

**PROGRESS REPORT OF THE COMMISIONER i/c OF COONOOR
MUNICIPALITY, ON THE ORDERS OF THE HON'BLE NATIONAL GREEN
TRIBUNAL (SZ) DURING THE HEARING HELD ON 03.02.2021,
IN O.A. No.:108 OF 2020 (SZ)**

Background:

The Hon'ble National Green Tribunal (SZ) in their order dated 03.02.2021 directed, among other things, that Coonoor Municipality is to come with a **proper action plan with a shorter and longer time line to resolve the issue permanently before the next hearing date** and posted the matter to 05.04.2021. In this connection, Coonoor Municipality submits the following ATR for the kind perusal of Hon'ble NGT. In compliance of the orders, an Action Taken Report was submitted to the Hon'ble Tribunal, along with the Study Report instituted by Coonoor Municipality was submitted during the hearing during April, 2021. This further Progress report on various Items of works planned and submitted and the further course of action proposed are submitted for the kind consideration of the Tribunal.

Progress on the Schedule of the works suggested:

In the report filed by Coonoor Municipality, during the hearing on 03.02.2021, submitted an Action Plan to identify the discharges in to the water bodies, quantify the same, assess its quality, identifying suitable nearby lands to intercept those discharges in order to provide suitable treatment systems, and the CAPEX and OPEX for the same. In view of the difficulties faced by the Municipality in combating the COVID-19 situation in the Municipal Limits and the restrictions prevailed in the District, there were delays in carrying out those works. In view of the same, a revised time line for the various action points were submitted before the Hon'ble Tribunal, during the hearing in April, 2021. Meanwhile, full lockdown was ordered since 10th May, 2021 to 24th of May, 2021, and was further extended up to 1st June. The travel restrictions and e-pass system were followed in the Nilgiris District, and were lifted only since 5th June, 2021. This has resulted in the delay on achieving the scheduled progress. The present status of the Action Plan already submitted, and the present status/ revised timeline is presented below:

S. No	Activity	Time line proposed	Revised Time line furnished in report filed on 25.04.2021.	Current Status
1	Instituting a study Second week of Identified and work 49 team to identify the Outfalls, quantify the same, feasibilities of providing decentralized sewage treatment plants, finalizing the technologies, estimation of CAPEX and OPEX.	Second week of January, 2021	Completed	Completed
2	Reconnaissance survey	Last week of January, 2021	Completed	Completed
3	Detailed investigation, collection of samples	First week of February, 2021	Completed	Completed
4	Analysis of samples	Second week of February, 2021	Completed	Completed
5	Preliminary report with viable schemes based on the availability of suitable and adequate land	Third week of February, 2021	Draft Report received on 25.03.2021. The same is under scrutiny. Land availability, based on which the treatment option and the costing to be included.	Received
6	Draft project report	First week of March, 2021	.	Received
7	Evaluation of report and communicating the comments	Third week of March, 2021	Preliminary comments communicated to the consultant.	----
8	Final report	First week of April, 2021	Third week of April, 2021	Received
8(a)	Feasibility study of Providing Phyto Remediation in the beds of the water Bodies by Service Providers	--	--	23.07.2021
(b)	Finalizing the Technological Option	--	--	28.07.2021
9	Approval of council	First week of June, 2021	Third week of May, 2021.	First week of August, 2021

10	Submission of proposal to Government for approval	Third week of June, 2021	First week of June, 2021.	Second week of August, 2021.
11	Completion of the schemes	Nine months from the financial approval for the schemes	Those schemes which are within the financial powers of the Municipality are intended to be taken up with the approval of Council. Other works would be taken up with the approval of Government, in a time period of nine months.	Nine months from the financial approval for the schemes

Findings of the Final Report:

The study team visited Coonoor, and carried out field inspections on the suitability of the various treatment options from 1st July, 2021 to 3rd July, 2021. The Team observed a redundancy in the assessing the discharges in to the water bodies, which was pointed out, and accordingly, that quantity of sewage is excluded from the quantity assessment for providing the Sewage treatment Plant.

Further, from the analysis of the quality of the water that is running in Brooklands River, and on visual observations made, the Team is of the opinion that the discharges that are let in to that stream do not warrant any immediate treatment. The Report pointed out that the level of Dissolved Oxygen in all four samples of the discharges are over 14 mg/L, thereby indicates the biological healthiness of the discharges and the Report concluded, if at all any intervention is needed, at a later stage could be decided by monitoring those outfalls over a long period in all seasons, by collecting and analyzing the quality of discharge and the stream water.

Therefore, the Report concluded that at the first instance to provide a Sewage Treatment Plant for about 2.40 MLD, with a Design Flow of 3.00 MLD.

The Report recommends Phyto-remediation as the most desired option for treating the sewage discharged in to the streams of Coonoor Municipality and also observed that the land needed to establish such systems, at the rate of 1.5 to 2.0 sq.m/KLD, requiring around 4500 sq.m. to 6000 sq.m. area is not available nearby. However, the study team observed that all three streams, are having a minimum width of 5.0 meters and much wider in many places, thereby a possibility of providing Phyto-remediation systems, could be explored. However, the Report also stated such a possibility need to be confirmed by the service providers of such system, after making site visit, considering the rainfall pattern, terrain of the area, geomorphologic conditions etc.

It is also stated that in the event of providing Phyto-remediation system is not feasible, a combination of Physical-Chemical treatment is recommended. It is also stated in the report that Biological Treatments such as Activated Sludge process, etc., would not yield the desired results, considering the temperate climate.

Further, in the Report it is stated that the sewage discharged in to the water bodies, at the first instance be intercepted in three common points and conveyance of the sewage from the discharge point to the Sewage treatment Plant location could be undertaken at a later stage, after strengthening the side walls/ bunds of the water bodies.

The Report is submitted for the kind perusal and record of the Honorable Tribunal.

Analysis of the Report:

The Report indicated that the Capital Expenditure for providing the Physico-Chemical Treatment with conveyance pipeline would be Rs. 845 Lakhs to Rs. 960 Lakhs. The Operating Cost is also estimated to be around Rs. 52 Lakhs to 58 Lakhs per year.

Whereas, providing of Phytoremediation in the beds of the Water bodies, would cost around Rs.843 Lakhs to Rs. 910 Lakhs on Capital Expenditure and the Operation Cost would be Rs. 23 Lakhs to Rs. 26.5 Lakhs per year only.

As such, it is found that the providing of Phyto-remediation would be the most desirable, dependent, requiring least manual intervention, cost effective both in Capital and Operating Cost.

Action Taken on the Report:

In view of the reasons mentioned in the previous section, it is decided to adopt the Phyto-remediation option and to execute the same if it is found to be technically feasible and executable in the beds of the water bodies, and to consider the option of Physico-Chemical treatment only in the event the that the site conditions prevail would not permit the implementation of such system.

Therefore, two of Phyto-remediation service providers viz. AYALA NBS and CAMUS STB are addressed to visit Coonoor, and to offer their Technical Feasibility of providing their Phytoremediation systems, together with their cost estimates before 21st July, 2021.

Revised Plan of Action

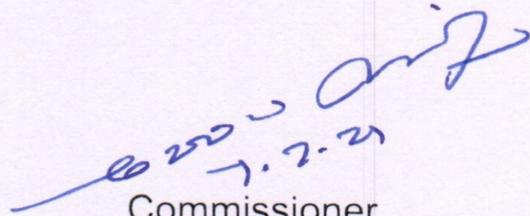
S. No.:	Activity	Time Line
1	Obtaining the Feasibility of providing Phytoremediation in the beds of the Streams with Cost Estimate	23 rd July, 2021
2	Finalizing the Technology	28 th July, 2021
3	Approval of council	First week of August, 2021
4	Submission of proposal to Government for approval	Second week of August, 2021
5	Completion of the schemes	Nine months from the financial approval for the schemes

Prayer:

It is respectfully submitted that the timelines, those were mentioned in the earlier submissions before this Hon'ble Tribunal could not be adhered with, and those happened due to the COVID-19 situation prevailed in the State in general,

the Nilgiris District in particular, and that Coonoor Municipality had taken all the required steps to adhere with the timelines submitted earlier.

Therefore it is kindly prayed that the Honourable Tribunal may kindly accept this Progress Report of the Coonoor Municipality, and to accept the revised Timelines submitted on behalf of the Coonoor Municipality, and to pass such orders that the Honourable Tribunal considers deem fit in the facts and circumstances of the case.


7.7.21

Commissioner

Coonoor Municipality