## REPORT ON CONSTRUCTION OF 1.2 MLD CAPACITY MODULAR SEWAGE TREATMENT PLANT ALONG RIGHT BANK OF COOUM RIVER IN CHENNAI CITY

## **INTRODUCTION:**

- Chennai River Restoration Trust (CRRT) has taken up the Integrated Cooum River Restoration project under Government of Tamil Nadu funds.
- Sixty sub-projects for the short term ie., from 2014-15 to 2016-17, will be implemented
  by the concerned implementing agencies/line departments like PWD, Corporation of
  Chennai, Commissionerate of Municipal Administration, Directorate of rural
  Development, CMWSS Board, Chennai Rivers Restoration Trust and TNSCB.
- The Government by its order GO.Ms.No.9 dated 13.01.2015 of the MA&WS
  Department (MC1) has accorded administrative sanction to a value of Rs.604.77 Crore
  under integrated Coovum River Eco restoration project.
- Out of 604.77 Crore, an amount of Rs. 186.19 Crore has been allotted to Chennai Metropolitan Water Supply and Sewerage Board for implementing 15 sub projects.
- In these 15 sub projects, 1.2 MLD capacity Modular Sewage Treatment Plant based on Moving Bed Bio Film Reactor Technology is constructed with a project cost of 2.78 Crore by CMWSSB.

## PROJECT DESCRIPTION:

- The work of "Design, Construction and Commissioning of 1.2 MLD capacity Modular Sewage Treatment Plant based on MBBR technology on DBO Basis including O&M for 5 years" has been proposed.
- The land site allocated is under the control of Public Works Department (PWD) and necessary consent to establish the STP to let out the treated water into the Cooum River has been obtained from Competent Authority.
- The aim of the project is to collect the untreated sewage being let out into the Cooum River by various outfalls at Choolaimedu and treat the sewage in the proposed Modular Sewage Treatment plant as per Standard discharge norms specified by TNPCB/CPCB.
- The raw sewage and outlet parameters considered for design of the above plant are as follows:

SI.No	Description	Inlet Parameters	Final Outlet parameters
1	BOD in mg/l	350	<=10
2	COD in mg/l	700	<=100
3	TSS in mg/l	450	<=10
4	Total Kjeldahl Nitrogen (as N) mg/l	45	<=10
5	Total Phosphorus (as P) mg/l	5	<=2
6	Fecal Coliform MPN/100 ml	10,00,000	<=200
7	рН	6.8 to 8.5	6.5 to 8.5
8	Oil & Grease mg/l	15	<=5

- The Modular Sewage Treatment is based on Moving Red Bio Reactor (MBBR) technology followed by Pressure Sand Filter and Activated Carbon filter.
- At present 71.40% of works has been completed and fabrication works under progress at site. The plant will be completed and commissioned for usage on 31.05.2022.