                                                                                     |

| Sl. No | Responsible Department / Organization        | Action Points as per NGT order                                                                                                                                                                                                                                                                                                                                                                                                                      | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|        |                                              | centres but, reconciliation of data with respect to each ULB on waste generation, existing waste Processing facilities (in the form of MRF), actually utilised capacity and utilisation of compost and rejects management has not been provided.                                                                                                                                                                                                    | population and reassess the capacities of the Solid Waste Processing Plants including composting facilities. Further, it was also instructed to prepare action plan to mitigate any gap for both dry & wet waste.<br>• A RFP for the same is being prepared.                                                                                                                                                                                                                                                                                                                             | existing waste Processing facilities (in the form of MRF), actually utilised capacity and utilisation of compost and rejects management and also to take necessary action, accordingly.                                                                                                                                                                                                                                                                                                                     |
| 5      | <b>UDD/PWD (DWS)/ Forests/ RDD/ DMs/ULBs</b> | It is disclosed that Hapania legacy waste site at Agartala has been remediated and closed. Closure of site has to be done in accordance with the MSW Rules. It is further observed that 13 ULBs are yet to remediate their sites. It is mentioned that eight sites are remediated but it is not clear as to what work is remaining and whether legacy waste still exists in these 8 sites. In respect of quantities mentioned as bio-mined material | <ul style="list-style-type: none"> <li>• Out of 13 ULBs, 10 ULBs have already bioremediated the existing Legacy Waste (Panisagar, belonia, Sabroom, Kumarghat, Udaipur, Khowai, Melaghar, Ambassa, Sonamura, Amarpur).</li> <li>• The remediation work of Kailasahar &amp; Santirbazar will be completed by October, 2024 and Dharmanagar will be completed by September, 2024.</li> <li>• The Legacy Dump site of DC Nagar will be remediated by November, 2024.</li> <li>• The RDFs from 4 ULBs namely Panisagar, Kumarghat, Ambassa &amp; Amarpur are being sent to Cement</li> </ul> | <ul style="list-style-type: none"> <li>• Ensure scientific disposal of the legacy waste remediation outputs by September, 2024. Further, the concerned ULBs to immediately obtain Third-Part-Certification of post-remediation confirming scientific remediation. Plantation or other suitable activities shall be performed in the reclaimed land.</li> <li>• Forest Department may take necessary initiatives for planation or making park in the Hapania reclaimed legacy waste dumping site.</li> </ul> |

| Sl. No | Responsible Department / Organization   | Action Points as per NGT order                                                                                                                                                                                                                                                                                                                                      | Progress as on Date                                                                                                                                                                                                                                                            | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                               |
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|        |                                         | like good soil, inert, C&D waste and RDF, it has not been disclosed that how these fractions have been disposed.                                                                                                                                                                                                                                                    | Factories.                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                      |
| 6      | UDD/PWD (DWS)/RD D/ Panchayet /DMs/ULBs | We also find that out of 82.4 MLD of sewage generated by 20 ULBs, 61.0 MLD is generated by Agartala. In case of other ULBs, sewage generation is estimated between 1.0 to 3.0 MLD each and accordingly, sewage management facilities are to be designed and executed without further delay. For such ULBs, packages/modular decentralised plants may be considered. | <ul style="list-style-type: none"> <li>The UDD and all the ULBs have taken necessary initiatives to mitigate the gap in sewage management through construction of STPs of adequate capacities / In-situ Nala Treatment and oxidation ponds.</li> </ul>                         | <ul style="list-style-type: none"> <li>The UDD and all ULBs shall take necessary initiatives in time bound manner to execute the proposed sewage treatment plants/ oxidation pond/In-situ Nalla Treatment.</li> <li>The UDD &amp; ULBs may ensure that capacity of the proposed and ongoing STPs for each ULBs for treatment of sewage shall be adequate.</li> </ul> |
| 7.     | UDD/PWD (DWS)/DMs/ULBs                  | In Agartala, 8 MLD STP is underutilized. Agartala MC and other ULBs shall ensure that STPs should not remain underutilized and a simultaneously household connection is secured.                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>To increase the utilization of STP to its optimal capacity through interception and diversion of drains, the work of installing additional sewage pumping station has been started and shall be completed by November, 2024.</li> </ul> | <ul style="list-style-type: none"> <li>UDD/ all ULBs shall take necessary initiatives to ensure the sewerage connectivity with the existing as well as proposed STPs for their full capacity utilisation within stipulated timeline.</li> </ul>                                                                                                                      |

| Sl. No                                                                                                                                                                                                                        | Responsible Department / Organization              | Action Points as per NGT order                                                                                                                                                                                                                                          | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                  | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| 8.                                                                                                                                                                                                                            | UDD/PWD (DWS)/RD D/ Panchayet /DMs/ULBs/TSPCB/DSTE | Concentration of Faecal Coliform in the treated water discharged from the STP shall be analyzed and filed before the Tribunal along with the next report. Further, performance results of in-situ bio-remediation shall be determined and filed before the Hon'ble NGT. | <ul style="list-style-type: none"> <li>All concerned will take necessary action as per the direction of the Hon'ble NGT.</li> </ul>                                                                                                                                                                                                                                                                  | <ul style="list-style-type: none"> <li>The ASCL shall take necessary initiative to assess the performance results of existing 1.4 MLD in-situ bio-remediation plant through accredited third party.</li> <li>The AMC shall regularly analyse the concentration of Faecal Coliform in the treated waste water discharged from the existing STP.</li> <li>The TSPCB shall also monitor the Faecal Coliform along with other parameters in the treated waste water discharged from the existing STP.</li> </ul> |
| 9.                                                                                                                                                                                                                            | UDD/PWD (DWS)/RD D/ Panchayet /DMs/ULBs/TSPCB/DSTE | The State of Tripura to file the next six-monthly report keeping in view the observations made by the Hon'ble NGT in its Order dated 16.05.2024. The matter will be listed on 05.12.2024 for consideration of report in respect of State of Tripura.                    | <ul style="list-style-type: none"> <li>Regular Review Meetings are being held at State as well as District Level.</li> <li>All concerned Department shall take necessary initiatives to comply with the direction of the Hon'ble NGT.</li> <li>All concerned shall provide the updated status report on each component to be submitted before the Hon'ble NGT within stipulated timeline.</li> </ul> | <ul style="list-style-type: none"> <li>The six-monthly report shall be submitted on behalf of the State highlighting all the progress made on Solid Waste &amp; Liquid Waste Management as per the direction of the Hon'ble NGT.</li> <li>All concerned departments shall review their compliance/ progress in terms of direction issued by the Hon'ble NGT twice a month.</li> </ul>                                                                                                                        |
| <b>Issue: Restoration of Polluted River Stretches</b><br><b>Ref: NGT Orders dated 28.02.2020 in O.A. No: 606/2018 and orders dated 29.11.2019 &amp; 21.09.2020 in OA No.673/2018 (Application Disposed) and EA No.35/2023</b> |                                                    |                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Sl. No | Responsible Department / Organization                           | Action Points as per NGT order                                                                                                                                                                                                                                                                          | Progress as on Date                                                                                                                                                                                                                                                                                                                                                            | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                                                                       |
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| 10     | UDD/<br>Forests/<br>PWD<br>(WR)/ I & C/<br>DMs/ULBs             | <ul style="list-style-type: none"> <li>• Implementation of the Individual Action Plan for Restoration of Identified Six polluted River stretches</li> <li>• It was declared in the 15<sup>th</sup> CMC meeting that the number of polluted river stretches of the state reduced from 6 to 1.</li> </ul> | <ul style="list-style-type: none"> <li>• Action Plan for Restoration of Identified Six polluted River stretches is under implementation.</li> </ul>                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>• All concerned shall implement the Action Plan for restoration of identified polluted river stretches with utmost priority. Special emphasis shall be given to the Model River Haora.</li> <li>• Construction of all Sewage Treatment Plants shall be expedited.</li> <li>• Proper monitoring shall be done to prohibit the illegal encroachment, dumping of all types of wastes and illegal sand mining.</li> </ul> |
| 11     | DSTE(RRC) / TSPCB                                               | Monitoring of the implementation of Action Plan for restoration of Rivers by River Rejuvenation Committee (RRC)                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• The RRC is monitoring the implementation of the Action Plan for restoration of identified river stretches with special emphasis on Haora River. The last review meeting was held on 25.03.2024 under the Chairmanship of the Director, DSTE.</li> <li>• The Haora River Front Development Project is under implementation.</li> </ul> | <ul style="list-style-type: none"> <li>• The RRC shall monitor the implementation of the Action Plan for restoration of identified river stretches with special emphasis on Haora River.</li> <li>• The ASCL shall take necessary steps for implementation of the different projects related to Howra River rejuvenation with utmost priority.</li> </ul>                                                                                                    |
| 12     | UDD/<br>Forests/<br>PWD<br>(WR)/ I & C /DMs/ULBs/TSPCB/AMC/ASCL | Submission of Monthly Progress Report showing incremental progress in implementation of the Action Plan.                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>• UDD, Forest and TSPCB are submitting monthly Progress Report on regular basis.</li> <li>• Monthly Progress Report is being submitted to NMCG with a copy to CPCB on regular basis.</li> <li>• In the 15<sup>th</sup> Central Committee</li> </ul>                                                                                     | <ul style="list-style-type: none"> <li>• All concerned shall submit the monthly progress report within 20<sup>th</sup> of every month showing incremental progress to the TSPCB.</li> <li>• Monthly Progress Report shall be submitted to NMCG with a copy to CPCB within stipulated timeline by the TSPCB.</li> </ul>                                                                                                                                       |

| Sl. No                                                                                                | Responsible Department / Organization | Action Points as per NGT order                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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|                                                                                                       |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Meeting, it was informed that the number of polluted river stretches of the state is now been reduced to 1 from 6.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Issue: Pollution Control Boards are the weak link (Regarding inadequate facilities/staff etc.)</b> |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Ref: NGT Orders dated 23.11.2023 in O.A. No: 693/2023</b>                                          |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 13                                                                                                    | DSTE/<br>TSPCB/<br>Finance            | Vide NGT Order Dated 23.11.2023 in OA No. 693/2023, the State of Tripura was made a party in this matter. It is directed to file the Report showing sanctioned strength of Staff in the concerned SPCBs, the Ratio of Administrative, Ministerial and Technical staff in SPCB and regulating & Monitoring facilities which was available with the SPCBs. The report shall have to be filed by the Principal Secretary, Environment Department, Govt of Tripura within 8 weeks from the date of hearing. | <ul style="list-style-type: none"> <li>The TSPCB has set up laboratory in the Head Office, Agartala. Total man power of TSPCB in position is 22.</li> <li>Two Zonal Offices are functioning at Kumarghat and Udaipur without any laboratory facilities.</li> <li>Supply Orders have been issued for procurement of additional instruments/ equipment. Some major equipment has already been installed for strengthening of the Laboratory of TSPCB.</li> <li>Tender flouted for selection of agency for obtaining NABL Accreditation for laboratory of TSPCB.</li> <li>The State Government and TSPCB have already submitted Affidavit before the Hon'ble NGT.</li> <li>Initiatives have already been taken for creation of Additional</li> </ul> | <ul style="list-style-type: none"> <li>TSPCB shall take necessary initiatives for creation of adequate additional posts/manpower required for smooth functioning of the statutory duties as well as to comply with the directions issued by the Supreme Court, National Green Tribunal and other judicial bodies related to environment and ecology at the earliest.</li> <li>Initiatives be taken for strengthening of the existing laboratory at Agartala and also for setting up of Zonal Laboratories at Zonal Offices of TSPCB and equipped them with requisite staff &amp; instruments.</li> <li>TSPCB shall expedite the initiatives to obtain NABL Accreditation for the existing laboratory of the TSPCB.</li> </ul> |

| Sl. No                                                                                                                                           | Responsible Department / Organization | Action Points as per NGT order                                            | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                  |                                       |                                                                           | Posts by the TSPCB.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Issue : Plastic Waste Management as per Plastic Waste Management Rules, 2016</b><br><b>Ref : NGT order dated 06.12.2019 in OA No.247/2017</b> |                                       |                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 14                                                                                                                                               | DMs/SPs/SDMs/SDPOs/BD Os/ULBs         | Enforcement of ban imposed on the use Identified Single Use Plastic Items | <ul style="list-style-type: none"> <li>Hon'ble Chief Minister has launched "Plastic Mukta Tripura" on 15.07.2023.</li> <li>DMs, SDMs &amp; ULBs are conducting raids and imposing penalty on violators.</li> <li>Extensive awareness activities involving ICA &amp; Education Department is being carried out in all the Districts.</li> <li>89 nos. of raids conducted by the District Administration/Subdivisional Administration/ULBs/Home (Police) Department; 160 Kgs of prohibited SUP seized and an amount of Rs. 23200/- has been realized in the month of August, 2024.</li> <li>AMC constituted four teams for enforcement of Ban on SUP and accordingly raids are being conducted. Other ULBs have also constituted teams for enforcement o ban on SUP.</li> <li>TSPCB has organized a workshop on</li> </ul> | <ul style="list-style-type: none"> <li>All concerned shall take necessary initiatives for strict &amp; effective enforcement of the ban imposed on the use of Identified Single Use Plastic Items in the State.</li> <li>All concerned shall submit the monthly report regarding enforcement in the prescribed format to the TSPCB.</li> <li>Strict vigilance shall be done to restrict dumping of non-biodegradable wastes &amp; plastic wastes into storm water drains.</li> <li>The amount of penalty/pollution cost realized from the violators shall be deposited to the bank account of TSPCB (A/c No- 33906035634, SBI, TLA House Branch). A formal communication may be made through email after deposition of pollution cost in the TSPCB Bank Account.</li> </ul> |

| Sl. No | Responsible Department / Organization  | Action Points as per NGT order                                                                                        | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                         |
|--------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        |                                        |                                                                                                                       | implementation of ban on SUP with the Officials & Task Forces of AMC on 30.07.2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                |
| 15     | I & C /TRLM/ TULM                      | Development, Manufacture and Promotion of Alternatives of Single Use Plastic Items and Promoting New Innovative Ideas | <ul style="list-style-type: none"> <li>Many Advt. were published in local newspapers inviting willing entrepreneurs to encourage to produce alternatives of SUP.</li> <li>Tripura Industrial Investment Scheme has been launched wherein provision for incentives are there for alternatives of SUP producers.</li> <li>SHGs under TRLM are making paper plates, cups, pottery-based utensils, jute bags and cloth bags.</li> <li>Selling point of alternatives of SUP items is functional at Sanjog outlet at PO Chowmuhani, MBB Airport, 2 nos. Rural Mart at Nalchar RD Block &amp; Salema RD Block, BDO Offices, DM Office of Sepahijala District.</li> <li>Training of making cloth bags/ jute bags is being conducted through RUDSETI.</li> </ul> | <ul style="list-style-type: none"> <li>I &amp; C Department shall provide necessary assistance to entrepreneurs for setting up of manufacturing units of alternative items of SUP.</li> <li>The TRLM &amp; TULM shall take necessary initiatives to manufacture the alternatives of the SUP items through SHGs and make it available in the market.</li> </ul> |
| 16     | ICA/ UDD/ ULBs/ TSPCB/ DSTE/ Education | Awareness generation and capacity building                                                                            | <ul style="list-style-type: none"> <li>Extensive awareness activities involving ICA, School Education Department are being carried out time to time.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>The IEC video clips and other photographs of waste management shall be displayed across the big digital screens installed by ICA Department.</li> </ul>                                                                                                                                                                 |

| Sl. No                                                                                                                                                                                                                                                                                                                                                                             | Responsible Department / Organization  | Action Points as per NGT order                                      | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Issue: Bio Medical Waste Management as per Bio Medical Waste Management Rules, 2016 and Scientific Disposal of Bio-Medical Waste arising out of COVID-19 Treatment/ Handling/ Diagnosis'</b><br><b>Ref: NGT Orders dated 22.01.2020 in O.A. No.710-713 of 2017 and NGT Orders dated 21.04.2020 &amp; 18.01.2021 in O.A. No.72/2020. (Application is Disposed on 18.01.2021)</b> |                                        |                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 17                                                                                                                                                                                                                                                                                                                                                                                 | Health & Family Welfare/ TSPCB/NHM/DHS | Operational status of Common Bio Medical Treatment Facility (CBWTF) | <ul style="list-style-type: none"> <li>• OCEMS installed &amp; connected with CPCB server</li> <li>• TSPCB has already provided the Unique Number of each Healthcare Facility for implementation of bar-coding system.</li> <li>• A Team is being constituted under State Nodal Officer, BMW, Tripura with members represented from TSPCB &amp; AMC for assessment as per 'Checklist for Performance Evaluation of the Common Bio-medical Waste Treatment and Disposal Facility (CBWTF). Report will be submitted within September 2024.</li> <li>• Necessary steps have been taken for introducing bar coding system for collection/ transportation of BMW through the CBWTF Operator as per the CPCB</li> </ul> | <ul style="list-style-type: none"> <li>• Regular monitoring and enforcement drive shall be done to ensure proper segregation, collection and disposal of BMW generated from the HCFs and also to check the operational status of the CBWTF at DC Nagar.</li> <li>• Necessary initiatives shall be taken for introducing bar coding system for collection/ transportation of bio medical wastes within September, 2024.</li> <li>• All the bedded Health Care Facilities shall take necessary initiatives for proper treatment of Sewage as well as liquid wastes before discharge.</li> </ul> |

| Sl. No | Responsible Department / Organization | Action Points as per NGT order | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024 |
|--------|---------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|        |                                       |                                | <p><b>Guidelines for Bar Code System for Effective Management of BMW</b> and work will be completed within September, 2024</p> <ul style="list-style-type: none"> <li>Health Department have already notified rate structure to collect the BMW from private HCFs in the AMC area at the existing rate and terms &amp; conditions of AMC. BMW collection by the existing TSPCB authorized CBWTF have accordingly started.</li> <li>A Committee has been constituted under the Chairmanship of the Mission Director, NHM with members representing from AMC, UDD, TSPCB for finalization of rate chart for BMW collection in other ULBs. Meeting of the said Committee is scheduled on <b>06.09.2024</b> for further course of action.</li> <li>Standard Operating Procedures (SOPs) on 'Liquid Waste Management' mentioned in the <b>Guidelines for</b></li> </ul> |                                                                                        |

| Sl. No                                                                                                                                                                                                                | Responsible Department / Organization                    | Action Points as per NGT order                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                       |                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Implementation of 'KAYAKALP' Initiative,</b> Ministry of Health & Family Welfare has been circulated to all Districts with focus to the HCFs which need to introduce Liquid Waste Management Facility immediately.                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Proper Management of Sewage and Construction of adequate Treatment Plants, water body conservation &amp; restoration, rain water harvesting etc.</b><br><b>NGT Case No. OA No. 156/2023, 263/2022, 22/2024(CZ)</b> |                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                       | <b>UDD/ULBs/ PWD(DWS) / RDD/PWD (WR)/Fisheries/TSPCB</b> | <ul style="list-style-type: none"> <li>Chief Secretaries of all States must work in mission mode for strict compliance of timelines for commencing new projects, completing ongoing projects and adopting interim phyto/bio-remediation measures, failing which in terms of earlier orders be deposited with the MoJS, to be utilised in the respective States as per action plan to be approved by the NRRM. Other steps in terms of action plans for abatement to pollution and rejuvenation of rivers, including preventing discharge or dumping of liquid</li> </ul> | <ul style="list-style-type: none"> <li>State Level Committee (Nodal Agency) under the chairmanship Chief Wildlife Warden is monitoring the water body conservation activity in the state. The last meeting was held on 02.07.2024.</li> <li>Till date 1645 water bodies have been identified and physical as well as qualitative parameters of the water samples collected from these water bodies have been analyzed.</li> <li>An Action Plan has been prepared on implementation of rain water harvesting system in the State.</li> <li>In the State of Tripura, the Rule of Tripura Building</li> </ul> | <ul style="list-style-type: none"> <li>The UDD &amp; ULBs may take necessary initiatives in time bound manner for construction of STPs and other facilities for sewage management.</li> <li>All ULBs may take necessary initiatives for regular monitoring for conservation and rejuvenation of the identified water bodies and rivers of the State.</li> <li>The PWD (WR)/RDD may take initiatives for creation / construction of rain water harvesting facilities in the State.</li> </ul> |

| Sl. No | Responsible Department / Organization | Action Points as per NGT order                                                                                                                                                                                                                                                                                                                                                                                                                                           | Progress as on Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Decision taken in meeting of 35 <sup>th</sup> State Level Committee held on 31.08.2024 |
|--------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|        |                                       | <p>and solid waste, maintaining e-flow, protecting floodplains, using treated sewage for secondary purposes, developing bio-diversity parks, protecting water bodies, regulating ground water extraction, water conservation, maintaining water quality etc. be taken effectively.</p> <ul style="list-style-type: none"> <li>• The Chief Secretaries of all States/UTs may personally monitor progress at least once every month and the NRRM every quarter.</li> </ul> | <p>Rules, 2017 makes it mandatory to create RWH structures for all new building within the jurisdiction of its municipal areas.</p> <ul style="list-style-type: none"> <li>• The PWD(WR) is presently taken up the construction work of Rain Water Harvesting Plant.</li> <li>• The UDD, ULBs and PWD (DWS) are taking necessary initiatives for construction of STPs and other facilities for sewage management.</li> <li>• The treated waste water discharged from the existing STP is being reused for road watering and gardening.</li> </ul> |                                                                                        |

Signed by Mahender Singh

Date: 15-09-2024 13:01:20

(Mahendar Singh, IFS)

Director

Science, Technology & Environment  
Government of Tripura

**ANNEXURE-I****List of Participants in 35<sup>th</sup> State Level Committee Meeting held  
on 31/08/2024**

| <b>Sl. No.</b> | <b>Name, Designation &amp; Department</b>                                                                          |
|----------------|--------------------------------------------------------------------------------------------------------------------|
| 1.             | Sri J.K. Sinha, Chief Secretary, Tripura                                                                           |
| 2.             | Sri Brijesh Pandey, Secretary to the Government of Tripura, Revenue & PWD (DWS, Sanitation), Tripura               |
| 3.             | Sri Pravin Agarwal, PCCF (P & D), Forest Department, Government of Tripura                                         |
| 4.             | Sri Kiran Gittee, Secretary to the Government of Tripura, Health and Industries & Commerce, Tripura                |
| 5.             | Sri Abhisek Singh, Secretary to the Government of Tripura, Power & UD Department, Tripura                          |
| 6.             | Dr. K. Sasikumar, Secretary to the Government of Tripura, Department of Science, Technology & Environment, Tripura |
| 7.             | Sri Apurba Roy, Secretary to the Government of Tripura, Finance Department, Tripura                                |
| 8.             | Dr. Sailesh Yadav, Municipal Commissioner, Agartala Municipal Corporation                                          |
| 9.             | Sri L. Darlong, IGP (Crime), Home (Police) Department, Government of Tripura                                       |
| 10.            | Sri Jeya Raghul Geshan B, Director, IT Department                                                                  |
| 11.            | Smt. Kuntal Das, Addl. Secretary to the Government of Tripura, RD Department                                       |
| 12.            | Sri Rajat Pant, Director, UD Department, Government of Tripura                                                     |
| 13.            | Sri Mahendar Singh, Director, Science, Technology & Environment Department, Government of Tripura.                 |
| 14.            | Sri Rajib Datta, MD, NHM, Tripura                                                                                  |
| 15.            | Smt. Swapna Debnath, Addl. Director, I & C Department                                                              |
| 16.            | Sri M. K. Gop, Chief Engineer, UD Department, Government of Tripura                                                |
| 17.            | Dr. Bishu Karmakar, Member Secretary, Tripura State Pollution Control Board                                        |
| 18.            | Dr. S. Reang, SNO, BMW, Health & Family Welfare Department, Govt. of Tripura.                                      |
| 19.            | Dr Dipayan Ghosh, CoO, TRLM                                                                                        |
| 20.            | Sri Debabrata Bhowmik, SWM, TULM                                                                                   |
| 21.            | Sri Dipak Rudra Pal, Jr. Scientist, Tripura State Pollution Control Board                                          |



## Tripura State Pollution Control Board

(A Statutory Organization Under Government of Tripura)

Department of Science, Technology & Environment



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**No.F.13(23)/TSPCB/NGT/606/Pt-II**

**September 17 , 2024**

To:

1. Principal Chief Conservator of Forest, Govt. of Tripura.
2. Principal Secretary, Department of Forest, Govt. of Tripura.
3. Secretary, PWD(DWS), Sanitation part, Govt. of Tripura.
4. Secretary, Science, Technology & Environment, Govt. of Tripura
5. Secretary, Revenue Department, Government of Tripura
6. Secretary, Finance Department, Govt. of Tripura.
7. Secretary, Education Department, Govt. of Tripura.
8. Secretary, Urban Development Department, Govt. of Tripura.
9. Secretary, ICA Department, Tripura.
10. Secretary, Agriculture Department, Govt. of Tripura.
11. Secretary, Rural Development Department, Govt. of Tripura.
12. Additional Director General/Inspector General of Police, Govt. of Tripura.
13. Director, Urban Development Department, Govt. of Tripura.
14. Director, Department of Industries & Commerce, Govt. of Tripura.
15. Director, Science, Technology & Environment, Govt. of Tripura.
16. Director, WSSO, PWD (DWS), Govt. of Tripura
17. District Magistrate & Collector, West Tripura, Sepahijala, Gomati, South Tripura, Khowai, Dhalai, Unakoti & North Tripura District.
18. District Forest Officer, West Tripura, Sepahijala, Gomati, South Tripura, Khowai, Dhalai, Unakoti & North Tripura District.
19. Municipal Commissioner, Agartala Municipal Corporation, Govt. of Tripura.
20. Regional Director, Central Pollution Control Board, Shillong.

  
(Dr. BISHU KARMAKAR)  
Member Secretary,  
TSPCB, Agartala.

(Dr. Bishu Karmakar)  
Member Secretary

Copy to:

The PPS to the Chief Secretary, Tripura for kind information of the Chief Secretary..

ANALYTICAL RESULTS OF SURFACE WATER SAMPLES COLLECTED FROM SIX IDENTIFIED RIVER STRETCH OF TRIPURA

ANNEXURE-3

| Sl. No. | June, 16 |     |     | July, 16 |     |     | August, 16 |     |     | September, 16 |     |     |
|---------|----------|-----|-----|----------|-----|-----|------------|-----|-----|---------------|-----|-----|
|         | BOD      | TC  | FC  | BOD      | TC  | FC  | BOD        | TC  | FC  | BOD           | TC  | FC  |
| S 1     | 1.99     | 350 | 250 | 1.57     | 350 | 240 | 1.21       | 350 | 220 | 1.05          | 350 | 220 |
| S 2     | 3.86     | 430 | 340 | 3.59     | 430 | 350 | 3.13       | 430 | 280 | 3.01          | 400 | 240 |
| S 3     | 1.71     | 430 | 350 | 1.06     | 430 | 280 | 1.05       | 430 | 240 | 0.89          | 400 | 220 |
| S 4     | 1.01     | 430 | 350 | 1.23     | 430 | 240 | 1.07       | 350 | 220 | 1.01          | 350 | 240 |
| S 5     | 1.61     | 280 | 220 | 1.54     | 280 | 210 | 1.38       | 350 | 210 | 1.05          | 350 | 220 |
| S 6     | 2.17     | 430 | 350 | 2.18     | 430 | 280 | 2.05       | 350 | 240 | 1.76          | 350 | 220 |
| S7      | 3.89     | 350 | 220 | 3.15     | 350 | 240 | 3.08       | 350 | 220 | 2.88          | 350 | 220 |
| S8      | 3.93     | 430 | 350 | 3.08     | 430 | 280 | 2.51       | 350 | 280 | 2.09          | 350 | 220 |
| S9      | 3.02     | 540 | 350 | 3.17     | 540 | 350 | 3.05       | 540 | 350 | 2.31          | 540 | 280 |
| S10     | 0.79     | 430 | 280 | 0.75     | 430 | 280 | 0.68       | 350 | 280 | 0.57          | 350 | 240 |
| S11     | 1.30     | 350 | 280 | 1.47     | 350 | 280 | 1.09       | 350 | 240 | 0.69          | 350 | 220 |
| S12     | 1.51     | 350 | 280 | 1.32     | 350 | 240 | 1.18       | 350 | 220 | 1.05          | 350 | 220 |
| S13     | 3.49     | 430 | 280 | 3.35     | 350 | 240 | 3.01       | 350 | 240 | 2.59          | 350 | 220 |
| S14     | 1.13     | 350 | 220 | 1.31     | 350 | 280 | 1.19       | 350 | 220 | 1.01          | 350 | 240 |
| S15     | 2.04     | 430 | 350 | 2.13     | 430 | 280 | 1.89       | 430 | 280 | 1.63          | 400 | 240 |
| S16     | 2.61     | 280 | 220 | 2.09     | 280 | 170 | 1.87       | 280 | 210 | 1.34          | 350 | 220 |
| S17     | 2.57     | 350 | 240 | 2.61     | 350 | 280 | 2.57       | 350 | 240 | 2.01          | 350 | 220 |
| S18     | 4.85     | 350 | 280 | 4.31     | 350 | 280 | 4.09       | 350 | 280 | 3.56          | 280 | 220 |

| Sl. No. | October, 16 |     |     | November, 16 |     |     | December, 16 |     |         |
|---------|-------------|-----|-----|--------------|-----|-----|--------------|-----|---------|
|         | BOD         | TC  | FC  | BOD          | TC  | FC  | BOD          | TC  | FC      |
| S 1     | 1.01        | 350 | 200 | 0.87         | 350 | 220 | 0.63         | 350 | 200     |
| S 2     | 2.95        | 350 | 220 | 2.31         | 350 | 200 | 2.05         | 350 | 200     |
| S 3     | 0.75        | 350 | 220 | 0.58         | 350 | 200 | 0.37         | 350 | 2200.61 |
| S 4     | 0.89        | 350 | 220 | 0.75         | 350 | 200 | 0.61         | 280 | 170     |
| S 5     | 0.95        | 350 | 220 | 0.88         | 350 | 240 | 0.77         | 350 | 200     |
| S 6     | 1.65        | 350 | 220 | 1.23         | 350 | 220 | 1.09         | 280 | 170     |
| S7      | 2.33        | 350 | 200 | 2.07         | 400 | 240 | 1.93         | 350 | 220     |
| S8      | 1.97        | 350 | 220 | 1.08         | 400 | 200 | 1.02         | 350 | 180     |
| S9      | 2.15        | 440 | 240 | 2.08         | 540 | 280 | 1.98         | 540 | 240     |
| S10     | 0.48        | 350 | 220 | 0.39         | 350 | 240 | 0.21         | 350 | 220     |
| S11     | 0.61        | 350 | 200 | 0.49         | 350 | 220 | 0.28         | 350 | 240     |
| S12     | 0.91        | 350 | 220 | 0.88         | 350 | 200 | 0.81         | 350 | 200     |
| S13     | 2.31        | 280 | 170 | 2.05         | 350 | 200 | 1.85         | 280 | 170     |
| S14     | 0.89        | 350 | 220 | 0.81         | 350 | 200 | 0.57         | 280 | 170     |
| S15     | 1.51        | 350 | 240 | 1.37         | 350 | 220 | 1.21         | 350 | 240     |
| S16     | 1.04        | 350 | 200 | 0.87         | 350 | 220 | 0.81         | 350 | 220     |
| S17     | 1.85        | 350 | 240 | 1.59         | 350 | 220 | 1.31         | 350 | 200     |
| S18     | 3.21        | 280 | 170 | 3.08         | 280 | 170 | 2.77         | 108 | 170     |

\*BOD = Bio Chemical Oxygen Demand, TC = Total Coliform, FC = Faecal Coliform

Site of Collection

S-1: Gomti River at Jatanbari, S-2: Gomti River at Sonamura, S-3: Gomti River at Rajdharnagar, S-4: Gomti River at Amarpur, S-5: Gomti River at Tirthamukh, S-6: Gomti River at Subhashsetu, S-7; Burigaon River at Bishalgarh, S-8: Haora River at Chandrapur, S-9: Haora River at Dashamighat, S-10: Haora River at Aralia, S-11: Haora River at Kalabagan, S-12: Haora River at Joynagar, S-13: Manu River at Kailasahar, S-14: Khowai River at Trishabari, S-15: Khowai River at Kumari Madhuti setu, S-16: Khowai River at Chakmaghat, S-17: Khowai River at Karailong, S-18: Juri River at Krishnapur.

ANALYTICAL RESULTS OF SURFACE WATER SAMPLES COLLECTED FROM SIX IDENTIFIED RIVER STRETCH OF TRIPURA

| Sl. No. | January, 17 |     |     | February, 17 |     |     | March, 17 |     |     | April, 17 |     |     | May, 17 |     |     | June, 17 |     |     |
|---------|-------------|-----|-----|--------------|-----|-----|-----------|-----|-----|-----------|-----|-----|---------|-----|-----|----------|-----|-----|
|         | BOD         | TC  | FC  | BOD          | TC  | FC  | BOD       | TC  | FC  | BOD       | TC  | FC  | BOD     | TC  | FC  | BOD      | TC  | FC  |
| S 1     | 0.41        | 350 | 200 | 0.32         | 350 | 170 | 0.38      | 350 | 200 | 0.18      | 350 | 220 | 0.35    | 350 | 220 | 0.28     | 350 | 200 |
| S 2     | 1.93        | 350 | 170 | 1.75         | 350 | 170 | 1.58      | 350 | 200 | 1.64      | 350 | 210 | 1.98    | 350 | 220 | 2.32     | 350 | 210 |
| S 3     | 0.31        | 350 | 200 | 0.25         | 350 | 170 | 0.29      | 350 | 200 | 0.35      | 350 | 220 | 0.46    | 350 | 210 | 0.52     | 350 | 200 |
| S 4     | 0.55        | 400 | 210 | 0.48         | 350 | 200 | 0.53      | 350 | 210 | 0.64      | 350 | 220 | 0.78    | 350 | 200 | 0.88     | 350 | 220 |
| S 5     | 0.70        | 350 | 200 | 0.55         | 350 | 200 | 0.72      | 350 | 200 | 0.78      | 350 | 220 | 0.96    | 350 | 220 | 0.96     | 350 | 210 |
| S 6     | 0.98        | 350 | 210 | 0.90         | 350 | 200 | 1.18      | 350 | 210 | 1.06      | 350 | 220 | 1.14    | 350 | 210 | 1.08     | 350 | 200 |
| S7      | 1.69        | 350 | 200 | 1.30         | 350 | 170 | 1.45      | 350 | 200 | 1.54      | 350 | 210 | 1.68    | 350 | 200 | 1.84     | 350 | 210 |
| S8      | 0.91        | 280 | 170 | 0.84         | 350 | 200 | 0.92      | 350 | 210 | 1.08      | 350 | 210 | 1.24    | 350 | 210 | 1.32     | 350 | 200 |
| S9      | 1.57        | 540 | 220 | 1.32         | 540 | 200 | 1.54      | 540 | 210 | 1.62      | 540 | 220 | 1.84    | 540 | 220 | 1.98     | 540 | 210 |
| S10     | 0.13        | 350 | 200 | 0.11         | 350 | 170 | 0.18      | 350 | 200 | 0.28      | 350 | 210 | 0.42    | 350 | 210 | 0.94     | 350 | 220 |
| S11     | 0.20        | 350 | 200 | 0.15         | 350 | 200 | 0.19      | 350 | 200 | 0.28      | 350 | 210 | 0.35    | 350 | 200 | 0.86     | 350 | 210 |
| S12     | 0.55        | 350 | 200 | 0.50         | 350 | 200 | 0.62      | 350 | 200 | 0.78      | 350 | 220 | 0.88    | 350 | 210 | 1.24     | 350 | 200 |
| S13     | 1.59        | 350 | 200 | 1.18         | 280 | 170 | 1.27      | 350 | 200 | 1.38      | 350 | 220 | 1.48    | 350 | 220 | 1.58     | 350 | 210 |
| S14     | 0.39        | 350 | 220 | 0.31         | 350 | 200 | 0.42      | 350 | 170 | 0.54      | 350 | 170 | 0.68    | 350 | 190 | 0.84     | 350 | 200 |
| S15     | 1.01        | 350 | 220 | 0.78         | 350 | 200 | 0.82      | 350 | 210 | 0.98      | 350 | 220 | 1.24    | 350 | 200 | 1.48     | 350 | 210 |
| S16     | 0.75        | 350 | 200 | 0.68         | 350 | 200 | 0.74      | 350 | 200 | 0.88      | 350 | 210 | 0.94    | 350 | 200 | 1.24     | 350 | 210 |
| S17     | 1.08        | 350 | 220 | 0.59         | 350 | 200 | 0.65      | 350 | 210 | 0.88      | 350 | 220 | 0.94    | 350 | 200 | 1.25     | 350 | 210 |
| S18     | 2.35        | 350 | 200 | 2.08         | 350 | 200 | 2.15      | 350 | 210 | 2.24      | 350 | 210 | 2.38    | 350 | 210 | 2.54     | 350 | 210 |

| Sl. No. | July, 17 |     |     | August, 17 |     |     | September, 17 |     |     | October, 17 |     |     | November, 17 |     |     | December, 17 |     |     |
|---------|----------|-----|-----|------------|-----|-----|---------------|-----|-----|-------------|-----|-----|--------------|-----|-----|--------------|-----|-----|
|         | BOD      | TC  | FC  | BOD        | TC  | FC  | BOD           | TC  | FC  | BOD         | TC  | FC  | BOD          | TC  | FC  | BOD          | TC  | FC  |
| S 1     | 0.34     | 350 | 210 | 0.86       | 350 | 220 | 0.58          | 350 | 210 | 0.28        | 280 | 170 | 0.20         | 280 | 170 | 0.12         | 280 | 170 |
| S 2     | 2.08     | 350 | 210 | 2.44       | 350 | 210 | 2.18          | 350 | 210 | 1.56        | 350 | 170 | 1.18         | 350 | 170 | 0.96         | 280 | 170 |
| S 3     | 0.94     | 350 | 210 | 1.34       | 350 | 210 | 1.14          | 350 | 210 | 0.84        | 350 | 170 | 0.68         | 280 | 170 | 0.44         | 280 | 140 |
| S 4     | 1.28     | 350 | 210 | 1.54       | 350 | 200 | 1.28          | 350 | 210 | 0.96        | 350 | 210 | 0.74         | 280 | 170 | 0.58         | 280 | 170 |
| S 5     | 1.24     | 350 | 220 | 1.38       | 350 | 220 | 1.26          | 350 | 210 | 1.04        | 280 | 170 | 0.64         | 280 | 170 | 0.48         | 280 | 140 |
| S 6     | 1.28     | 350 | 210 | 1.96       | 350 | 210 | 1.64          | 350 | 210 | 1.18        | 350 | 210 | 1.02         | 350 | 210 | 0.68         | 280 | 170 |
| S7      | 1.98     | 350 | 220 | 2.28       | 350 | 210 | 2.02          | 350 | 210 | 1.58        | 350 | 210 | 1.14         | 280 | 170 | 0.94         | 280 | 170 |
| S8      | 1.54     | 350 | 210 | 1.88       | 350 | 220 | 1.56          | 350 | 210 | 1.08        | 350 | 210 | 0.56         | 280 | 170 | 0.44         | 280 | 170 |
| S9      | 2.08     | 540 | 220 | 2.36       | 540 | 210 | 2.14          | 540 | 210 | 1.38        | 540 | 220 | 1.04         | 540 | 170 | 0.68         | 430 | 220 |
| S10     | 1.28     | 350 | 210 | 1.36       | 350 | 220 | 1.22          | 350 | 210 | 1.04        | 350 | 210 | 0.68         | 350 | 210 | 0.52         | 280 | 170 |
| S11     | 1.24     | 350 | 220 | 1.68       | 350 | 210 | 1.38          | 350 | 210 | 1.04        | 280 | 170 | 0.84         | 280 | 170 | 0.54         | 280 | 170 |
| S12     | 1.48     | 350 | 210 | 1.88       | 350 | 220 | 1.56          | 350 | 210 | 1.22        | 350 | 210 | 1.04         | 280 | 170 | 0.68         | 280 | 170 |
| S13     | 1.74     | 350 | 210 | 1.88       | 350 | 210 | 1.52          | 350 | 210 | 1.18        | 280 | 170 | 1.08         | 280 | 170 | 0.56         | 280 | 140 |
| S14     | 0.96     | 350 | 210 | 1.34       | 350 | 200 | 1.08          | 350 | 210 | 0.58        | 350 | 210 | 0.42         | 350 | 210 | 0.36         | 350 | 210 |
| S15     | 1.64     | 350 | 220 | 1.88       | 350 | 210 | 1.62          | 350 | 200 | 1.24        | 280 | 170 | 1.08         | 280 | 170 | 0.88         | 280 | 170 |
| S16     | 1.36     | 350 | 210 | 1.88       | 350 | 210 | 1.46          | 350 | 210 | 1.24        | 350 | 210 | 1.04         | 280 | 170 | 0.82         | 280 | 150 |
| S17     | 1.48     | 350 | 220 | 1.68       | 350 | 210 | 1.48          | 350 | 210 | 1.14        | 280 | 170 | 1.04         | 280 | 170 | 0.52         | 280 | 170 |
| S18     | 2.68     | 350 | 200 | 2.88       | 350 | 210 | 2.38          | 350 | 210 | 2.04        | 280 | 180 | 1.46         | 280 | 180 | 1.08         | 280 | 170 |

\*BOD = Bio Chemical Oxygen Demand, TC = Total Coliform, FC = Faecal Coliform

Site of Collection

S-1: Gomti River at Jatanbari, S-2: Gomti River at Sonamura, S-3: Gomti River at Rajdharnagar, S-4: Gomti River at Amarpur, S-5: Gomti River at Tirthamukh, S-6: Gomti River at Subhashsetu, S-7; Burigaon River at Bishalgarh, S-8: Haora River at Chandrapur, S-9: Haora River at Dashamighat, S-10: Haora River at Aralia, S-11: Haora River at Kalabagan, S-12: Haora River at Joynagar, S-13: Manu River at Kailasahar, S-14: Khowai River at Trishabari, S-15: Khowai River at Kumari Madhuti setu, S-16: Khowai River at Chakmaghat, S-17: Khowai River at Karailong, S-18: Juri River at Krishnapur.

ANALYTICAL RESULTS OF SURFACE WATER SAMPLES COLLECTED FROM SIX IDENTIFIED RIVER STRETCH OF TRIPURA

| Sl. No. | January, 18 |     |     | February, 18 |     |     | March, 18 |     |     | April, 18 |     |     | May, 18 |     |     | June, 18 |     |     |
|---------|-------------|-----|-----|--------------|-----|-----|-----------|-----|-----|-----------|-----|-----|---------|-----|-----|----------|-----|-----|
|         | BOD         | TC  | FC  | BOD          | TC  | FC  | BOD       | TC  | FC  | BOD       | TC  | FC  | BOD     | TC  | FC  | BOD      | TC  | FC  |
| S 1     | 0.1         | 280 | 150 | 0.18         | 280 | 130 | 0.24      | 240 | 110 | 0.18      | 220 | 120 | 0.66    | 280 | 150 | 0.48     | 280 | 150 |
| S 2     | 0.7         | 280 | 150 | 0.58         | 240 | 120 | 0.40      | 220 | 120 | 0.22      | 240 | 120 | 1.82    | 350 | 170 | 1.24     | 350 | 140 |
| S 3     | 0.36        | 280 | 150 | 0.28         | 240 | 120 | 0.34      | 280 | 170 | 0.26      | 240 | 150 | 0.66    | 280 | 170 | 0.74     | 350 | 220 |
| S 4     | 0.36        | 280 | 150 | 0.28         | 240 | 130 | 0.36      | 240 | 150 | 0.22      | 240 | 130 | 1.06    | 280 | 170 | 0.96     | 280 | 150 |
| S 5     | 0.36        | 240 | 150 | 0.24         | 220 | 130 | 0.32      | 240 | 150 | 0.26      | 240 | 130 | 0.78    | 280 | 150 | 0.56     | 240 | 130 |
| S 6     | 0.46        | 280 | 150 | 0.34         | 280 | 130 | 0.38      | 280 | 150 | 0.26      | 240 | 130 | 0.82    | 280 | 170 | 0.82     | 240 | 130 |
| S7      | 0.72        | 280 | 150 | 0.58         | 220 | 120 | 0.40      | 220 | 130 | 0.32      | 220 | 110 | 0.68    | 280 | 170 | 1.22     | 350 | 170 |
| S8      | 0.32        | 280 | 140 | 0.24         | 280 | 130 | 0.28      | 240 | 120 | 0.22      | 240 | 110 | 1.28    | 280 | 150 | 1.06     | 280 | 130 |
| S9      | 0.54        | 350 | 210 | 0.36         | 280 | 170 | 0.30      | 240 | 150 | 0.22      | 210 | 130 | 0.38    | 430 | 220 | 0.94     | 430 | 240 |
| S10     | 0.46        | 280 | 170 | 0.38         | 220 | 150 | 0.26      | 240 | 150 | 0.20      | 220 | 130 | 0.48    | 280 | 170 | 0.86     | 350 | 220 |
| S11     | 0.38        | 280 | 150 | 0.30         | 220 | 130 | 0.26      | 240 | 140 | 0.22      | 220 | 130 | 0.46    | 280 | 170 | 0.58     | 350 | 170 |
| S12     | 0.56        | 280 | 170 | 0.38         | 220 | 130 | 0.32      | 240 | 130 | 0.26      | 230 | 120 | 0.38    | 280 | 140 | 0.86     | 350 | 170 |
| S13     | 0.40        | 220 | 140 | 0.36         | 220 | 120 | 0.38      | 230 | 140 | 0.30      | 230 | 120 | 0.98    | 280 | 170 | 0.82     | 280 | 150 |
| S14     | 0.22        | 280 | 170 | 0.20         | 220 | 150 | 0.24      | 240 | 170 | 0.20      | 220 | 150 | 0.44    | 280 | 170 | 0.56     | 350 | 170 |
| S15     | 0.62        | 280 | 170 | 0.48         | 240 | 150 | 0.42      | 240 | 130 | 0.36      | 210 | 120 | 0.48    | 280 | 140 | 0.94     | 350 | 170 |
| S16     | 0.68        | 280 | 170 | 0.52         | 240 | 150 | 0.46      | 220 | 130 | 0.32      | 210 | 120 | 0.54    | 240 | 170 | 0.88     | 280 | 170 |
| S17     | 0.40        | 220 | 150 | 0.34         | 220 | 130 | 0.38      | 240 | 170 | 0.32      | 220 | 150 | 0.58    | 280 | 170 | 0.98     | 280 | 170 |
| S18     | 0.78        | 280 | 140 | 0.56         | 220 | 140 | 0.88      | 240 | 140 | 0.56      | 240 | 130 | 1.28    | 350 | 170 | 1.06     | 350 | 150 |

| Sl. No. | July, 18 |     |     | August, 18 |     |     | September, 18 |     |     | October, 18 |     |     | November, 18 |     |     | December, 18 |     |     |
|---------|----------|-----|-----|------------|-----|-----|---------------|-----|-----|-------------|-----|-----|--------------|-----|-----|--------------|-----|-----|
|         | BOD      | TC  | FC  | BOD        | TC  | FC  | BOD           | TC  | FC  | BOD         | TC  | FC  | BOD          | TC  | FC  | BOD          | TC  | FC  |
| S 1     | 0.40     | 280 | 120 | 0.46       | 280 | 170 | 0.40          | 280 | 150 | 0.40        | 350 | 170 | 0.62         | 280 | 150 | 0.54         | 240 | 130 |
| S 2     | 1.08     | 280 | 130 | 0.74       | 280 | 150 | 0.58          | 280 | 130 | 0.58        | 280 | 150 | 0.64         | 240 | 130 | 0.48         | 220 | 110 |
| S 3     | 0.62     | 350 | 170 | 0.54       | 350 | 170 | 0.94          | 350 | 170 | 0.68        | 280 | 140 | 0.52         | 220 | 110 | 1.06         | 280 | 150 |
| S 4     | 0.78     | 350 | 170 | 0.62       | 280 | 140 | 0.54          | 280 | 150 | 0.38        | 220 | 120 | 0.24         | 220 | 110 | 0.58         | 240 | 170 |
| S 5     | 0.48     | 240 | 110 | 0.42       | 280 | 120 | 0.58          | 280 | 130 | 0.44        | 240 | 110 | 0.36         | 220 | 110 | 0.86         | 220 | 130 |
| S 6     | 0.68     | 280 | 130 | 0.52       | 280 | 120 | 0.78          | 350 | 150 | 0.66        | 240 | 120 | 0.52         | 220 | 110 | 0.94         | 280 | 170 |
| S7      | 1.06     | 350 | 170 | 0.74       | 280 | 140 | 1.22          | 350 | 170 | 1.02        | 240 | 140 | 0.78         | 220 | 110 | 1.06         | 240 | 150 |
| S8      | 0.84     | 280 | 130 | 0.68       | 280 | 110 | 0.52          | 280 | 120 | 0.50        | 280 | 140 | 0.38         | 240 | 120 | 0.32         | 220 | 110 |
| S9      | 0.88     | 430 | 210 | 0.72       | 430 | 220 | 0.66          | 350 | 240 | 0.52        | 280 | 210 | 0.48         | 350 | 240 | 0.36         | 430 | 350 |
| S10     | 0.68     | 280 | 170 | 0.54       | 240 | 140 | 0.86          | 280 | 150 | 0.58        | 240 | 130 | 0.34         | 220 | 120 | 0.48         | 240 | 140 |
| S11     | 0.48     | 280 | 150 | 0.40       | 280 | 130 | 0.88          | 280 | 150 | 0.54        | 220 | 120 | 0.32         | 220 | 110 | 0.52         | 220 | 130 |
| S12     | 0.64     | 350 | 170 | 0.58       | 280 | 140 | 0.92          | 280 | 130 | 0.64        | 240 | 120 | 0.52         | 220 | 110 | 0.74         | 240 | 150 |
| S13     | 0.64     | 280 | 130 | 0.52       | 280 | 120 | 0.84          | 280 | 130 | 0.58        | 240 | 110 | 0.36         | 280 | 120 | 0.66         | 240 | 120 |
| S14     | 0.42     | 350 | 150 | 0.36       | 350 | 130 | 0.42          | 350 | 140 | 0.30        | 280 | 130 | 0.26         | 220 | 110 | 0.34         | 240 | 130 |
| S15     | 0.46     | 350 | 150 | 0.42       | 350 | 130 | 0.36          | 350 | 130 | 0.30        | 240 | 110 | 0.22         | 220 | 120 | 0.46         | 280 | 170 |
| S16     | 0.54     | 350 | 170 | 0.44       | 350 | 150 | 0.62          | 350 | 170 | 0.54        | 280 | 140 | 0.42         | 240 | 120 | 0.48         | 280 | 170 |
| S17     | 0.82     | 350 | 170 | 0.70       | 350 | 150 | 1.08          | 350 | 170 | 0.86        | 280 | 140 | 0.58         | 240 | 120 | 0.36         | 220 | 130 |
| S18     | 0.68     | 280 | 110 | 0.48       | 280 | 120 | 0.64          | 280 | 150 | 0.48        | 240 | 110 | 0.26         | 240 | 120 | 0.54         | 240 | 130 |

\*BOD = Bio Chemical Oxygen Demand, TC = Total Coliform, FC = Faecal Coliform

Site of Collection

S-1: Gomti River at Jatanbari, S-2: Gomti River at Sonamura, S-3: Gomti River at Rajdharnagar, S-4: Gomti River at Amarpur, S-5: Gomti River at Tirthamukh, S-6: Gomti River at Subhashsetu, S-7; Burigaon River at Bishalgarh, S-8: Haora River at Chandrapur, S-9: Haora River at Dashamighat, S-10: Haora River at Aralia, S-11: Haora River at Kalabagan, S-12: Haora River at Joynagar, S-13: Manu River at Kailasahar, S-14: Khowai River at Trishabari, S-15: Khowai River at Kumari Madhuti setu, S-16: Khowai River at Chakmaghat, S-17: Khowai River at Karailong, S-18: Juri River at Krishnapur.

ANALYTICAL RESULTS OF SURFACE WATER SAMPLES COLLECTED FROM SIX IDENTIFIED RIVER STRETCH OF TRIPURA

| Sl. No. | January, 19 |     |     | February, 19 |     |     | March, 19 |     |     | April, 19 |     |     | May, 19 |     |     | June, 19 |     |     |
|---------|-------------|-----|-----|--------------|-----|-----|-----------|-----|-----|-----------|-----|-----|---------|-----|-----|----------|-----|-----|
|         | BOD         | TC  | FC  | BOD          | TC  | FC  | BOD       | TC  | FC  | BOD       | TC  | FC  | BOD     | TC  | FC  | BOD      | TC  | FC  |
| S 1     | 0.68        | 210 | 120 | 1.08         | 220 | 110 | 0.88      | 150 | 94  | 1.24      | 220 | 120 | 1.56    | 220 | 110 | 1.98     | 170 | 110 |
| S 2     | 0.64        | 220 | 140 | 1.44         | 240 | 110 | 1.28      | 220 | 110 | 1.68      | 240 | 120 | 1.84    | 220 | 110 | 1.98     | 170 | 110 |
| S 3     | 1.86        | 240 | 130 | 0.88         | 220 | 110 | 0.56      | 150 | 110 | 0.84      | 130 | 110 | 1.28    | 110 | 70  | 1.56     | 110 | 70  |
| S 4     | 1.06        | 220 | 150 | 0.66         | 210 | 110 | 0.98      | 150 | 110 | 1.44      | 130 | 110 | 1.68    | 110 | 94  | 1.46     | 120 | 84  |
| S 5     | 1.54        | 220 | 110 | 0.72         | 240 | 130 | 1.08      | 220 | 110 | 1.42      | 170 | 110 | 1.98    | 130 | 70  | 2.26     | 110 | 63  |
| S 6     | 1.28        | 240 | 150 | 0.78         | 220 | 130 | 1.22      | 170 | 110 | 1.54      | 150 | 110 | 1.94    | 170 | 110 | 2.28     | 150 | 94  |
| S7      | 1.15        | 220 | 130 | 1.08         | 220 | 150 | 1.14      | 220 | 130 | 1.56      | 210 | 150 | 1.94    | 170 | 84  | 2.36     | 150 | 70  |
| S8      | 0.58        | 240 | 120 | 0.96         | 240 | 130 | 1.42      | 240 | 150 | 1.88      | 220 | 110 | 2.22    | 170 | 110 | 1.98     | 170 | 110 |
| S9      | 1.58        | 430 | 280 | 1.26         | 280 | 220 | 1.58      | 350 | 220 | 2.18      | 430 | 180 | 2.88    | 540 | 220 | 3.18     | 920 | 240 |
| S10     | 0.88        | 220 | 120 | 0.64         | 280 | 150 | 1.64      | 220 | 130 | 1.86      | 220 | 110 | 1.94    | 220 | 110 | 2.38     | 170 | 94  |
| S11     | 1.02        | 220 | 110 | 0.88         | 220 | 120 | 1.18      | 220 | 120 | 1.36      | 170 | 120 | 1.94    | 150 | 94  | 1.82     | 130 | 84  |
| S12     | 1.46        | 220 | 130 | 0.66         | 280 | 130 | 1.12      | 220 | 110 | 1.46      | 170 | 110 | 1.94    | 150 | 70  | 2.18     | 150 | 94  |
| S13     | 1.22        | 220 | 110 | 0.58         | 240 | 170 | 0.98      | 220 | 150 | 1.16      | 170 | 110 | 1.86    | 150 | 110 | 1.94     | 130 | 94  |
| S14     | 0.58        | 220 | 130 | 0.52         | 280 | 150 | 1.02      | 240 | 130 | 1.24      | 220 | 110 | 1.68    | 170 | 79  | 1.98     | 150 | 79  |
| S15     | 0.94        | 240 | 130 | 0.64         | 240 | 150 | 1.22      | 220 | 130 | 1.56      | 150 | 110 | 1.88    | 130 | 94  | 2.38     | 150 | 84  |
| S16     | 0.86        | 240 | 150 | 0.88         | 240 | 130 | 1.56      | 220 | 110 | 1.88      | 170 | 110 | 2.08    | 170 | 79  | 2.22     | 150 | 63  |
| S17     | 0.56        | 220 | 110 | 0.84         | 220 | 110 | 0.98      | 170 | 110 | 1.14      | 150 | 110 | 1.52    | 130 | 94  | 1.86     | 120 | 84  |
| S18     | 1.04        | 220 | 110 | 0.58         | 240 | 150 | 0.94      | 220 | 130 | 1.24      | 150 | 110 | 1.86    | 130 | 94  | 2.54     | 150 | 94  |

| Sl. No. | July, 19 |     |     | August, 19 |     |     | September, 19 |     |     | October, 19 |     |     | November, 19 |     |     | December, 19 |     |     |
|---------|----------|-----|-----|------------|-----|-----|---------------|-----|-----|-------------|-----|-----|--------------|-----|-----|--------------|-----|-----|
|         | BOD      | TC  | FC  | BOD        | TC  | FC  | BOD           | TC  | FC  | BOD         | TC  | FC  | BOD          | TC  | FC  | BOD          | TC  | FC  |
| S 1     | 2.78     | 150 | 110 | 2.88       | 170 | 120 | 2.74          | 280 | 150 | 2.10        | 240 | 120 | 1.64         | 170 | 63  | 1.02         | 110 | 43  |
| S 2     | 2.64     | 130 | 110 | 2.76       | 130 | 70  | 2.48          | 210 | 84  | 2.22        | 210 | 79  | 2.04         | 210 | 63  | 1.56         | 170 | 58  |
| S 3     | 1.98     | 120 | 33  | 1.64       | 170 | 63  | 1.86          | 210 | 79  | 1.58        | 170 | 49  | 1.14         | 150 | 33  | 1.02         | 130 | 33  |
| S 4     | 1.38     | 150 | 46  | 1.46       | 170 | 46  | 1.28          | 150 | 49  | 1.06        | 130 | 46  | 0.86         | 110 | 32  | 0.74         | 110 | 27  |
| S 5     | 1.58     | 120 | 43  | 1.94       | 170 | 70  | 2.22          | 170 | 94  | 2.04        | 150 | 84  | 1.64         | 120 | 58  | 1.18         | 110 | 41  |
| S 6     | 2.34     | 130 | 49  | 2.18       | 170 | 63  | 2.04          | 150 | 58  | 1.58        | 130 | 47  | 1.58         | 110 | 34  | 1.14         | 110 | 33  |
| S7      | 2.48     | 120 | 46  | 2.26       | 150 | 79  | 2.04          | 220 | 110 | 1.82        | 220 | 110 | 1.24         | 170 | 46  | 1.08         | 150 | 31  |
| S8      | 2.38     | 150 | 110 | 2.56       | 130 | 79  | 2.28          | 210 | 94  | 2.04        | 170 | 70  | 1.86         | 150 | 47  | 1.52         | 120 | 37  |
| S9      | 3.44     | 920 | 220 | 3.86       | 920 | 280 | 2.98          | 920 | 350 | 2.54        | 920 | 350 | 2.22         | 540 | 280 | 2.14         | 430 | 220 |
| S10     | 2.54     | 150 | 84  | 2.28       | 280 | 94  | 1.84          | 240 | 70  | 1.68        | 220 | 43  | 1.32         | 170 | 33  | 1.26         | 120 | 33  |
| S11     | 1.98     | 150 | 70  | 1.56       | 170 | 79  | 1.28          | 150 | 63  | 1.16        | 150 | 47  | 1.16         | 150 | 47  | 1.02         | 120 | 39  |
| S12     | 2.42     | 130 | 63  | 2.16       | 170 | 70  | 1.56          | 170 | 58  | 1.18        | 150 | 31  | 1.02         | 130 | 27  | 0.84         | 120 | 23  |
| S13     | 2.16     | 150 | 58  | 1.56       | 170 | 63  | 1.78          | 220 | 79  | 1.52        | 210 | 70  | 1.18         | 170 | 70  | 1.01         | 120 | 58  |
| S14     | 2.22     | 150 | 70  | 2.56       | 350 | 120 | 2.24          | 350 | 150 | 2.02        | 350 | 130 | 2.02         | 350 | 130 | 1.52         | 280 | 110 |
| S15     | 2.42     | 120 | 63  | 2.38       | 170 | 79  | 2.14          | 170 | 70  | 2.08        | 150 | 63  | 1.48         | 120 | 48  | 1.24         | 110 | 41  |
| S16     | 2.54     | 120 | 70  | 2.18       | 210 | 94  | 2.24          | 170 | 70  | 2.02        | 210 | 70  | 1.56         | 170 | 48  | 1.22         | 150 | 33  |
| S17     | 1.54     | 150 | 63  | 1.22       | 170 | 94  | 1.68          | 220 | 94  | 1.32        | 220 | 84  | 1.04         | 170 | 58  | 0.84         | 140 | 41  |
| S18     | 2.68     | 150 | 46  | 2.14       | 170 | 58  | 2.38          | 220 | 79  | 2.38        | 210 | 70  | 2.02         | 120 | 46  | 1.94         | 110 | 33  |

\*BOD = Bio Chemical Oxygen Demand, TC = Total Coliform, FC = Faecal Coliform

Site of Collection

S-1: Gomti River at Jatanbari, S-2: Gomti River at Sonamura, S-3: Gomti River at Rajdharnagar, S-4: Gomti River at Amarpur, S-5: Gomti River at Tirthamukh, S-6: Gomti River at Subhashsetu, S-7; Burigaon River at Bishalgarh, S-8: Haora River at Chandrapur, S-9: Haora River at Dashamighat, S-10: Haora River at Aralia, S-11: Haora River at Kalabagan, S-12: Haora River at Joynagar, S-13: Manu River at Kailasahar, S-14: Khowai River at Trishabari, S-15: Khowai River at Kumari Madhuti setu, S-16: Khowai River at Chakmaghat, S-17: Khowai River at Karailong, S-18: Juri River at Krishnapur.

ANALYTICAL RESULTS OF SURFACE WATER SAMPLES COLLECTED FROM SIX IDENTIFIED RIVER STRETCH OF TRIPURA

| Sl. No. | January, 20 |     |     | February, 20 |     |     | March, 20 |     |     | April, 20 |     |     | May, 20 |     |    | June, 20 |     |    |
|---------|-------------|-----|-----|--------------|-----|-----|-----------|-----|-----|-----------|-----|-----|---------|-----|----|----------|-----|----|
|         | BOD         | TC  | FC  | BOD          | TC  | FC  | BOD       | TC  | FC  | BOD       | TC  | FC  | BOD     | TC  | FC | BOD      | TC  | FC |
| S 1     | 1.28        | 110 | 33  | 1.04         | 84  | 27  | 1.54      | 220 | 63  | 1.36      | 210 | 58  | 1.58    | 170 | 26 | 1.74     | 150 | 26 |
| S 2     | 1.34        | 150 | 46  | 1.08         | 130 | 38  | 1.7       | 280 | 70  | 1.4       | 220 | 58  | 1.56    | 170 | 58 | 1.76     | 220 | 70 |
| S 3     | 0.92        | 110 | 26  | 1.36         | 70  | 25  | 1.2       | 170 | 43  | 1.0       | 170 | 32  | 1.18    | 150 | 40 | 1.12     | 120 | 38 |
| S 4     | 0.82        | 110 | 22  | 0.78         | 63  | 17  | 0.5       | 170 | 41  | 0.3       | 140 | 31  | 0.88    | 130 | 27 | 0.56     | 110 | 25 |
| S 5     | 1.02        | 110 | 33  | 1.10         | 70  | 21  | 1.1       | 140 | 34  | 0.9       | 110 | 25  | 1.26    | 94  | 25 | 1.04     | 84  | 31 |
| S 6     | 1.36        | 110 | 32  | 1.12         | 63  | 25  | 1.1       | 120 | 27  | 0.9       | 94  | 22  | 1.38    | 120 | 33 | 1.12     | 94  | 26 |
| S7      | 0.74        | 120 | 26  | 1.28         | 110 | 21  | 1.5       | 220 | 63  | 1.4       | 170 | 58  | 1.78    | 210 | 79 | 1.28     | 170 | 43 |
| S8      | 1.24        | 110 | 26  | 1.08         | 94  | 26  | 1.5       | 240 | 39  | 1.3       | 220 | 27  | 1.14    | 210 | 31 | 1.62     | 220 | 49 |
| S9      | 2.34        | 430 | 170 | 2.68         | 350 | 140 | 2.3       | 240 | 120 | 2.2       | 240 | 120 | 2.64    | 220 | 84 | 2.56     | 170 | 84 |
| S10     | 1.08        | 110 | 31  | 1.16         | 84  | 22  | 1.5       | 240 | 48  | 1.2       | 220 | 47  | 1.56    | 210 | 41 | 1.32     | 170 | 41 |
| S11     | 0.94        | 110 | 31  | 0.82         | 70  | 26  | 1.3       | 220 | 31  | 1.3       | 220 | 47  | 1.18    | 150 | 33 | 1.08     | 120 | 33 |
| S12     | 0.68        | 110 | 23  | 0.86         | 70  | 21  | 1.4       | 150 | 34  | 1.0       | 120 | 22  | 1.26    | 110 | 33 | 1.08     | 110 | 33 |
| S13     | 0.98        | 110 | 47  | 1.22         | 84  | 32  | 1.2       | 140 | 31  | 0.9       | 120 | 25  | 1.02    | 110 | 31 | 0.66     | 94  | 25 |
| S14     | 1.38        | 240 | 94  | 1.04         | 140 | 84  | 1.2       | 79  | 31  | 1.0       | 63  | 22  | 1.14    | 70  | 26 | 1.02     | 58  | 25 |
| S15     | 1.24        | 110 | 41  | 1.08         | 84  | 31  | 0.6       | 63  | 17  | 0.7       | 70  | 25  | 1.04    | 63  | 32 | 0.88     | 58  | 21 |
| S16     | 1.06        | 120 | 25  | 1.14         | 94  | 21  | 1.3       | 120 | 26  | 1.2       | 94  | 17  | 1.56    | 84  | 34 | 1.12     | 58  | 15 |
| S17     | 0.68        | 120 | 40  | 0.54         | 110 | 26  | 0.9       | 110 | 27  | 0.8       | 94  | 22  | 0.94    | 94  | 33 | 0.78     | 63  | 15 |
| S18     | 1.82        | 110 | 31  | 1.28         | 58  | 17  | 0.6       | 110 | 25  | 0.6       | 94  | 25  | 0.88    | 110 | 32 | 0.52     | 84  | 27 |

| Sl. No. | July, 20 |     |    | August, 20 |     |    | September, 20 |     |    | October, 20 |     |    | November, 20 |     |    | December, 20 |     |    |
|---------|----------|-----|----|------------|-----|----|---------------|-----|----|-------------|-----|----|--------------|-----|----|--------------|-----|----|
|         | BOD      | TC  | FC | BOD        | TC  | FC | BOD           | TC  | FC | BOD         | TC  | FC | BOD          | TC  | FC | BOD          | TC  | FC |
| S 1     | 1.08     | 170 | 63 | 1.22       | 210 | 70 | 1.08          | 120 | 63 | 1.08        | 170 | 63 | 1.32         | 150 | 63 | 0.86         | 120 | 47 |
| S 2     | 1.92     | 240 | 63 | 2.08       | 240 | 63 | 1.56          | 220 | 63 | 2.26        | 220 | 58 | 1.36         | 170 | 70 | 1.86         | 150 | 46 |
| S 3     | 1.34     | 150 | 94 | 1.54       | 170 | 49 | 1.28          | 150 | 25 | 1.48        | 150 | 39 | 1.36         | 170 | 33 | 1.08         | 130 | 31 |
| S 4     | 0.88     | 150 | 47 | 1.06       | 170 | 58 | 1.14          | 110 | 32 | 0.98        | 150 | 47 | 1.38         | 170 | 58 | 0.52         | 130 | 38 |
| S 5     | 1.26     | 94  | 47 | 1.38       | 120 | 32 | 1.08          | 110 | 17 | 1.08        | 110 | 27 | 1.28         | 170 | 31 | 0.94         | 94  | 25 |
| S 6     | 1.46     | 110 | 41 | 1.78       | 140 | 47 | 1.36          | 120 | 25 | 1.24        | 130 | 40 | 1.56         | 150 | 33 | 0.88         | 110 | 33 |
| S7      | 1.34     | 220 | 48 | 1.28       | 220 | 58 | 1.10          | 170 | 38 | 1.48        | 220 | 47 | 1.78         | 220 | 58 | 1.14         | 150 | 31 |
| S8      | 1.56     | 150 | 25 | 1.72       | 170 | 26 | 1.48          | 140 | 17 | 1.62        | 150 | 25 | 1.48         | 130 | 33 | 1.14         | 110 | 17 |
| S9      | 1.34     | 220 | 94 | 1.98       | 280 | 70 | 1.26          | 240 | 58 | 1.84        | 220 | 63 | 2.04         | 220 | 58 | 1.12         | 280 | 48 |
| S10     | 1.42     | 210 | 63 | 1.56       | 170 | 58 | 0.98          | 150 | 39 | 1.28        | 170 | 48 | 1.58         | 210 | 58 | 0.96         | 170 | 33 |
| S11     | 1.26     | 170 | 47 | 1.36       | 150 | 48 | 1.28          | 120 | 39 | 1.22        | 130 | 32 | 1.28         | 130 | 40 | 0.98         | 110 | 25 |
| S12     | 1.14     | 170 | 63 | 1.36       | 150 | 58 | 1.1           | 130 | 25 | 1.22        | 120 | 48 | 1.14         | 120 | 25 | 0.98         | 110 | 25 |
| S13     | 1.08     | 94  | 41 | 1.22       | 84  | 33 | 0.88          | 84  | 17 | 1.08        | 63  | 17 | 1.36         | 150 | 31 | 0.78         | 48  | 11 |
| S14     | 1.14     | 84  | 34 | 1.28       | 110 | 38 | 0.48          | 110 | 21 | 1.12        | 94  | 32 | 1.38         | 110 | 26 | 0.96         | 70  | 17 |
| S15     | 0.98     | 94  | 46 | 1.14       | 140 | 58 | 1.02          | 120 | 58 | 1.02        | 110 | 40 | 1.42         | 210 | 58 | 0.76         | 63  | 25 |
| S16     | 1.28     | 84  | 23 | 1.44       | 110 | 38 | 0.58          | 94  | 17 | 1.18        | 94  | 33 | 1.14         | 210 | 63 | 0.86         | 70  | 21 |
| S17     | 0.98     | 84  | 23 | 1.12       | 84  | 32 | 0.56          | 70  | 26 | 1.02        | 63  | 25 | 1.26         | 130 | 33 | 0.74         | 40  | 21 |
| S18     | 0.78     | 110 | 48 | 1.26       | 120 | 58 | 0.88          | 110 | 26 | 1.18        | 110 | 47 | 1.32         | 170 | 39 | 0.88         | 94  | 33 |

\*BOD = Bio Chemical Oxygen Demand, TC = Total Coliform, FC = Faecal Coliform

Site of Collection

S-1: Gomti River at Jatanbari, S-2: Gomti River at Sonamura, S-3: Gomti River at Rajdharnagar, S-4: Gomti River at Amarpur, S-5: Gomti River at Tirthamukh, S-6: Gomti River at Subhashsetu, S-7; Burigaon River at Bishalgarh, S-8: Haora River at Chandrapur, S-9: Haora River at Dashamighat, S-10: Haora River at Aralia, S-11: Haora River at Kalabagan, S-12: Haora River at Joynagar, S-13: Manu River at Kailasahar, S-14: Khowai River at Trishabari, S-15: Khowai River at Kumari Madhuti setu, S-16: Khowai River at Chakmaghat, S-17: Khowai River at Karailong, S-18: Juri River at Krishnapur.

ANALYTICAL RESULTS OF SURFACE WATER SAMPLES COLLECTED FROM SIX IDENTIFIED RIVER STRETCH OF TRIPURA

| Sl. No. | January, 21 |     |    | February, 21 |     |    | March, 21 |     |    | April, 21 |     |    | May, 21 |     |    | June, 21 |     |    |
|---------|-------------|-----|----|--------------|-----|----|-----------|-----|----|-----------|-----|----|---------|-----|----|----------|-----|----|
|         | BOD         | TC  | FC | BOD          | TC  | FC | BOD       | TC  | FC | BOD       | TC  | FC | BOD     | TC  | FC | BOD      | TC  | FC |
| S 1     | 1.08        | 170 | 47 | 1.36         | 170 | 63 | 1.5       | 170 | 58 | 1.4       | 210 | 70 | 1.5     | 220 | 70 | 1.8      | 240 | 70 |
| S 2     | 1.56        | 210 | 58 | 2.48         | 210 | 58 | 2.5       | 350 | 47 | 2.7       | 240 | 84 | 2.8     | 280 | 84 | 2.9      | 280 | 94 |
| S 3     | 1.46        | 150 | 47 | 1.58         | 170 | 58 | 1.8       | 210 | 33 | 1.6       | 210 | 63 | 1.8     | 240 | 63 | 1.9      | 280 | 63 |
| S 4     | 1.32        | 150 | 33 | 1.48         | 170 | 58 | 1.5       | 210 | 47 | 1.7       | 220 | 70 | 1.8     | 240 | 70 | 1.9      | 280 | 70 |
| S 5     | 1.14        | 120 | 33 | 1.18         | 130 | 47 | 1.3       | 140 | 48 | 1.3       | 140 | 58 | 1.6     | 170 | 63 | 1.8      | 210 | 63 |
| S 6     | 1.56        | 150 | 41 | 1.64         | 170 | 58 | 1.8       | 170 | 58 | 1.8       | 220 | 84 | 1.9     | 240 | 84 | 2.1      | 280 | 84 |
| S7      | 1.46        | 170 | 32 | 1.76         | 220 | 40 | 1.8       | 280 | 43 | 2.1       | 280 | 58 | 2.5     | 280 | 58 | 2.6      | 280 | 63 |
| S8      | 1.22        | 150 | 17 | 1.56         | 170 | 27 | 1.2       | 280 | 15 | 1.8       | 210 | 38 | 1.9     | 240 | 40 | 2.3      | 280 | 58 |
| S9      | 1.54        | 350 | 63 | 1.98         | 350 | 70 | 1.6       | 430 | 63 | 2.5       | 430 | 84 | 2.6     | 430 | 94 | 2.8      | 540 | 94 |
| S10     | 1.46        | 210 | 33 | 1.74         | 220 | 48 | 1.6       | 220 | 43 | 2.0       | 280 | 58 | 2.2     | 350 | 63 | 2.6      | 350 | 63 |
| S11     | 1.22        | 150 | 33 | 1.36         | 170 | 41 | 1.1       | 210 | 38 | 1.5       | 210 | 48 | 1.8     | 220 | 58 | 1.9      | 240 | 63 |
| S12     | 1.36        | 150 | 26 | 1.44         | 150 | 32 | 1.2       | 170 | 38 | 1.8       | 170 | 40 | 1.9     | 210 | 47 | 1.8      | 220 | 48 |
| S13     | 1.22        | 110 | 27 | 1.32         | 130 | 33 | 1.48      | 150 | 38 | 1.7       | 170 | 48 | 1.8     | 210 | 48 | 1.9      | 220 | 48 |
| S14     | 1.32        | 110 | 33 | 1.46         | 120 | 40 | 1.1       | 150 | 43 | 1.6       | 170 | 63 | 1.8     | 210 | 63 | 1.9      | 220 | 63 |
| S15     | 1.28        | 63  | 21 | 1.34         | 110 | 27 | 1.2       | 120 | 33 | 1.7       | 170 | 40 | 1.9     | 210 | 49 | 2.1      | 220 | 58 |
| S16     | 1.18        | 63  | 26 | 1.42         | 63  | 32 | 1.2       | 70  | 40 | 1.6       | 94  | 58 | 1.8     | 110 | 58 | 1.9      | 140 | 58 |
| S17     | 1.42        | 94  | 26 | 1.56         | 110 | 32 | 1.68      | 150 | 40 | 1.8       | 170 | 58 | 1.9     | 170 | 63 | 2.1      | 210 | 63 |
| S18     | 1.22        | 94  | 38 | 1.56         | 110 | 40 | 1.6       | 150 | 43 | 1.8       | 170 | 58 | 1.7     | 210 | 63 | 1.8      | 220 | 70 |

| Sl. No. | July, 21 |     |    | August, 21 |     |     | September, 21 |     |     | October, 21 |     |    | November, 21 |     |    | December, 21 |     |    |
|---------|----------|-----|----|------------|-----|-----|---------------|-----|-----|-------------|-----|----|--------------|-----|----|--------------|-----|----|
|         | BOD      | TC  | FC | BOD        | TC  | FC  | BOD           | TC  | FC  | BOD         | TC  | FC | BOD          | TC  | FC | BOD          | TC  | FC |
| S 1     | 1.7      | 240 | 70 | 1.8        | 280 | 84  | 1.5           | 280 | 84  | 1.2         | 240 | 63 | 1.1          | 210 | 58 | 1.1          | 150 | 38 |
| S 2     | 2.8      | 350 | 94 | 2.8        | 430 | 110 | 2.9           | 430 | 120 | 2.6         | 430 | 94 | 2.4          | 350 | 63 | 2.2          | 280 | 58 |
| S 3     | 2.1      | 280 | 63 | 2.2        | 280 | 63  | 2.1           | 240 | 58  | 1.8         | 210 | 43 | 1.6          | 170 | 38 | 1.3          | 150 | 58 |
| S 4     | 1.9      | 350 | 70 | 2.1        | 350 | 84  | 1.9           | 350 | 79  | 1.4         | 220 | 58 | 1.2          | 210 | 58 | 1.3          | 140 | 58 |
| S 5     | 1.9      | 220 | 63 | 2.1        | 240 | 63  | 1.8           | 220 | 58  | 1.1         | 130 | 27 | 1.1          | 130 | 26 | 1.1          | 98  | 32 |
| S 6     | 2.2      | 280 | 84 | 2.4        | 280 | 84  | 2.2           | 240 | 63  | 1.9         | 170 | 43 | 1.6          | 150 | 41 | 1.5          | 170 | 58 |
| S7      | 2.8      | 350 | 63 | 2.9        | 350 | 63  | 2.6           | 350 | 63  | 2.4         | 280 | 58 | 2.2          | 240 | 49 | 1.7          | 210 | 47 |
| S8      | 2.4      | 350 | 63 | 2.5        | 350 | 63  | 2.4           | 430 | 63  | 2.2         | 350 | 58 | 2.1          | 350 | 58 | 1.9          | 280 | 47 |
| S9      | 2.9      | 540 | 94 | 3.2        | 540 | 94  | 2.9           | 540 | 94  | 2.6         | 540 | 84 | 2.4          | 430 | 70 | 2.5          | 350 | 84 |
| S10     | 2.7      | 350 | 63 | 2.8        | 350 | 63  | 2.6           | 350 | 58  | 2.2         | 280 | 47 | 2.1          | 240 | 43 | 1.7          | 220 | 58 |
| S11     | 2.1      | 280 | 63 | 2.2        | 280 | 63  | 1.9           | 240 | 58  | 1.5         | 210 | 41 | 1.2          | 170 | 32 | 1.3          | 170 | 31 |
| S12     | 1.9      | 240 | 58 | 2.1        | 280 | 58  | 1.8           | 240 | 58  | 1.4         | 210 | 43 | 1.2          | 170 | 33 | 1.5          | 110 | 31 |
| S13     | 2.2      | 240 | 58 | 2.3        | 240 | 58  | 2.1           | 220 | 48  | 1.8         | 170 | 47 | 1.6          | 150 | 40 | 1.5          | 110 | 41 |
| S14     | 2.1      | 240 | 63 | 2.2        | 280 | 63  | 1.9           | 240 | 58  | 1.8         | 220 | 47 | 1.6          | 210 | 41 | 1.2          | 150 | 41 |
| S15     | 2.4      | 240 | 58 | 2.5        | 240 | 58  | 2.3           | 220 | 47  | 1.8         | 210 | 40 | 1.5          | 210 | 38 | 1.5          | 150 | 33 |
| S16     | 2.2      | 170 | 58 | 2.2        | 210 | 58  | 2.1           | 210 | 47  | 1.9         | 210 | 41 | 1.7          | 210 | 40 | 1.3          | 84  | 33 |
| S17     | 2.4      | 240 | 63 | 2.5        | 240 | 63  | 2.1           | 220 | 47  | 1.8         | 170 | 43 | 1.6          | 150 | 41 | 1.5          | 130 | 38 |
| S18     | 1.9      | 240 | 70 | 2.1        | 240 | 63  | 1.8           | 220 | 48  | 1.6         | 210 | 41 | 1.4          | 170 | 41 | 1.5          | 130 | 47 |

\*BOD = Bio Chemical Oxygen Demand, TC = Total Coliform, FC = Faecal Coliform

Site of Collection

S-1: Gomti River at Jatanbari, S-2: Gomti River at Sonamura, S-3: Gomti River at Rajdharnagar, S-4: Gomti River at Amarpur, S-5: Gomti River at Tirthamukh, S-6: Gomti River at Subhashsetu, S-7; Burigaon River at Bishalgarh, S-8: Haora River at Chandrapur, S-9: Haora River at Dashamighat, S-10: Haora River at Aralia, S-11: Haora River at Kalabagan, S-12: Haora River at Joynagar, S-13: Manu River at Kailasahar, S-14: Khowai River at Trishabari, S-15: Khowai River at Kumari Madhuti setu, S-16: Khowai River at Chakmaghat, S-17: Khowai River at Karailong, S-18: Juri River at Krishnapur.

ANALYTICAL RESULTS OF SURFACE WATER SAMPLES COLLECTED FROM SIX IDENTIFIED RIVER STRETCH OF TRIPURA

| Sl. No. | January, 22 |     |    | February, 22 |     |    | March, 22 |     |    | April, 22 |     |    | May, 22 |     |    | June, 22 |     |    |
|---------|-------------|-----|----|--------------|-----|----|-----------|-----|----|-----------|-----|----|---------|-----|----|----------|-----|----|
|         | BOD         | TC  | FC | BOD          | TC  | FC | BOD       | TC  | FC | BOD       | TC  | FC | BOD     | TC  | FC | BOD      | TC  | FC |
| S 1     | 1.18        | 130 | 41 | 1.1          | 130 | 39 | 1.3       | 150 | 47 | 1.4       | 170 | 58 | 1.5     | 170 | 63 | 1.7      | 210 | 70 |
| S 2     | 2.14        | 170 | 58 | 1.9          | 150 | 47 | 2.1       | 170 | 58 | 2.4       | 240 | 63 | 2.5     | 280 | 70 | 2.6      | 350 | 94 |
| S 3     | 1.12        | 130 | 47 | 1.2          | 110 | 38 | 1.4       | 130 | 47 | 1.6       | 150 | 58 | 1.8     | 210 | 58 | 1.9      | 220 | 84 |
| S 4     | 1.12        | 110 | 38 | 1.1          | 94  | 26 | 1.3       | 110 | 41 | 1.4       | 150 | 58 | 1.4     | 170 | 58 | 1.6      | 210 | 63 |
| S 5     | 1.08        | 84  | 25 | 1.1          | 63  | 21 | 1.2       | 84  | 34 | 1.2       | 110 | 46 | 1.3     | 120 | 48 | 1.4      | 150 | 58 |
| S 6     | 1.34        | 150 | 48 | 1.2          | 130 | 32 | 1.5       | 150 | 58 | 1.8       | 170 | 63 | 1.9     | 210 | 63 | 2.2      | 240 | 70 |
| S7      | 1.52        | 170 | 32 | 1.3          | 150 | 32 | 1.6       | 170 | 39 | 1.9       | 240 | 58 | 1.5     | 280 | 63 | 2.4      | 350 | 84 |
| S8      | 1.28        | 150 | 22 | 1.2          | 120 | 21 | 1.5       | 140 | 26 | 1.8       | 210 | 48 | 2.1     | 220 | 58 | 1.4      | 240 | 63 |
| S9      | 2.26        | 280 | 63 | 2.1          | 280 | 47 | 2.4       | 350 | 58 | 2.7       | 430 | 70 | 2.8     | 430 | 79 | 2.9      | 430 | 84 |
| S10     | 1.1         | 170 | 41 | 1.4          | 150 | 32 | 1.8       | 170 | 38 | 1.9       | 210 | 58 | 2.0     | 220 | 63 | 1.9      | 240 | 70 |
| S11     | 1.22        | 150 | 25 | 1.1          | 130 | 21 | 1.3       | 170 | 27 | 1.4       | 170 | 31 | 1.5     | 210 | 40 | 1.8      | 240 | 47 |
| S12     | 1.36        | 84  | 25 | 1.2          | 63  | 21 | 1.4       | 84  | 26 | 1.5       | 94  | 27 | 1.7     | 150 | 39 | 1.9      | 210 | 48 |
| S13     | 1.36        | 84  | 33 | 1.4          | 94  | 31 | 1.4       | 94  | 31 | 1.5       | 110 | 39 | 1.6     | 120 | 48 | 1.8      | 130 | 48 |
| S14     | 1.18        | 130 | 38 | 1.1          | 120 | 27 | 1.3       | 150 | 38 | 1.4       | 170 | 41 | 1.5     | 170 | 43 | 1.6      | 210 | 58 |
| S15     | 1.34        | 120 | 21 | 1.2          | 110 | 21 | 1.4       | 130 | 32 | 1.4       | 150 | 40 | 1.5     | 170 | 40 | 1.7      | 210 | 48 |
| S16     | 1.14        | 58  | 17 | 1.1          | 48  | 17 | 1.4       | 58  | 17 | 1.4       | 63  | 22 | 1.4     | 110 | 38 | 1.6      | 140 | 47 |
| S17     | 1.38        | 110 | 21 | 1.2          | 84  | 21 | 1.3       | 94  | 22 | 1.3       | 110 | 38 | 1.5     | 120 | 40 | 1.6      | 150 | 48 |
| S18     | 1.32        | 110 | 38 | 1.4          | 110 | 39 | 1.4       | 110 | 39 | 1.5       | 120 | 39 | 1.6     | 150 | 48 | 1.8      | 170 | 58 |

| Sl. No. | July, 22 |     |     | August, 22 |     |     | September, 22 |     |     | October, 22 |     |    | November, 22 |     |    | December, 22 |     |    |
|---------|----------|-----|-----|------------|-----|-----|---------------|-----|-----|-------------|-----|----|--------------|-----|----|--------------|-----|----|
|         | BOD      | TC  | FC  | BOD        | TC  | FC  | BOD           | TC  | FC  | BOD         | TC  | FC | BOD          | TC  | FC | BOD          | TC  | FC |
| S 1     | 1.9      | 220 | 83  | 1.9        | 220 | 83  | 1.8           | 210 | 70  | 1.3         | 150 | 47 | 1.2          | 130 | 47 | 1.2          | 110 | 43 |
| S 2     | 2.7      | 350 | 94  | 2.8        | 350 | 94  | 2.6           | 350 | 84  | 2.1         | 220 | 63 | 1.1          | 210 | 63 | 1.8          | 170 | 63 |
| S 3     | 2.1      | 240 | 84  | 2.3        | 280 | 94  | 2.1           | 240 | 94  | 1.4         | 150 | 48 | 1.3          | 130 | 47 | 1.2          | 120 | 41 |
| S 4     | 1.7      | 220 | 63  | 1.8        | 240 | 63  | 1.6           | 220 | 58  | 1.4         | 130 | 47 | 1.3          | 120 | 41 | 1.2          | 110 | 39 |
| S 5     | 1.5      | 170 | 63  | 1.7        | 210 | 63  | 1.5           | 170 | 58  | 1.1         | 110 | 43 | 1.1          | 110 | 41 | 1.1          | 110 | 39 |
| S 6     | 2.4      | 280 | 84  | 2.6        | 280 | 84  | 2.2           | 240 | 70  | 1.6         | 150 | 63 | 1.5          | 130 | 58 | 1.4          | 120 | 49 |
| S7      | 2.5      | 430 | 110 | 2.7        | 430 | 130 | 2.6           | 430 | 110 | 1.8         | 220 | 58 | 1.7          | 210 | 58 | 1.5          | 170 | 48 |
| S8      | 2.2      | 280 | 79  | 2.4        | 280 | 63  | 2.2           | 240 | 63  | 1.5         | 210 | 47 | 1.3          | 170 | 38 | 1.3          | 170 | 38 |
| S9      | 3.1      | 430 | 94  | 3.3        | 430 | 110 | 3.1           | 430 | 94  | 2.6         | 430 | 70 | 2.2          | 430 | 63 | 2.1          | 430 | 63 |
| S10     | 2.5      | 280 | 84  | 2.4        | 280 | 94  | 2.2           | 240 | 84  | 1.8         | 210 | 48 | 1.7          | 170 | 46 | 1.6          | 170 | 43 |
| S11     | 1.8      | 240 | 58  | 1.9        | 280 | 63  | 1.7           | 240 | 58  | 1.3         | 150 | 31 | 1.2          | 130 | 31 | 1.2          | 120 | 31 |
| S12     | 1.6      | 210 | 48  | 1.7        | 220 | 58  | 1.6           | 210 | 58  | 1.4         | 94  | 26 | 1.2          | 94  | 26 | 1.2          | 94  | 26 |
| S13     | 1.9      | 150 | 58  | 1.9        | 170 | 58  | 1.8           | 150 | 47  | 1.3         | 110 | 32 | 1.2          | 94  | 32 | 1.2          | 94  | 26 |
| S14     | 1.5      | 220 | 63  | 1.6        | 240 | 63  | 1.4           | 220 | 63  | 1.3         | 150 | 38 | 1.2          | 130 | 38 | 1.2          | 120 | 32 |
| S15     | 1.8      | 220 | 58  | 1.9        | 240 | 58  | 1.6           | 220 | 58  | 1.3         | 150 | 38 | 1.3          | 130 | 38 | 1.2          | 120 | 38 |
| S16     | 1.7      | 170 | 58  | 1.8        | 210 | 58  | 1.6           | 210 | 48  | 1.3         | 63  | 22 | 1.2          | 58  | 22 | 1.2          | 58  | 22 |
| S17     | 1.8      | 170 | 58  | 1.9        | 210 | 63  | 1.7           | 170 | 58  | 1.2         | 94  | 38 | 1.1          | 94  | 33 | 1.1          | 94  | 31 |
| S18     | 1.9      | 170 | 58  | 2.2        | 170 | 58  | 2.1           | 140 | 43  | 1.4         | 110 | 39 | 1.5          | 94  | 27 | 1.6          | 94  | 27 |

\*BOD = Bio Chemical Oxygen Demand, TC = Total Coliform, FC = Faecal Coliform

Site of Collection

S-1: Gomti River at Jatanbari, S-2: Gomti River at Sonamura, S-3: Gomti River at Rajdharnagar, S-4: Gomti River at Amarpur, S-5: Gomti River at Tirthamukh, S-6: Gomti River at Subhashsetu, S-7; Burigaon River at Bishalgarh, S-8: Haora River at Chandrapur, S-9: Haora River at Dashamighat, S-10: Haora River at Aralia, S-11: Haora River at Kalabagan, S-12: Haora River at Joynagar, S-13: Manu River at Kailasahar, S-14: Khowai River at Trishabari, S-15: Khowai River at Kumari Madhuti setu, S-16: Khowai River at Chakmaghat, S-17: Khowai River at Karailong, S-18: Juri River at Krishnapur.

ANALYTICAL RESULTS OF SURFACE WATER SAMPLES COLLECTED FROM SIX IDENTIFIED RIVER STRETCH OF TRIPURA

| Sl. No. | January, 23 |     |    | February, 23 |     |    | March, 23 |     |    | April, 23 |     |    | May, 23 |     |     | June, 23 |     |     |
|---------|-------------|-----|----|--------------|-----|----|-----------|-----|----|-----------|-----|----|---------|-----|-----|----------|-----|-----|
|         | BOD         | TC  | FC | BOD          | TC  | FC | BOD       | TC  | FC | BOD       | TC  | FC | BOD     | TC  | FC  | BOD      | TC  | FC  |
| S 1     | 1.1         | 110 | 41 | 1.1          | 94  | 39 | 1.1       | 110 | 39 | 1.3       | 120 | 41 | 1.4     | 130 | 47  | 1.6      | 150 | 47  |
| S 2     | 1.6         | 150 | 58 | 1.5          | 130 | 47 | 1.6       | 130 | 48 | 1.8       | 150 | 58 | 1.9     | 170 | 63  | 2.2      | 210 | 63  |
| S 3     | 1.2         | 110 | 41 | 1.1          | 110 | 39 | 1.2       | 120 | 39 | 1.2       | 130 | 47 | 1.3     | 150 | 58  | 1.5      | 170 | 58  |
| S 4     | 1.1         | 110 | 39 | 1.1          | 94  | 27 | 1.1       | 94  | 27 | 1.3       | 110 | 38 | 1.3     | 110 | 46  | 1.5      | 120 | 58  |
| S 5     | 1.1         | 110 | 38 | 1.1          | 110 | 38 | 1.4       | 110 | 41 | 1.5       | 120 | 47 | 1.5     | 130 | 58  | 1.7      | 150 | 63  |
| S 6     | 1.3         | 110 | 47 | 1.2          | 110 | 43 | 1.2       | 120 | 43 | 1.3       | 120 | 48 | 1.4     | 120 | 58  | 1.6      | 140 | 58  |
| S7      | 1.4         | 150 | 47 | 1.2          | 130 | 43 | 1.2       | 150 | 43 | 1.3       | 150 | 58 | 1.6     | 170 | 84  | 1.9      | 220 | 94  |
| S8      | 1.2         | 140 | 38 | 1.2          | 130 | 38 | 1.3       | 130 | 38 | 1.3       | 150 | 47 | 1.5     | 170 | 63  | 1.7      | 210 | 63  |
| S9      | 1.9         | 350 | 58 | 1.7          | 350 | 49 | 1.8       | 350 | 63 | 1.9       | 350 | 84 | 2.1     | 430 | 110 | 2.3      | 430 | 120 |
| S10     | 1.4         | 170 | 43 | 1.2          | 150 | 43 | 1.4       | 170 | 58 | 1.4       | 220 | 63 | 1.5     | 240 | 63  | 1.8      | 280 | 70  |
| S11     | 1.2         | 110 | 31 | 1.2          | 110 | 27 | 1.2       | 120 | 27 | 1.3       | 130 | 39 | 1.3     | 150 | 43  | 1.4      | 170 | 48  |
| S12     | 1.2         | 94  | 26 | 1.2          | 94  | 23 | 1.3       | 110 | 25 | 1.4       | 120 | 32 | 1.4     | 150 | 38  | 1.5      | 170 | 41  |
| S13     | 1.1         | 94  | 26 | 1.1          | 94  | 26 | 1.2       | 110 | 26 | 1.2       | 120 | 32 | 1.3     | 130 | 41  | 1.8      | 170 | 47  |
| S14     | 1.2         | 110 | 31 | 1.1          | 94  | 31 | 1.1       | 94  | 31 | 1.2       | 110 | 31 | 1.3     | 120 | 34  | 1.4      | 140 | 43  |
| S15     | 1.1         | 110 | 33 | 1.1          | 110 | 31 | 1.2       | 130 | 38 | 1.3       | 130 | 41 | 1.3     | 130 | 43  | 1.4      | 130 | 43  |
| S16     | 1.2         | 58  | 22 | 1.2          | 49  | 22 | 1.2       | 63  | 25 | 1.4       | 110 | 31 | 1.5     | 170 | 47  | 1.6      | 170 | 48  |
| S17     | 1.1         | 84  | 31 | 1.1          | 63  | 27 | 1.2       | 79  | 27 | 1.3       | 94  | 31 | 1.3     | 120 | 38  | 1.4      | 130 | 41  |
| S18     | 1.4         | 84  | 27 | 1.3          | 84  | 27 | 1.3       | 94  | 31 | 1.3       | 110 | 38 | 1.3     | 120 | 38  | 1.4      | 120 | 38  |

| Sl. No. | July, 23 |     |     | August, 23 |     |     | September, 23 |     |     |
|---------|----------|-----|-----|------------|-----|-----|---------------|-----|-----|
|         | BOD      | TC  | FC  | BOD        | TC  | FC  | BOD           | TC  | FC  |
| S 1     | 1.7      | 170 | 47  | 1.8        | 210 | 58  | 1.7           | 210 | 48  |
| S 2     | 1.9      | 350 | 94  | 2.6        | 350 | 110 | 2.4           | 350 | 84  |
| S 3     | 1.6      | 210 | 58  | 1.8        | 240 | 63  | 1.5           | 220 | 63  |
| S 4     | 1.7      | 170 | 58  | 1.8        | 210 | 63  | 1.6           | 170 | 58  |
| S 5     | 1.8      | 170 | 63  | 1.9        | 210 | 63  | 1.8           | 170 | 58  |
| S 6     | 1.7      | 150 | 58  | 1.8        | 170 | 63  | 1.6           | 150 | 58  |
| S7      | 2.1      | 280 | 94  | 2.6        | 350 | 110 | 2.5           | 350 | 70  |
| S8      | 1.8      | 220 | 63  | 1.9        | 240 | 70  | 1.8           | 220 | 58  |
| S9      | 2.6      | 540 | 130 | 2.9        | 540 | 140 | 2.8           | 430 | 110 |
| S10     | 2.2      | 350 | 94  | 2.6        | 430 | 110 | 2.6           | 350 | 90  |
| S11     | 1.6      | 220 | 58  | 1.8        | 240 | 63  | 1.6           | 220 | 58  |
| S12     | 1.6      | 210 | 47  | 1.8        | 220 | 58  | 1.6           | 220 | 48  |
| S13     | 1.9      | 170 | 48  | 2.1        | 210 | 58  | 1.8           | 170 | 48  |
| S14     | 1.6      | 170 | 47  | 1.8        | 210 | 58  | 1.8           | 210 | 48  |
| S15     | 1.6      | 150 | 47  | 1.8        | 170 | 58  | 1.7           | 150 | 58  |
| S16     | 1.7      | 170 | 48  | 1.9        | 210 | 58  | 1.7           | 170 | 58  |
| S17     | 1.5      | 150 | 47  | 1.7        | 170 | 47  | 1.5           | 150 | 47  |
| S18     | 1.5      | 140 | 41  | 1.6        | 150 | 48  | 1.4           | 150 | 48  |

*\*BOD = Bio Chemical Oxygen Demand, TC = Total Coliform, FC = Faecal Coliform*

Site of Collection

S-1: Gomti River at Jatanbari, S-2: Gomti River at Sonamura, S-3: Gomti River at Rajdharnagar, S-4: Gomti River at Amarpur, S-5: Gomti River at Tirthamukh, S-6: Gomti River at Subhashsetu, S-7; Burigaon River at Bishalgarh, S-8: Haora River at Chandrapur, S-9: Haora River at Dashamighat, S-10: Haora River at Aralia, S-11: Haora River at Kalabagan, S-12: Haora River at Joynagar, S-13: Manu River at Kailasahar, S-14: Khowai River at Trishabari, S-15: Khowai River at Kumari Madhuti setu, S-16: Khowai River at Chakmaghat, S-17: Khowai River at Karailong, S-18: Juri River at Krishnapur.

#### A. Materials and Methods:

Surface water samples from the six identified river stretches of Tripura were collected on monthly basis. The collected samples were analyzed in the laboratory of TSPCB using the standard methods given in **APHA, 2012** (*American Public Health Association*).

#### B. Observations:

From the analytical results it has been observed that, in 2016, six river stretches in Tripura (S-2: Gomti River at Sonamura, S-7; Burigaon River at Bishalgarh, S-8: Haora River at Chandrapur, S-9: Haora River at Dashamighat, S-13: Manu River at Kailasahar, S-18: Juri River at Krishnapur) having BOD values beyond the prescribed standard limit of CPCB (3mg/liter) for June & July, 2016. The BOD values were higher than the prescribed standards for five locations (S-2: Gomti River at Sonamura, S-7; Burigaon River at Bishalgarh, , S-9: Haora River at Dashamighat, S-13: Manu River at Kailasahar, S-18: Juri River at Krishnapur) in August, 2016, Two locations (S-2: Gomti River at Sonamura, S-18: Juri River at Krishnapur) in September, 2016 & one location (S-18: Juri River at Krishnapur) for October & November, 2016 respectively. Following after 2016, among the six identified rivers stretches in Tripura, 5 stretches having BOD; Total Coliform & Faecal Coliform values were within the prescribed standard limit of CPCB for Class-B (Water for Outdoor Bathing). The BOD values of one river stretch that is Haora River were slightly beyond the prescribed standard limit of CPCB for particular one location (Dashamighat, Haora) for few months only.

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