

CMWSSB subsequent to the management of water supply during 2017 drought continued to undertake various studies for augmentation and sustainability of water sources. In continuation of these works a study under State Planning Commission the proposals for augmenting water supply were studied by the special water group under the Chairmanship of Dr. T.V. Somanathan, the then Additional Chief Secretary to Government, Planning, and Development & Special Initiatives Department. Five lakes (Porur, Perungudi, Retteri, Aynambakkam and Perumbakkam) in and around Chennai city, abandoned quarries and proposals to recharge lake with tertiary treated used water which includes five stages of treatment and disinfection were investigated for quality, quantity and economic feasibility.

The various proposals were submitted, scrutinized and finalized by the special group. The GoTN accorded sanction of works vide G.O (Ms) No. 131 dated 10.12.2018. The components of works under are detailed below:

1. Providing Special Pumping facilities for Evacuation of 10 MLD of Water from Erumaiyur Quarry including Supplying and Laying of 300/400/450mm Dia DI conveying main from Erumaiyur Quarry to Chembarambakkam Water Treatment Plant.
2. Decentralized Water source Augmentation with Onsite Treatment Plant of 10 MLD capacity in Rettai Eri Including Conveyance System to Kolathur Water Distribution Station
3. Decentralized Water source Augmentation with Onsite Treatment Plant of 10 MLD capacity in Perumbakkam Lake Including Conveyance System to Sholinganallur/Karapakkam Water Distribution Station
4. Decentralized Water source Augmentation with Onsite Treatment Plant of 10 MLD capacity in Ayanbakkam Lake Including Conveyance System to Mogappair Water Distribution Station
5. Design, Engineering, Build and Commissioning of 10 MLD Capacity Sewage Modular Tertiary Treatment Plant based on Sequential Batch Reactor (SBR) technology followed by ultrafiltration at Nesapakkam with construction of additional 6 MLD Modular Water treatment plant at Porur lake, Chennai City on DBO basis including conveyance system to Porur lake
6. Design, Engineering, Build and Commissioning of 10 MLD Capacity Sewage Modular Tertiary Treatment Plant based on Sequential Batch Reactor (SBR) technology followed by ultra filtration at Perungudi with construction of

additional 10 MLD Modular Water treatment plant near Perungudi lake, Chennai City on DBO basis including conveyance system to Perungudi lake

The above said works were tendered and awarded to M/s BGR Energy Systems Ltd. vide contract no. CNT/WSS/NCB/MWB/2916A, 2018-19 for the total work value of Rs.176.12 Cr. The work order issued on 07.03.2019 and agreement signed on 24.04.2019. The works were commenced on 13.05.2019. The process design of treatment plant was vetted and approved by IIT Chennai on 12.07.2019. The period for completion of the works is 18 months but the interruptions like pandemic and monsoon have extended the period of completion and the works are still continuing. The cumulative augmentation due to the 7 no's modular treatment plants (2 no's of Tertiary Treatment Ultrafiltration Plant and 5 no's of Water Treatment Plant) will be 60 MLD of treated water supply to the city.

The work of providing of special pumping facilities from Erumaiyur quarry to Chembarambakkam WTP and laying of pipeline work has been completed and commissioned on 15.07.2019. Moreover, Out of total length of 33.33 kms, the works for laying of DI pipeline for a cumulative length of 29.07 kms are completed.

The civil works for tertiary treatment ultrafiltration plants at Nesapakkam and Perungudi and water treatment plants at Porur, Perungudi, Mogappair, Kolathur are nearing completion. Further, the supply and erection of mechanical, electrical, control and instrumentation items have commenced. The overall progress including treatment plants and its associated pipe laying works is 75.13 % and balance works are in progress. Plants are expected to be commissioned from 31.08.2022.