

Action Taken Report on directions of Hon'ble National Green Tribunal vide Order dated 28.02.2020 in the O.A. No.606 of 2018 in compliance of Solid Waste Management Rules and other environmental issues

BACKGROUND:

Hon'ble National Green Tribunal, Principle Bench, New Delhi, vide Order dated 28/02/2020 in O.A No.606 of 2018 in the matter of compliance of Solid Waste Management Rules and other environmental issues, directed that compliance reports on Liquid Waste Management may be filed quarterly and first such report may be filed by 31.03.2020 with a copy to the CPCB. Accordingly, the status report is furnished as follows:

A. CURRENT STATUS:

1. There is only one 8 Million Litres Per Day (MLD) capacity Sewage Treatment Plant (STP) in entire State of Tripura which is located in Agartala city. The Plant is being operated and maintained by Agartala Municipal Corporation (AMC). The STP was set up with assistance under JNNURM and was commissioned in the year 2017. At present, incoming flow of raw water varies from 1.50 MLD to 2.0 MLD which is being treated at the Plant. There is a storage and chlorination sump of 1.5 lakh litre capacity for treated sewage water at the Plant. The operating status of the STP is provided in the table below:

Location of each STP	Coordinates of STP (Latitude and Longitude)	STP Commissioned in (Year)	STP Installed Capacity (in MLD)	Actual Utilization of installed Capacity (in MLD)	Technology (UASB/ASP/OP/ SBR/ MBR/ FAB Etc.)	Compliance Status			
						pH	TSS	COD	BOD
Barjala, Agartala	Latitude 23°85'16.92" N Longitude 91°26'34.63" E	2016	8MLD	1.5-2.0 MLD	SBR	Within the permissible limit			

2. AMC has already prepared the Action Plan for utilization of treated waste water from Sewage Treatment Plant (STP) located at Agartala. The said Action Plan was sent to Central Pollution Control Board (CPCB) in March, 2019 and subsequently revised and resubmitted in November 2019 in view of the observations of CPCB (**ANNEXURE-I**).
3. The treated waste water produced in the STP at Agartala is being used for watering of parks, gardens & open space in Agartala city, and watering of roads in dry season. A Notification has also been issued by AMC prohibiting use of drinking water for the purposes of watering of parks, gardens and open space in Agartala city, watering of roads in dry season (**ANNEXURE-II**). At present, out of 1.5 lakh litre treated waste water, only 30% is being used for the above activities. Remaining is being discharged to agricultural fields as per demand of the stakeholders.
4. As per the revised Action Plan, the additional steps taken by AMC for full compliance of the directions of Hon'ble NGT are as follows:
 - A dedicated team has been formed to look after the parks and gardens in Agartala city. At present watering is done by jetting machines which collect treated waste water from the STP.
 - Under ADB support, 15 no. of tankers filled with suction pump will be shortly delivered to AMC out of which 6 no. of vehicles shall be utilized for watering of parks and gardens across the city.
 - AMC has received 3 no. of heavy duty sweeping machines with water tanks from the Urban Development Department under ADB project. Watering of roads is being done using these machines.
5. The Urban Development Department has also identified industries as a potential bulk user of the treated waste water. Accordingly, the Department of Industries has been requested to develop a suitable policy for use of treated waste water by the industries.

6. In addition to the 8 MLD STP located at Agartala, there are 42 smaller STPs being operated by individual units, mainly in healthcare and hotel sectors. These have been found to be operating satisfactorily.
7. Work order has been issued for another 8 MLD STP at Agartala at tendered value of Rs 24.73 crore with funding from 10% Lumpsum Scheme & Smart City Mission.
8. 5 drains carrying 0.648 MLD sewage are being discharged into Haora river in Agartala. As a part of Howrah River Front Development Project at a cost of Rs 99 crore under Smart city mission, DPR is under preparation for in-situ sewage treatment of these 5 drains using CSIR NEERI developed RENEU (Restoration of Nallah with Ecological Units) technology which uses phyto-remediation, microbial consortia as well as physical operations. Tender is likely to be published in June, 2020 with estimated timeline of 01 year for completion of whole project.
9. It is also targeted to set up at least one STP in each of the remaining 19 Urban Local Bodies. These may be low cost STPs as sewage generation in ULBs other than Agartala city is not much and the water quality of the river stretches adjoining these ULBs is well within prescribed standards. Further, a DPR for Rs 7.02 crore (under SBM) for 14 Faecal Sludge Treatment Plants (FSTPs) for 14 ULBs has also been approved.
10. All the ULBs have been directed to adopt in-situ Bio-remediation and phyto-remediation of sewage in drains (**ANNEXURE-III**).

B. DESIRABLE LEVEL OF COMPLIANCE IN TERMS OF STATUTES:

1. Strict monitoring of operation and maintenance of STPs.
2. Implementation of action plan towards comprehensive use of treated water to save drinking water.

C. GAP BETWEEN CURRENT STATUS AND DESIRED LEVELS:

1. The revised action plan has already been submitted to CPCB.
2. As per the National Building Code (NBC) 2005, the estimated Sewage Generation in Agartala City is 48.6 MLD and projected generation is 72.9 MLD. At present 8 MLD capacity STP has been operating to cater the demand of the citizens in the northern part of Agartala City and initiative is taken under Smart City Project to set up another 8 MLD STP in the central Zone of Agartala. In this regard tender has been invited and technical evaluation is in progress.
3. Furthermore, with the revised DPR for decentralized solid and liquid waste management, total 14 nos. Faecal Sludge Treatment Plants (FSTPs) are to be developed for 14 ULBs.

D. PROPOSAL OF ATTENDING THE GAP WITH TIMELINES:

Proposed actions with timelines are provided in the table as follows.

Sl. No.	Action Point	A	B	C =A-B	D
		Existing status	Desired/ Projected	Gap	Timeline
1.	Estimated Sewage Generation	82.40 MLD	99.25 MLD	N/A	
2.	Treatment Capacity [Projection for 05 years to be taken into consideration]	8 MLD STP + 0.72 Feacal Sludge Co-treatment	99.25 MLD	90.53	
3.	Status of Sewerage System (in Km)	104.5 Km	154.5 Km	50 Km	
4.	No. of STPs (Details to be provided as per Annexure)	1 Nos.	2 Nos.	1 Nos.	
5.	Has bulk users identified for reuse of treated Water such as Industrial Clusters, Metro Rail, Indian Railways, Infrastructure Projects, Agriculture, Bus Depots and PWD?	There are no bulk users as of now.			

Sl. No.	Action Point	A	B	C =A-B	D
		Existing status	Desired/ Projected	Gap	Timeline
	(Y/ N)				
6.	Quantity of treated waste water being used by Bulk User (in MLD)				
	Industrial Clusters	NA			
	Metro Rail	No such bulk user is available in Agartala			
	Indian Railways				
	Infrastructure Projects				
	Agriculture				
	Bus Depots				
	PWD				
7.	No. of Water Aquatic Sources (Lakes, Pond, etc.) being developed through treated waste water	No such requirement due to high water table and adequate rainfall. .		N/A	N/A

E. NAME AND DESIGNATION OF DESIGNATED OFFICER FOR ENSURING COMPLIANCE

- Dr. Shailesh Kumar Yadav, IAS, Director, Urban Development Department, Government of Tripura, U.D. Bhavan, Agartala.